

POSSIBLE REFORMATIONS IN AYURVEDA EDUCATION SYSTEM TO SUITE THE CURRENT NEED

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Abstract: **Background:** Advancements in medical science is reflected in medical education in terms of incorporation of newer techniques in teaching and availability of standard text books, but it is not the same in Ayurvedic education system. **Objective:** To propose reformations in to existing Ayurveda education system to meet the current needs. **Methods:** We identified some of the possible reformations and searched for relevant literature through computer based Google scholar and PUBMED indexing cites. **Discussion:** We identified eight possible areas where reformations can be made to meet the current needs. These areas include introduction of Standards and uniformity in the entry of students in to graduate level education in Ayurveda, Emphasis on clinical exposure to graduate students, Introduction of credit point system for academicians and practitioners, Preparation of standard textbooks, Inclusion of academic research findings in to the curricula of Ayurveda, Scope for BAMS graduates for Doctoral studies, Strengthening research and statistics teaching at UG level, Greater promotion of interpathy and interdisciplinary learning. **Conclusion:** Albeit these advances are not new to Ayurveda education system however the pace is not up to the desired level. Hence reformation in to the Ayurvedic education system with the consideration of above mentioned points is the need of the hour.

Keywords: Ayurveda, BAMS curriculum, current needs, education, reformations

Introduction

Medical science is growing by leaps and bound throughout the globe so also in India. The advancement in medical science is also clearly reflected in medical education in terms of incorporation of newer techniques in teaching, availability of standard medical books etc. but is not the same in Ayurvedic education system. Many of the Ayurvedic institutes are still following the same age old principles of teaching. Students are recruited without standard entrance examination and more over the quality assessment of teaching and teacher is very poor in this sector. We propose the following points for the reformation and revival of Ayurvedic education system.

Objective: To propose reformations in to existing Ayurveda education and training to meet the current needs.

Methods:

We identified some of the possible reformations and searched for relevant literature through literature review using computer based Google scholar, PUBMED and other indexing cites. The key words used for the purpose of literature review include Ayurveda, advances, curriculum, education, prospects, revival and reformations.

Discussion: We identified eight possible areas where reformations can be made to meet the current needs. A detailed description of these areas is delineated below.

Standards and uniformity in the entry of students in to graduate level education in Ayurveda:

A national level entrance examination is the need of the hour for the entry to graduate level education in Ayurveda colleges across the entire

nation. This has been made mandatory in mainstream medical education and is successfully run in the country. Pursuant to the Notification published in the Gazette of India Extraordinary dated 21st December, 2010, the Medical Council of India with the approval of the Central Government amended the regulations on Graduate Medical Education 1997 and made provision for a Single Eligibility cum Entrance Examination, namely, National Eligibility cum Entrance Test (NEET) for admission to MBBS Course in each academic year. The Dental Council of India also amended the BDS course Regulations 2007 and notified in the Gazette of India Extraordinary dated 31st May, 2012 that admission to BDS course in each academic year shall be through National Eligibility Cum Entrance Test (NEET) (**CBSE, 2015**). However this kind of an entrance examination is not available in Ayurveda sector. Ayurveda colleges in different states depend upon their respective state level entrance examinations such as CET in Maharashtra and JEE in Odisha etc. This will bring uniformity and standards in admission process.

Emphasis on clinical exposure to graduate students:

More emphasis should be laid on clinical exposure, clinical examination of patients and right kind of diagnostic approaches for the graduate students. In the ancient days, students used to get clinical exposure right from the first section of classical texts like *Sûtrasthâna*, which deals with fundamental principles covering many clinical topics. There is also a need to extend the clinical tra

ining after the completion of the course. Effective residency programs need to be designed for young graduates of Ayurveda (**Manohar PR, 2014**). In addition studies also reveal that the Undergraduate level clinical exposure to students is not satisfactory. This is pertinent in certain areas like *Panchakarma* (five basic purification therapies), *Kshara Sutra* (medicated thread used for the treatment of anal fistula and hemorrhoids), and *Jalaukavacharana* (leech therapy). In addition students at UG level are not equipped with basic skills to handle emergencies required at a primary health care setting through

Ayurveda (**Patwardhan et al, 2011**). It is recommended that the institutes should create ample scope for clinical exposure for the graduate students of Ayurveda.

