

Editorial

Physiotherapy Education in India: Is it Time for Reform?

“True education must correspond to the surrounding circumstances or it is not a healthy growth.” Mahatma Gandhi

Is the physiotherapy profession in India ready to accept the professional autonomy as described in the recently passed Allied and Health Professionals commission bill? It is after a long struggle, that the physiotherapy profession has attained its due credit. To answer this question, it will be worthwhile to analyze the current status of physiotherapy education in India.

Physiotherapy is an integral part of health care as evident through the recent contributions of physiotherapists in managing COVID pandemic. The transformation of physiotherapy education since early 21st century led to speciality practice. At present, most of the Indian universities are offering doctoral level programs in physiotherapy. As per information from some senior therapists, the King Edward Memorial Hospital (KEM), Mumbai started the first physiotherapy school with 10 students. This was initiated by Mr Jacques with the support of the World Health Organization. This school offered 2 years Diploma Program in Physiotherapy. The second physiotherapy school was established in Chennai during the same period at the Government General Hospital, Chennai. In the academic year 1975–76, a 3-year degree program was introduced. Currently, about 450 institutes in India offer entry-level degree course. Approximately 6000 graduates complete entry-level physiotherapy program annually. At present, the duration of entry-level physiotherapy program is 4 years and 6 months. The primary objective of the entry-level curriculum should be preparing autonomous physiotherapy practitioners who can contribute to the healthcare system in all possible ways, more so, in view of the recently gazetted National Commission for Allied And Health Professions Act.

ENTRY-LEVEL PHYSIOTHERAPY CURRICULUM OF INDIA: CURRENT STATUS

Is the curriculum offered appropriate? Are the roles and scope of physiotherapy practice clearly defined?

We analyzed entry-level physiotherapy curriculum of 19 different universities as part of Foundation of Advancement of International Medical Education and Research (FAIMER) fellowship. Most of the prescribed curricular contents are at par with global standards. The following is observed regarding entry-level physiotherapy curriculum in the country.^[1]

The model curriculum proposed by the Ministry of Family Welfare in the year 2017 serves as guideline by clearly defining the roles and competencies required. It insists the need for vertical integration of basic health sciences knowledge into physiotherapy practice.^[2] Recently, World Physiotherapy published a framework for entry-level curriculum. It identified eight competence domains which are further divided into core competencies.^[3] It will be appropriate to redefine physiotherapy curriculum as the newly introduced bill provides a platform, i.e., developing a competency framework to meet the physiotherapy need of the society in alignment with national health mission. For instance, national health policy provides importance to preventive health.^[4] Physiotherapists should possess required competencies in preventive health. Integrating allied and health services to the national healthcare delivery will have positive effect.^[5]

COMPETENCY-BASED PHYSIOTHERAPY EDUCATION

As recommended by World Physiotherapy and other physiotherapy professional bodies, entry-level physiotherapy curriculum needs to be competency-based. It is mandatory to understand curricular aspects of physiotherapy education to formulate a national competency framework. Competency-based physiotherapy education is outcome-oriented, and the learners are provided with appropriate learning experience to acquire necessary competencies. The learning experience includes teaching-learning, assessments, and feedback.

Competency-based education (CBE) focusses on outcomes, whereas the traditional curriculum focusses on content delivery. CBE emphasizes the development of required competencies in an organized order through learner-centered approach.

COMPETENCY, DOMAINS OF COMPETENCE, AND ENTRUSTABLE PROFESSIONAL ACTIVITIES (EPA)

Competency is “an observable ability of a health professional related to a specific activity that integrates knowledge, skills, values, and attitudes.” Each defined competency can be observed and assessed objectively [Figure 1].^[6] Competencies are derived from domains of competence identified based on the societal need.

EPA is defined as “An essential task of a profession that a qualified practitioner can be trusted to perform without direct supervision.” Entry-level physiotherapists should

be able to develop EPAs required to practice.^[7] Defining EPAs considering the local needs will be the first step in transforming physiotherapy education.

The competency framework proposed by World Physiotherapy identified eight domains of competencies, whereas the MOHFW model curriculum identified nine goals which are common for all the Indian healthcare professionals. Table 1 compares the competency domains proposed by World Physiotherapy and MOHFW. The competency domains adopted by other professional organizations such as American Physical Therapy Association (APTA) and Canadian Physiotherapy Association are in alignment with the World Physiotherapy framework.

