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Editorial

Ayurveda education reforms in India

1. Present scenario

Ayurveda education in India has undergone several transitions till 1970, when the Central Council for Indian Medicine (CCIM) was constituted by an Act of Parliament. This resulted in uniform curriculum for Ayurveda education at the national level. The national health policies thus far have generally favored modern medicine while traditional systems of medicine have remained marginalized in the country of their origin. The Ayurveda system has not yet become the mainstream in India. It does not coexist with modern medicine as traditional medicine exists in China. Although Ayurveda graduates play an important role in public health delivery system, their formal training in basic diagnosis and clinical skills are supposedly limited [1]. The theoretical and textbook based teaching needs to be transformed into more practical bedside training on par with developments in medicine.

The present situation in medical education and especially that of Ayurvedic education in India resembles that in the United States before the publication of the Flexner Commission's landmark report. The report highlighted the importance of creating physician scientists and not just clinicians. Even Ayurveda physicians need to be educated both as clinicians and as scientists ('Vaidya-Scientists') where traditional and modern pedagogies are balanced [2]. The current Ayurveda education system needs to reinforce its *Shastra* base on one side while keeping pace with the developments in modern science and technology and ensuring a strong link between research and teaching. Classical Indian method of education, which is applicable to Ayurveda also, involves four levels. *Adhiti* is the first level when information is collected and absorbed. This is followed by *Bodha*, which involves understanding and internalization of knowledge. The next level is *Acharana*, which means application of the knowledge and its practice. After mastering the three levels, one is supposed to be capable for *Pracharana*, which involves preaching, teaching, advocacy and dissemination of knowledge. The current problem in Ayurveda education becomes serious as teachers often tend to teach without sufficient understanding and clinical experience.

The CCIM approach of permitting hundreds of new colleges without sufficient infrastructure and teachers has resulted in diploma mills producing thousands of inadequately equipped Ayurvedic graduates and post-graduates. The CCIM's uniform curriculum approach has adversely impacted traditional pedagogy and shifted the focus from classical *Gurukula* to colleges and Universities. In *Gurukula*, the Guru used to have a small group of students at his place, and because this group was small, learning was more natural, spontaneous, informal and competency-based. As this system got disintegrated to form universities and colleges, learner–teacher interaction has diminished to a bare minimum and 'theoretical knowledge' has replaced 'competency'. A large section of community is concerned that the majority of Ayurvedic graduates tend to opt Western medicine practice. All these reasons are responsible for the present state of crisis in Ayurveda education. Therefore, major reforms were inevitable to put the house in order.

2. Proposed regulatory mechanisms

Recently the NITI Aayog, Government of India, has proposed two draft bills titled "The National Commission for Indian Systems of Medicine (NCISM) Bill, 2017" and "The National Commission for Homoeopathy (NCH) Bill-2017". The bills primarily seek to introduce a paradigm shift in the regulation of AYUSH education in India. These follow a similar proposal to replace the Medical Council of India (MCI) through the National Medical Commission Bill-2016.

2.1. Key features

One of the important features of the proposed bills is the introduction of a new regulatory hierarchy comprising of a Commission, advisory council and different autonomous boards with a mandate to perform their functions in the specified domains. One board for ensuring ethics in education and practice along with regulating the registration process, and another one for assessment and rating of the institutions has also been proposed. Another prominent point in the draft is that it proposes to replace the current norm of 'elections' with a transparent merit-based 'selection' process. This new process of selection will be applicable for the key positions of the Commission and its constituent boards. This change is intended at stopping the incompetent and inexperienced people from occupying the key regulatory positions. The draft also mentions of replacing the current input-based regulatory mechanism with an outcome based one. In this context, it has been rightly pointed out that, at present, the recognition of the institutions is based mostly on the inputs in the form of pre-defined infrastructural requirements and headcounts of different classes of employees and hence, neglects the quality of teaching and learning outcomes. One more significant point in the draft proposal is that it gives a provision for representation from varied fields such as botany, pharmacology, management,

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economics, law etc., to the Commission. Introduction of national level entrance examination to ensure a merit-based transparent admission process and introduction of a licentiate exit examination are two more changes that have been envisioned. This licentiate examination is also set to serve as the entrance examination for postgraduate programs. A ground-breaking point in the draft, however, is that it allows the 'for-profit' entities to set up educational institutions in contrast to the current policy of allowing 'not-for-profit' entities only. This is supposed to create a healthy and competitive environment in the AYUSH education sector. Furthermore, there is also a provision for interaction with MCI (or its successor institution) to ensure interface between all systems of healthcare delivery.

3. Serious concerns

While the intentions of the proposed bills are appreciable, few concerns need to be addressed before these bills are enacted.