Introduction of credit point system for academicians and practitioners:

Credit point system needs to be introduced for the job promotion of clinicians and academicians in Ayurveda fraternity. This should be similar to that of MCI pattern of credit system. The medical council of India has recently introduced this concept for continued medical education (CME). A minimum of 150 credit hours is needed to renew medical registration. This has led to most of the state medical councils coming up with their guidelines for credit hours (**MGRMU, 2010**). Although there are many objections from medical fraternity for such a system as many other parallel technical professionals do not have to face such credit system such as lawyers and engineers etc. (**Sohoni, 2011**). But this will invariably help in creating a competitive attitude among practitioners and academicians. Many a time paradoxical situations happen with the introduction of credit system with Ayurveda doctors i.e. practitioners do come to attend the CME sessions as a pass time event out of their busy clinical practice as the same is sponsored by Govt. and good arrangements are made for the venue, accommodation and food etc. Hence what needs to be done is the introduction of a strong and diligent monitoring and evaluation system in to the existing CME programs. The other facet is that it might be cumbersome and inconvenient for busy practitioners to attend a CME in a far away location hence the venue of CME needs to be planned accordingly to ensure proper attendance of the targeted practitioners. Again care must be taken while designing the CMEs for the Ayurvedic practitioners and the Ayurvedic teachers as the scope of both these cadres of professionals are different in many ways. Above all the CMEs should not be treated as a system of earning credits but as a way of updating the skills, practice and knowledge

Preparation of standard textbooks:

This is probably a serious issue in Ayurveda fraternity. It is very difficult to find standard

textbooks in Ayurveda. Here standard categorically refers to international standards in book publishing. Most of the Ayurveda text books are devoid of ISBN number and a very limited number of quality publishers are available in this sector.

Inclusion of academic research findings in to the curricula of Ayurveda:

Every year a noticeable number (around 2500) of MD and PhD student pass out from various Ayurveda colleges across the country. Each of these MD and PhD students do submit a research thesis. As on 01/04/2014 there were 98 post graduates Ayurveda colleges in India with an admission capacity of 2441 scholars each year (Dept. of AYUSH, 2014). Moreover these post graduate institutes also provide doctoral (PhD) degrees. Such meticulous research carried out under the supervision of an academic expert should not go in vain and hence the results need to be incorporated in to the respective areas and disciplines of Ayurveda syllabus. This will help in introducing the latest scientific developments of Ayurveda to graduate students. It is generally perceived that the science of Ayurveda is eternal and cannot be changed easily however there is no harm in getting updated with the recent advancements of Ayurveda. During the ancient times the Ayurveda scholars like *Charak*, *Sushrut* and *Vagavatta* could not explore the science in a modern way owing to limitations of modern instruments, equipments and technologies but at present the world is witnessing a paradigm shift in terms of medical technology especially in biomedical research which should preferably be applied to the field of Ayurveda.

Scope for BAMS graduates for Doctoral studies:

In India academic institutions are accepting MBBS graduates for direct entry to PhD programs in several disciplines such as management and social sciences etc. The rationale behind this is the 5 and 1/2 years of formal education after 10+2. This should also be applicable to BAMS and other AYUSH graduates owing to similar duration of course. This will help in fulfilling the erudite desire of AYUSH graduates to learn interdisciplinary research areas. Albeit a few universities are offering PhD programs directly to BAMS graduates but is not widely accepted akin to MBBS graduates.