Competencies for each domain need to be formulated. Defined competencies will determine teaching learning and assessment methods. World Physiotherapy identified core competencies for each learning domain specific to physiotherapy education.^[3] Another important question arises at this juncture. Can we adopt the competencies proposed elsewhere in the world? The answer would be yes and no. Though we can adopt the competencies prescribed, there is a need to define a set of competencies in alignment with national health policy and our healthcare

delivery system. For instance, noncommunicable disorders are the major cause of concern in our society. Developing competencies in health promotion and prevention needs due consideration. Another example would be to develop competency in community care. Therapists should have necessary knowledge, skills, and attitude in providing community care in order to reduce impairments, functional limitations, and participatory. This will reduce the cost of health care significantly. Merely prescribing the contents in the curriculum will not yield the desired outcomes. Hence, the curriculum should define competencies required to register as physiotherapists.

ADAPTING INNOVATIVE TEACHING–LEARNING AND ASSESSMENT METHODS

Once the competencies are defined, choosing appropriate teaching–learning methods to train the learner becomes the responsibility of faculty members. Merely using the traditional didactic lecture will not be sufficient to impart knowledge. Innovative teaching–learning methods such as case-based learning, problem-based learning, and other interactive teaching methods should be adopted to impart knowledge. Clinical training plays a vital role in developing competencies. Adequate clinical exposure and supervision are required for the holistic development of physiotherapy graduate. Established methods such as simulation training, using standardized patients, virtual reality training, etc. need to be adapted.

Assessment of learning is vital for the development of competency. Appropriate assessment methods should be used to assess competency as it is understood “Assessment drives learning.” Assessment of clinical competence is carried out as described by George Miller at knowledge (know), application of knowledge (knows how) performance (shows) and action (does) levels.^[8] Established assessment methods such as Objective Structured Clinical/Practical Examinations (OSCE/ OSPE), Objective Structured Long Case Examination Record (OSLER), etc., need to be implemented.

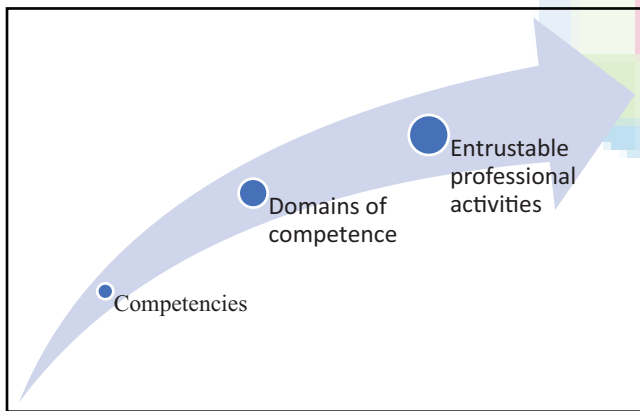


Figure 1: Relationship between competencies and domains of competence

MOHFW learning goals^[2]	World Physiotherapy competence domains^[3]
Clinical care	Physiotherapy assessment and interventions
Communication	Communication
Membership of a multidisciplinary health team	Interprofessional team work
Ethics and accountability at all levels (clinical, professional, personal, and social)	Ethical and professional practice
Commitment to professional excellence	Quality improvement
Leadership and mentorship	Leadership and management
Social accountability and responsibility	Reflective practice and lifelong learning
Scientific attitude and scholarship	Evidence-based practice
Lifelong learning	

NEED FOR FACULTY DEVELOPMENT PROGRAMS

Are our faculty members equipped to use the innovative teaching methods and assessment methods?

We should accept the fact that there is no formal training for the physiotherapy teacher, in education methods. Structured training programs to facilitate teaching learning skills should be one of the priority areas to be considered. There should be regulations to train faculty member in educational technologies as practiced by National Medical Commission.

To answer the question, **yes**, it is the most appropriate time for reformations in physiotherapy education. Physiotherapy profession in India is ready to accept the professional autonomy as described in the recently passed Allied and Health Professionals commission bill. Physiotherapy profession requires a well-articulated regulation to govern the profession as envisaged by the recent bill. The curriculum of the entry graduate programs needs to be formulated based on the principles of CBE. It is a dream for every physiotherapist to achieve the professional autonomy.

The purpose of education is to make good human beings with skill and expertise... Enlightened human beings can be created by teachers. – A. P. J. Abdul Kalam

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