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## Ayurvedic practice, education and research, beyond dilemmas and confessions

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#### ABSTRACT

Emergent diseases and the pursuit of universal health coverage have incited a renewed interest in the role of traditional medicines (TM) in healthcare. Ayurveda, a widely accepted and practised system in India, is gaining attention globally owing to its holistic and individualised therapeutic approaches. Addressing the contemporary relevance of Ayurveda in healthcare, the article examines concerns surrounding its core principles, educational methodologies, and research validation. Pertinent queries are raised about Ayurveda's relevance today and challenges in aligning Ayurvedic theories with current scientific paradigms and pedagogical dilemmas in Ayurvedic education. Further, we propose solutions, charting a course for Ayurveda's evolution in contemporary healthcare. This includes bridging epistemological differences by integrating modern scientific methodologies with Ayurvedic concepts. Addressing the educational challenges, we recommend comprehensive curriculum revisions considering contemporary healthcare needs. The teaching methodologies are to be enhanced to impart Ayurvedic principles effectively, acknowledging the limitations of ancient anatomical and physiological constructs. Training programs must prioritise equipping teachers with the ability to impart a critical understanding of Ayurveda's philosophy without undermining modern scientific concepts. In conclusion, this article underscores the importance of policy reforms in Ayurvedic curriculum design and teaching methodologies to ensure Ayurveda's sustained relevance and integration within contemporary healthcare systems.

#### 1. Background

In the current era of emergent diseases and healthcare challenges, to achieve universal health coverage, there has been a renewed interest regarding the role and relevance of traditional medicines (TM) across the globe [1]. By definition, traditional healthcare practices refer to knowledge, skills, and techniques intending maintenance of health and disease prevention based on the theories, beliefs, and experience-based practices indigenous to different cultures and, most importantly, often inexplicable to current scientific techniques [2]. In India, Ayurveda is a widely accepted and practised indigenous healthcare system. Being a component of state-sponsored public healthcare programs, its education, training, and practice are regulated by government-appointed bodies. Ayurvedic education is institutionalised, wherein the graduates are being imparted training on the concepts and practices of the science, considering contemporary medical advancements as well. Experts, including academicians, have raised concerns regarding the legitimacy of its fundamental concepts and the method of training and research conducted in the field.

This article attempts to raise valid questions regarding the relevance of Ayurveda and its practices in the current era, the need to validate its concepts, and the pedagogical dilemmas in Ayurvedic education. It proposes solutions, paving the way forward.

#### 1.1. Is Ayurveda relevant in the current era?

Before initiating discussions on the validity of Ayurvedic theories, examining the relevance of a healthcare system like Ayurveda in the current era is ideal. Ayurveda has been practised in the subcontinent for the last several centuries and is an inevitable part of the daily routine in major sections of society. There is an evident drift in the current healthseeking behaviour, wherein more people from developing countries tend to adopt traditional healthcare systems for common and sporadic ailments and to prevent lifestyle disorders [3]. People are assumed to seek Ayurvedic treatment owing to its vision of personalized care, especially in chronic and debilitating conditions. It is believed to be based on herbal regimes and thereby perceived as safe. Looking at the patient turnover in rural dispensaries, private clinics, or medical colleges, it seems evident that the patient community continues to benefit from TMs like Avurveda [4]. Recently, the experience gained by Avurvedic physicians in public healthcare initiatives concerned with COVID management further augments this argument [5,6].

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Globally there has been a surge in the importance and scope of traditional and complementary medicine in healthcare and the economy. Around 75 % of 100 million sub-continental people in Asia are estimated to utilize Ayurvedic herbs. The practice of Ayurveda is steadily on the rise in the USA and European Union [7,8]. WHO has shown keen interest in mainstreaming traditional systems of medicine, primarily in the country of its origin, followed by international expansion.

# 1.2. Are Ayurvedic principles, the encoded forms of homeostasis and complex functional deviations logical and still relevant? Is the falsifiability against specific prefixed tools the only scientific approach to validate such principles?

The logic in the fundamental principles of Ayurveda evolved from reflective and critical philosophical concepts and theology that prevailed in ancient India, much before the advent of modern physics and chemistry. These philosophy-driven fundamentals, along with rigorous clinical observations recorded historically, formed the foundation of the theory of disease pathogenesis and therapeutics in Ayurveda. Lately, authors have raised their concerns [9] on the credibility of specific Ayurvedic theories and concepts, particularly about the validity of experimentally non-tractable principles and seemingly outdated anatomical and physiological concepts. Also debated is the need for a reciprocally acceptable vocabulary, citing the examples of *dosha-dhathu–srotas*-based understanding of human physiology being illogical when focussed through a lens of current biomedical sciences. The same goes for difficulties in explaining the mode of action of Ayurvedic therapeutics [10,11].