Strengthening research and statistics teaching at UG level:

Since the inception of Indian Medicine Central Council Act, 1970 (Act No. 48 of 1970) many organized and individual attempts have been made for Strengthening research, teaching and training at UG (BAMS) level. The contribution towards the revival and advancement of Ayurvedic Education by Late Prof. Shriram Sharma, President of CCIM and their colleagues, is laudable [(Sharma S, 1983), (Kumar S, 1983A), (Kumar S and Dwivedi R, 1983), (Kumar S, 1983B), (Kumar S, Dwivedi R and Sharma S, 1988)]. Creation of new teaching material including Books and Journals have also been contributed by some authorities [(Patwardhan K., Kumar S , 2014), (Patwardhan K, Galib R, Thakur P, Kumar S, 2014), (Baghel MS, 2005)].

Recently CCIM has introduced changes in the syllabus for the subject of *Swathavritta Vijnan* that includes subjects like public health, epidemiology, biostatistics and research methodology. Appointing teachers having post graduate education in these disciplines preferably with a BAMS graduation should be the preferred option. Curricular reformation and possibilities of exploration of some subject experts other than Ayurveda teachers has also been suggested by some authorities (Patwardhan K, 2010). Moreover a comparative study between public health syllabus and *Swathavritta* syllabus revealed that there is a great degree of similarity between these two subjects. The comparison revealed that the syllabus of MPH program of Achutha Menon Center for Health Science Studies (AMCHSS) of the Sree Chitra Tirunal Institute of Medical Sciences and Technology (SCTIMST), Thiruvananthapuram, Kerala, India matches with that of *Swathavritta Vijnan* Syllabus of BAMS in 60% of the courses i.e., 12 out of 20 courses are found matching with each other. These courses include Orientation, Basics of Biostatistics, Introduction to Epidemiology, Health Policy, Health Care system in India, Health and Environment, Intermediate Biostatistics, Intermediate Epidemiology, Infectious disease epidemiology, Chronic Disease Epidemiology, Research Methods and Health Policy. *Swathavritta Vijnan* is a subject in the UG program of Ayurveda and the same is not a specialized course like a Master's degree in Public Health (MPH) program (Samal J, 2014). In another study

when compared with Community Medicine syllabus of MBBS 88.88% i.e. 16 out of 18 courses are found matching. The broad outlines of similar courses in both these syllabi are community medicine and introduction to humanities and community medicine. When the syllabus was compared with MPH syllabus of Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh, India 67.4% i.e. 56 topics out of 83, are found to be conceptually similar and 85.5% of the courses are similar when compared with MD community medicine syllabus (Kumar J *et al.*, 2012).

Greater promotion of interpathy learning

Interpathy clinical practice is being observed in various states with or without governmental patronization. In many states it has been observed that Ayurveda graduates are posted at primary health centers and work along with allopathic doctors and sometimes alone in the center (Samal J, 2013). This requires more than a basic level understanding of modern medicine. However while promoting interpathy learning care must be taken to impart the required level of knowledge only, else the knowledge of modern medicine may coax the Ayurveda graduates to practice Allopathy instead of Ayurvedic medicine. This will also help in understanding the basics of treatment rendered by the Allopathic doctors for a particular disease which would otherwise help in devising proper treatment strategy of that disease by the Ayurvedic practitioner. The same is also applicable to the MBBS graduates. One of the studies revealed that the MBBS graduates are interested in knowing the basics of Ayurveda alongside their regular studies. Many students (78%) were in favor of integration of Ayurvedic and conventional therapies. Though most of the students (89%) wished to learn the basics of Ayurveda, 55% students were not in favor of Ayurveda being included in MBBS curriculum. Out of the total students who used Ayurvedic medicines, 92% found it to be effective. For most of the students, delayed relief and prolonged duration of treatment were the barriers to use Ayurvedic medicines (Mankar NN *et al.*, 2015).

Conclusion

The world is witnessing great advances in medical education coupled with advances in medical technology. Albeit these advances are not new to

Ayurveda education system however the pace is not up to the desired level. Hence reformation in to the existing Ayurvedic education system with the consideration of above mentioned points is the need of the hour.

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