First, the 'search and selection process' intended at identifying people for occupying key positions may sometimes become politically driven. Since there is no democratic process involved, the autonomy (especially of the different boards) may not be ensured in letter and spirit. Second, since there is no provision for controlling the fees, the colleges may become too commercial and many meritorious students may not be able to afford the education despite instituting a national-level entrance examination rendering the admissions to be money based rather than merit based. Third, it is a well-known fact that many students neglect their clinical duties during the period of internship and instead, concentrate on preparation for PG entrance examinations. In these circumstances, if a licentiate examination is thrust upon every single student, the situation may further deteriorate. The knowledge–skill–attitude assessment, as it has been proposed, may require interviews and other forms of tests in addition to the written ones. This is feared to pave way for corrupt practices unless improved, transparent and objective methods of assessment are placed. Fourth, India has adopted a parallel model of health education and practice, where each system of medicine has its own regulatory mechanisms independent of other systems. Learnings from nations such as China and Vietnam that have long back embraced an integrative model of education and practice (of modern and traditional medicine systems) are worth consideration for India. Unfortunately, in the current proposal, there is no provision for exploring the possibilities of India adopting an integrative model in medical education and practice. Since there are different bills being introduced to regulate different systems of healthcare, the present parallel model seems to be continued. Fifth, in the proposed draft, the State/Union Territory representations/nominations to the Commission and advisory council are mostly earmarked for the universities with the 'largest number of AYUSH colleges' and there is no room for central universities or the institutions with exemplary academic and research output to be included. This awards more weightage to quantity over quality. Sixth, there is no provision for separate Undergraduate and Post graduate education boards for Indian Systems of Medicine (ISM), unlike NCH. Since the problems affecting both the levels of education are different, they require due attention.

Most importantly, the answer to the question "Can we really expect an improvement in the standards and quality of AYUSH education by changing the regulatory mechanism?" appears to be still elusive. This question becomes especially important when one considers the fact that the provision to de-recognize an institution has been addressed cautiously in these bills. In the background of widespread corruption and academic dishonesty prevailing in the system, how the proposed mechanism is going to curb the current menace of 'ghost faculty' and 'ghost students' is yet to be seen.

4. Educational policy research

AYUSH systems have since long been marginalized because of policy dominance favoring modern medicine. Furthermore, policy-makers often do not take into consideration the regional differences in terms of population characters, healthcare-seeking behavior, socio-economic and socio-cultural factors, awareness and literacy level etc., within India. This 'one size fits all' approach may not be suitable in the context of ISM. This fact becomes obvious when one compares the prescription pattern of physicians of Ayurveda in southern parts of India with those in northern states of India. This region-dependent variation is seen even in the way how AYUSH systems are taught in the colleges. Many institutions such as Banaras Hindu University have adopted an integrative approach while teaching Ayurveda, whereas many others (such as those located in Kerala) have maintained a mostly 'classics-oriented' approach (*Shuddha* Ayurveda). The differences in terms of practices and educational standards amongst different states has been documented in the Udupa Committee report as early as in 1958. Therefore, expecting to impose uniformity in training may not be practical and fruitful considering the prevalent patterns and practice traditions.

Realistically, as stakeholders, we have not been able to gather sufficient data to categorically state which model of AYUSH education is better in which kind of set-up. The proponents of neither 'integrative approach' nor '*Shuddha* Ayurveda approach' have yet been able to produce evidence to demonstrate suitability of either to particular context.

Most importantly, we hardly carry out 'policy research' in educational institutions in India. Most of the nations and reputed universities world over have their own dedicated 'policy research institutes on medical education'. In India, unfortunately, there is no such dedicated mechanism in force. Institutions such as Public Health Foundation of India (PHFI) have not focused much on AYUSH education policies. A huge gap between different streams of healthcare professionals exists at present and they perceive each other to be their competitors rather than partners [3]. This situation makes the policies 'opinion-driven' and not 'research-based'. For instance, during the past decade, the CCIM has introduced a number of revisions in curricula repeatedly without a meaningful intellectual discussion with the stakeholders, and most importantly, without any data to support these revisions.

A well-thought-of strategy to carry out "educational policy research" is the need of the hour. Good educational surveys (such as those conducted periodically by NCERT) and some well-planned educational experiments will help the policy-makers take informed decisions. Only a handful of published papers of expected quality on this topic are available as of today on the research databases such as PubMed. An institution with a mandate to carry out 'Policy Research in Medical Education' under the ministry of Health and Family Welfare should be framed and it should guide all the proposed National Commissions to frame evidence informed policies.

5. Controversial areas

Recently, there was a controversy regarding the presence of certain topics on pre-conception gender selection in the syllabus of Bachelor of Ayurvedic Medicine and Surgery program. Activists claimed that these are against the Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994 and that these topics

must be removed from the syllabus. While it is true that the topic '*Pumsavana*' is listed in the syllabus, and a clear implication of practicing these methods in the context of PCPNDT Act is missing therein, it is also true that the popular media reporting was immature: the content that was suggested to be removed by the activists was displayed at full length by mass media. In fact, there is no scientific evidence to suggest that these methods work and even conducting such studies is unethical. Any pre-conception method aimed at gender selection is unethical and legally banned in the present-day context. It may be noted that the use of some indigenous medicines, mostly in post-conception phase, by women in certain populations has been reported with potentially harmful implications [4].

Some scholars argue that these methods are prescribed for healthy progeny and not for gender selection. If at all such a suggestion is plausible, suitable modifications are required to be incorporated in the curriculum-based textbooks. Re-translation and re-interpretation of classical textbooks can help in such cases. Peer-reviewed, curriculum-based textbooks written under the supervision of multi-disciplinary expert committees-that must also incorporate the recent advances in the field – are the need of the hour.

A study has suggested that certain topics, which are not much relevant today, may exist in the classical textbooks. It is important to revise the curriculum so as to remove such portions and include more contemporary application-oriented topics. We must replace ritualistic approach that encourages 'worship' with 'critical inquiry'. [5].

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