Further, despite the discrepancies in the epistemology, testing methods, and healthcare practices between Ayurveda and modern medicine, several authors have tried to bridge these two to generate corroborative evidence [12–14]. Scholars from varied disciplines have initiated discussions on studying unique areas such as *prakruti, agni*, and *tridosha* against modern physiological advancements, for instance, variation in epigenetic expressions, immune-phenotyping, metabolic typing and plasma metabolomics [15–19]. Nevertheless, this effort might also create disagreements among Ayurvedic practitioners who debate the futility or insignificance of these corroborations or translations in clinical practice. This concern is reflected in academics, wherein the instructors and students are equally caught between epistemological, conceptual, and clinical dilemmas.

It is valid that the current physiological and disease models need not be the sole references against which TMs such as Avurveda are compared, tested and validated. Ayurveda has its epistemological understanding of multiple disease pathways (samprapti) and risk/causative factors (nidana), wherein the whole concept of treatment (chikitsa) is focused on reversing the samprapti and total abstinence from nidana. Ayurvedic treatment principles are thus better explained as holistic manipulation or calculative adaptation to deviated complex non-linear dynamic systems [20]. Why complex non-linear dynamic systems? This better explains the clinical complexities of aetio-pathology (dasha vidha pareeksha to ascertain the severity of vikruti) in a given individual to be addressed by an Ayurvedic physician. Hence the concepts are not easily testable with research lenses that focus on fixed predefined quantitative outcome measures, as rightly pointed out while defining TMs, as the ground theories of either discipline fundamentally vary. The comparison of dialectically diverse approaches is a fundamental error, and its implications can be equally severe depending upon the knowledge base and competency in the critical understanding of the person rendering it.

The *tridosha* theory of Ayurveda involves assessing and manipulating deviated *dosha-dhathu* states wherein the *doshas* are evaluated, targeted, and rectified with the help of signs and expressed symptoms. Since the results of such interventions are reproducible in different clinical settings using properly validated assessment tools, this can be considered as

proof of 'mechanism. Medical evidence is generated not alone by explicit methods but with well-documented longitudinal and subjective clinical experiences [21–24].

#### 1.3. Does Ayurveda need modified tools to generate medical evidence? How can the Ayurvedic clinical practice be standardised across settings?

The clinician's in-depth knowledge of science, aided with timely intuitive wisdom and critical questioning of the contextual literature alone, will render excellence in clinical competence in Ayurvedic Sciences. Nonetheless, the quality of such subjective clinical evidence is influenced by the physician's expertise and in-depth knowledge of the system, and to generate collective evidence across settings, standardisation of assessment tools and treatment protocols is crucial. Thus, Ayurveda may require modified research techniques, disease models, and appropriate clinical endpoints for clinical research to present valid results.

Additionally, through collaborative research, disease processes with pathognomonic signs (*samprapti*) may be best translated with the help of surrogate markers/disease modifiers rather than one-to-one correlation. Transparent publications and communication of consensus statements and treatment protocols are also vital in standardising the clinical practice at the root level.

# 1.4. What is wrong with the current biomedical trend of relying on quantitative outcome measure-assisted clinical practice? Do bridging such specific quantitative measure-assisted research in Ayurvedic protocols benefit the growth of the science?

Even though the advent of novel markers (predictive, prognostic/ disease modifiers, pharmacodynamic) has revolutionised decisionmaking and outcomes in a big way, the ultimate goal of any health science should not always be to change selected quantifiable markers but to tackle morbidity and bring patient satisfaction in whatever ways possible. Observable and quantifiable biological characteristics, as in biomarker-assisted research in every pathological state, may not always correspond to a patient's clinical condition or health. Such markers may show variance across populations [25–28]. Moreover, the need for appropriate vocabulary to share and interpret outcomes between two systems results in out-of-context/random (unintentional) falsifications of results.

### 2. Dilemmas in Teaching Ayurvedic concepts and their probable solutions

Education policy and reforms suggested in 'The National Commission for Indian Systems of Medicine (NCISM) Bill, 2017' was criticised for its i) proposed unripe assessment methods of evaluating knowledge, skill, attitude and competency of students pursuing formal Ayurvedic education; ii) neglect of regional representation in terms of population characters, health-seeking behaviours, treatment trends, common prescriptions; iii) ill-definition of integrative or stand-alone classic textbook oriented treatment approaches; iv) need for modifying and updating contexts in curriculum related to gender/socio-economic status based selective treatment approaches [29].

Suppose a healthcare science has to stay relevant and continue to meet the needs of society. In that case, its knowledge base must be updated with appropriate additions and subtractions to incorporate emerging evidence. There is an urgent need to attain consensus among academicians in this regard. As discussed earlier, specific anatomical and physiological models particularised in Ayurveda are seemingly flagged as outdated and irrelevant in the current era, and the necessity of deliberately deleting these concepts from the Bachelor of Ayurvedic Medicine and Surgery (BAMS) curriculum is suggested. The issues are genuine [29–32].

Learning an unfamiliar system of knowledge that is relatively

traditional in its principles and practices is quite a tussle for a plus 2grade science student. It is, therefore, a challenge for teachers. Teaching Ayurvedic principles to naïve minds requires thorough expertise. Teachers should have a decent amount of demarcating knowledge of philosophy and the clinical applicability of basic principles. Teachers unapologetically and critically should address and discuss the limitations of anatomical and physiological constructs in science, owing to the evident time gap between today and the periods when those were documented.

Meta theory refers to scientific methods on how to construct/test a hypothesis and formulate solid theories. Cosmology refers to the science of the origin of the universe. Philosophical ideas about the laws of nature mentioned in Ayurvedic literature that connects meta-theory and cosmology to the bodily constitution and complex non-linear functions [20] should not be imparted in a way that would challenge the student's already learned concepts of physics and biology. Philosophical understanding and modern laws of nature should be distinct from one another, or instead, one should not be explained in the purview of the other, e.g., the flawed strategy of trying to explain panchamahabhuta as atomic theory. Though the time-evolved changes must be rigorously acknowledged, undergraduate students should be protected from complex correlational epistemological learning of laws of nature and human physiology. These philosophies should be imparted as ways or methods of attaining knowledge/analysing a phenomenon that evolved in a particular period. Also, philosophical ideas found in historical medical science textbooks may be introduced to students as the then-fashioned means to understand moral and ethical codes in clinical practice.

The perceived factual errors concerning the anatomy and the anatomy-driven functional explanations of systems, such as theories of urine formation, blood formation and the like, should be regressed to the historical perspective section and be retained in the curriculum. Historical perspectives shall motivate aspirants to acknowledge the need for constant and rigorous updating to the sciences rather than falling prey to considering it divine and non-tangible.

Ayurvedic principles and practices basically can be categorised into three classes, i) concepts that are deemed outdated as science advanced; and found clinically irrelevant, E.g. urine formation theory, blood and other tissue formation theories] [9]; ii) concepts that are reasonably validated with modern tools and methods and found germane, E.g. *prakruti* [15–19], and; iii) concepts that are currently valuable and clinically relevant for Ayurvedic Physicians but are not validated yet to satisfy the contemporary intelligence, E.g. multi-fold complex analysis and application of *dosha* functional states in different clinical conditions, assessment of clinical constructs such as *agni, koshta, ama*, specific *dhathu* level *srotorodha* (digressed functions) etc. The third category, by and large, influences Ayurvedic clinical practices.

The range of instructional options in teaching Ayurveda should enable an adequate understanding of human physiology and pathology in the purview of these clinical constructs, notably the *tridosha* theory, through a pragmatic consensus-building and then included in the syllabus. This strategy is crucial because the pharmacological concepts of Ayurveda primarily, if not solely, rely on this *tridosha* concept rather than the histological or biochemical approach of modern medicine.

### 3. Suggested modifications in the curriculum, teaching methods and student-attributes

#### 3.1. Curriculum

Ayurvedic learning methods employed a unique epistemological process wherein human functioning was taught in analogy to phenomena observed in nature. To comprehend such complex correlations in the current era seems quite a concern and burden, especially to students who have learned the current laws of nature. They are pressurised to redefine their fundamental understanding of human physiology, which further intensifies the concern about the validity of particular theories and concepts of Ayurveda. Hence a critical revision in the BAMS curriculum is the need of the hour. The current transitional curriculum spanning two to three weeks of the BAMS course focuses on motivating the students towards science, which does not satisfy the cause. It is suggested that this period be enhanced for about half a year wherein the student gets judiciously exposed to the following domains i) the fine line of demarcation between Traditional Healthcare practices, Integrative Medicine, Complementary and Alternative Medicine, and the need for such approaches ii) chronological evolution of the science in terms of relevant philosophies and related epistemological and empirical processes of learning highlighted across the literature, iii) different clinically relevant textbooks in chronological order, v) the gap in knowledge concerning anatomy and the concerned anatomy-oriented physiology, and vi) the need for critical appraisal, research, and validation of clinical methods, syndromes, and other conceptual ideas to integrate Ayurveda into mainstream healthcare.

Further, the four- and half-year curriculum should be rigorously reviewed and demarcated at i) historical perspectives of meta-theories and cosmology and their relevance in understanding body constitution and complex non-linear functional ranges, ii) clinically oriented epistemological means, iii) clinical knowledge, and iv) the prominent demarcating role of the system such as stand-alone care (lifestyle disorders/disorder of metabolic error, geriatrics) complementary therapy (Cancer, Auto-immune diseases), alternative medicine or integrative medicine in specific clinical states and the limitations.

The primary aim of the undergraduate curriculum is to enable the learner to acquire the necessary theoretical knowledge and practical skills essential for routine clinical practice rather than to learn all the nuances of the science encoded in ancient literature. It should focus on learning based on direct and demonstrative evidence. Hence the curriculum at the undergraduate level shall be a need-based one rather than the current text-oriented design. Moreover, clinical competence can be appropriately assessed through subjective or implied (problem-based and task-based clinical examinations at the bedside) and objective (assessment of responses on clinical case constructs mimicking realworld settings and discussion of treatment possibilities) methods. A curriculum incorporating minimum entrustable outcomes, threshold outcomes, and electives shall fittingly interrogate the clinical competence and assess the learner's cognitive process and learning outcomes [33]. Clinical practice guidelines that guarantee basic patient care protocols in prevalent healthcare concerns, especially about lifestyle disorders and disorders indicative of palliative care and rehabilitation, should be formulated (consensus-based), updated, and incorporated into the curriculum. Knowledge in threshold areas (i. transformative or community-based internships, ii. integrative or inter-professional tie-ups, and iii. troublesome or contexts that need thorough debates and discussions with teachers and learned men (e.g. the concept of avarana) based on the curiosity of the aspirant may be thoroughly planned and imparted on a need basis. Electives at the UG level should be in a way that would help/guide students for their higher education (PG). Tables 1 and 2 depicts the suggested expected learning outcomes after the BAMS and post-graduation.

Further, regional knowledge, including regional literature, folklore practices, and locally available drugs, is vital in traditional healthcare practices and should be considered when framing a nationwide curriculum. Hence regional treatises (for instance, *Chikitsa Manjari* and *Sahasrayogam* in Kerala) must be incorporated into the curriculum, and universities may be given autonomy to integrate region-specific available herbs with their botanical identities so that such indigenous practices are kept alive in the mainstream.

#### 3.2. Teaching practice

Teachers are causal to the success and failure of any system of knowledge, particularly healthcare. Teachers of Ayurvedic Sciences should display a commitment to change following reflective practices as

#### Table 1

#### Expected learning outcomes.

Expected Learning Outcomes (Curricular basis)				
Mode	Graduate (B.A.M.S)		Post Graduate	
	Perspective (Instrumental)	Example	Perspective (Intrinsic)	Example
Theory classes/ Classroom- based	<ol> <li>Clinical understanding of observed physical and psychological traits and other phenotypes in the background of dosha dushya concept and <i>dashavidha pareeksha</i> (Different domains of clinical examination)</li> <li>Professional competence in deciding the role of Ayurveda as a stand-alone care, alternative medicine or complementary medicine or as a component of integrative medicine in clinical practice.</li> </ol>	<ol> <li>Case-based learning/virtual sessions using programmable mannequins, small group application exercises for learning assessment methods like rookshatva of vata dosha, or methods to assess vrudha vata karma and AI-based tools etc.</li> <li>Virtual mannequins based training to assess prakruti, koshta, ama etc, case- based learning for evaluating prognosis and for therapeutic selection 3. Concept of deductive analysis of guna attributable to each dosha, and selecting the appropriate therapeutic means congruent to the guna analysis, e.g. while selection of medicaments and other therapies</li> <li>Differential understanding of formulations based on patients' dynamic needs</li> </ol>	<ol> <li>In-depth critical knowledge of the specific PG arena</li> <li>Epistemological derivation and the darshnik view critically to be revisited with respect to clinically relevant contexts.</li> <li>Knowledge of developing ideas that are translational to contemporary intelligence and need updating</li> <li>In-depth knowledge of research models exclusively appraised for Traditional Medicine.</li> <li>Validating and upgrading treatment possibilities in integrative/alternative to standard care/complementary modes in prevalent clinical conditions visiting an Ayurvedic OPD that are equally efficient, standardized, and effective.</li> <li>In-depth and focused discussion amongst peers on clinically prevalent syndrome complexes and their best integration into healthcare practices</li> </ol>	<ol> <li>Critical reading in between lines of contextual literature and compilation of differences in views amongst authors.</li> <li>Understanding darshanik concept (padartha jnana) such as panchabhoutika theory, tridosha theory, etc as a means to critically analyse Ayurvedic fundamental principles favouring therapeutics or those that give leads into disease aetiology and pathogenesis; e.g. Samanya vishesha sidhanta application in chikitsa sutra of different diseases.</li> <li>Decoding nidana-samprapti complexes added relevant translational value research outcomes in neuro-degenerative, neuro- psychiatric, auto-immune and skin ailments, metabolic disorders</li> <li>Formulating integrative/ complementary/alternative treatment models for Neuro- rehabilitation, different forms of arthritis, skin ailments and auto- immunity, psychiatric disorders, metabolic syndrome etc</li> </ol>
Bedside/ Clinical/ Hospital- based	<ol> <li>To decode, appreciate and validate the symptomatology documented under each prevalent syndrome,</li> <li>A decent understanding of diagnostic terminologies, diagnostic means (<i>rogi pareeksha</i>), and differential presentation of personalized traits such as koshta (metabolic typing) and prakruti (phenotype) with a background of good knowledge in modern physiology and pathological processes</li> <li>Effective learning of essentials of Basic life support, death certification etc.</li> <li>Learning of skilful activities related to palliative care and rehabilitation such as catheterization, wound dressing – bed sore management,</li> </ol>	<ol> <li>Basic science theory related to dasha vidha pareeksha</li> <li>Writing and documenting skills (case sheets, history, discharge summary, Referral letters)</li> <li>Basic Medical skills – medical ethics, Understanding warning signs/medical emergencies, risk assessment, emergencies, measuring vitals, CPR/ Catheterization/Wound Cleansing/ Palliative Care</li> <li>Learning different presentations of Metabolic- syndrome, Neuro- degenerative/Neurological/ Neuropsychiatric conditions, Skin disorders, Auto-immune disorders, and Disorders of GUT against cited Ayurvedic contexts.</li> <li>Exposure to real-life situations (Problem-based/Case-based learning) Understanding various feasible and established therapeutic protocols</li> </ol>	<ol> <li>Personalization of pharmaco- therapeutics to the best possible degree at the bedside</li> <li>Mastering the art of reporting and publishing novel clinical-therapeutic findings at the bedside highlighting the Ayurvedic nidana-samprapthi complex against personalized traits (dashavidha pareeksha) and guna- based dosha functional deviated states</li> <li>To re-test and validate clinically important models against the current healthcare needs, but not through mere translational means.</li> </ol>	<ol> <li>Considering each case at the bedside as a well-formulated problem concerning the personalized characters of the patient versus the nidana-samprapthi complex of the identified diseased state</li> <li>Ambulatory, real-life situations/ Problem-based learning and learning in community-based settings</li> <li>Focussed discussion in inter- departmental scientific groups wherein a case is presented before commencing treatment and the objective is to develop inter- professional/integrative protocols, especially in conditions such as auto- immune conditions, neuro- degeneration, musculoskeletal health, rehabilitation etc.</li> <li>Case-based incorporation of recent scientific advances in current diseases, diagnostic markers, evaluation methods, and health- seeking behaviours in protocols for</li> </ol>

#### Table 2

#### Entrustable professional attributes.

UG level	PG level
Working in Teams at bedside (Differential analysis of Dosha status, Prakruti, Koshta, Agni, Sama-nirama states Writing - documenting and communication skills (History, Risk assessment, Clear treatment protocols, Referral letters, Documenting medical error)	Reflective practices- learning experiences, critically analysing medical errors Taking responsibility for action and clinical decisions, being pro-actively involved in patient care, helping patients with decision making
Interacting with bystanders/relatives/ care providers such as nursing staff or masseur and effective communication about the expected treatment outcomes and prognosis	Peer group participation in case discussions and developing holistic therapeutic protocols, Effective documentation and publishing of clinical results.

against a very stringent mind-set. They should be frequently sensitised with specific faculty development programmes for astuteness and competence that would make them clinician-researchers. Only a teacher with clinician-researcher conviction can judiciously lead the students in clinical environment participation and real-world-based (patient-centred) problem-solving techniques. Teachers can also take the initiative for i) creating learning communities for reviewing chapters and contexts together, ii) forming a platform to discuss the application of concepts and strategies, iii) networking with clinicians, academicians, and knowledgeable persons from other sciences to enhance collaborative learning experiences at the institutional, inter-institutional and national levels.

research purpose

Such national-level communities need representation from policymakers such as NCISM members as well. The draft policy mentions generic pedagogic factors such as 'cognitive comprehension, cognitive recall, affective and multi-level methods as in the flipped classroom, inquiry-based learning, self-directed learning, play-based, and studentcentred/activity-based learning approaches. Although these changes are, to an extent, envisioned in the latest syllabus drafts, bringing out emergent, feasible and practical ways of implementation followed by rigorous periodic assessments ensuring that these initiatives are systematically followed is far more critical. Introspection of errors made in practice and errors-driven reflective practices should be documented and debated in these communities and discussed with students. Such reflective practices are a professional way to introduce students to the problem-based and task-based learning processes.

#### 3.3. Student attributes

Students should develop professional skills of communication, discussion and fruitful debates, which is fundamental for an aspirant of Ayurvedic Science to keep themself motivated to the science. They should make additional efforts to master the language of Sanskrit. Rigorous and critical reading of fundamental concepts and contexts as group activities is pivotal. Ayurvedic learning and practice become operative only when all sectors of patient care personnel effectively communicate. Nurses, Attendants, and Masseurs have significant roleplay. Hence BAMS aspirants should be tutored regarding effective communication with every person involved in patient care. Entrustable professional attributes after BAMS and Post-graduation are elicited in Table no 02.

#### 4. Conclusion

Ayurveda is a system that tried to blend epistemology with clinics in the best possible way with available resources dating back to 2500-3000 BC Ayurvedic theories and concepts are built upon the then robust observation further aided by inference and other analytic methods; hence employing its basic tenets in current practice depends on the contextual decoding of the concepts and not on the content alone. Moreover, at times understanding the philosophical ideologies seemingly irrelevant in science may enhance one's knowledge of the thinking strategies of its founders and how science systematically evolved through the ages. However, most importantly, it gives crucial wisdom on its limitations. An epistemological understanding of science helps impart an empirical, pragmatic, and reflective mind-set to its aspirants. This understanding is essential while learning fundamentals of a science which, as mentioned above, addresses complex non-linear dynamic functional states. Thus, rather than deleting seemingly irrelevant concepts from the syllabus curriculum, their retention as historical perspectives may render justice to the science.

A blindfolded belief that the principles in the coded Sanskrit literature are unquestionable, non-testable and conclusive is indeed detrimental. Ethics in clinical practice rise from the wisdom of understanding the limitation of science. A knowledge seeker of Ayurvedic Science should categorically understand that if an epistemological learning process is emphasised in science, it gives scope for the unconditional revision of concepts and ideas. The voices raised are very loud and clear. Subject matters wherein the sentiments of communities regarding economic status, caste, or gender that were highlighted due to apparent or non-obvious reasons in a historic era should be unapologetically revised or logically reasoned for retaining if at all, to be retained. A mind-set that accommodates contemporary advancements (e.g. selection of any appropriate disease-modifying marker as a proposed outcome in addition to the regular Ayurvedic/subjective parameters) while applying authentic contextual knowledge of the system shall augment the progress of Ayurvedic sciences. Thus, for Ayurveda to stay relevant as a healthcare science, policy reforms at the level of i) student curriculum, ii) teaching approaches, and iii) student attributes are quintessential.

Nevertheless, this in-depth learning requires thorough dedication, clarity in concepts, and, fundamentally, wisdom from the teaching

faculties. Value-based, instrumental and intrinsic criteria in the curriculum that does not erase the holistic essence of the medical system should be effectively demarcated and implemented. Most importantly, the authorities designing the curriculum of Ayurveda should act aware of the country's rising voices and sociocultural renaissance.

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