

Reforming the Physiotherapy Curriculum in India: Identifying Issues and Proposing Solutions

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Abstract: *The curriculum for physiotherapy education in a few nations faces challenges that prevent it from being optimally aligned with contemporary healthcare needs. This discussion aims to identify these issues and propose solutions to improve the efficiency and relevance of the curriculum in India. The revised Bachelor of Physiotherapy syllabus offers a comprehensive and structured curriculum that encompasses foundational sciences, clinical knowledge, research skills, and interdisciplinary subjects. Moreover, incorporating practical components, involving physiotherapist teachers, and prioritizing speciality and research at the master's level, the proposed syllabi aim to equip students with the necessary knowledge and skills to excel in the field.*

Keywords: Curriculum, Physiotherapy Education, Solutions, India

1. Introduction

As an essential component of healthcare, physiotherapy plays a critical role in the prevention, treatment, and rehabilitation of multifarious health conditions. It improves people's well-being and functionality through a multifaceted approach that combines therapeutic interventions, exercise, and education. The basis for this is the curriculum which serves as the foundation for preparing physiotherapy graduates to enter the dynamic and demanding workforce. In general, a curriculum must be set up on an adequate philosophical, theoretical, and pedagogical foundation to be effective. The philosophical basis defines the core values and principles that guide physiotherapy practice. Theoretical frameworks provide an empirical basis for understanding the human body, health, and rehabilitation principles. Pedagogical considerations ensure that the curriculum is designed and delivered in a way that effective learning and skill acquisition are possible [1]

The curriculum is meticulously crafted to impart specific knowledge, skills, and attributes required to address the evolving challenges in the field of physiotherapy. This is not only focused on the current requirements but also on a forward-thinking vision for professional enhancement. A strong curriculum is thus more than just a collection of courses acts as a strategic roadmap that aligns with the ever-changing healthcare landscape. Despite its comprehensive nature, the physiotherapy curriculum in a few nations faces challenges that prevent it from being optimally aligned with contemporary healthcare needs. These challenges necessitate a critical examination and proactive solutions to ensure that the curriculum remains responsive and relevant in a rapidly evolving healthcare landscape. [2, 3]

However, while the curriculum for physiotherapy education in India covers a wide range of topics, it faces several challenges that must be addressed to better align with contemporary healthcare needs. This discussion aims to identify these issues and propose solutions to improve the

efficiency and relevance of the physiotherapy curriculum in India.

2. Issues and Solutions

In addressing the challenges within physiotherapy education, several key issues have been identified, each requiring a tailored solution to enhance the quality and relevance of the curriculum. Redundancy in subjects such as Biophysics and English is apparent, with opportunities to integrate Biophysics into the Electrophysiological Agents chapter and remove English as a standalone subject. This consolidation streamlines the curriculum, focusing on essential content while eliminating unnecessary redundancies. Moreover, the overemphasis on clinical subjects risks overshadowing foundational physiotherapy principles, highlighting the importance of maintaining a balanced curriculum that encompasses both clinical and foundational concepts. Standardized practical evaluation formats are imperative to ensure consistency in assessing students' clinical skills, necessitating the development and implementation of fixed evaluation formats. Additionally, addressing the inadequate coverage of pain management content requires the incorporation of comprehensive pain assessment and management material to equip students with essential skills. Research methodology is integral to fostering evidence-based practice, prompting the introduction of dedicated courses to cultivate research skills among physiotherapy students. Integration of alternative medicine and allied therapeutics content into core subjects ensures a holistic approach to patient care, while relevant aspects of pathology, microbiology, and pharmacology can be incorporated to provide essential knowledge without overwhelming students with standalone courses. Finally, revisiting basics from BPT in the first year of MPT is deemed unnecessary, advocating for a streamlined MPT curriculum that eliminates this redundancy and optimizes learning experiences for students. Collectively, these solutions aim to enhance the effectiveness and relevance of physiotherapy education, preparing students to meet the diverse needs of patients and excel in their professional practice. Henceforth an attempt

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has been made to develop a syllabus for the bachelor and master of physiotherapy programs (Table1&2)

Table 1: Proposed BPT Curriculum

BPT			
First-Year	Second Year	Third Year	Fourth-Year
Basic Sciences (5)	Pre Clinical & Physio Therapeutics (5)	Clinicals (Pathophysiology, Etiopathology, Investigations, Medical and Surgical Management) (6)	Physiotherapeutic Application (5)
Anatomy	Research Methodology	Clinical Orthopaedics	MSK Physiotherapy
Physiology	Exercise Physiology & Prescription	Clinical Neurology	Neuro Physiotherapy
Physio Therapeutics 1	Physio Therapeutics 2	Clinical Cardiorespiratory	Cardiorespiratory & GMGS Physiotherapy
Electrophysiological Agents – 1	Electrophysiological Agents-2	General Medical & Surgical Conditions (GMGS)	Community Physiotherapy
Kinesiology And Biomechanics 1	Kinesiology And Biomechanics 2	PFD or physiotherapeutic evaluation-1 (ORTHO&NEURO)	Psychology & Sociology & EBM, ETHICS
		PFD or Physiotherapeutic Evaluation-2 (CARDIORESPIRATORY&GMGS)	

Table 2: Proposed MPT Curriculum

MPT	
First-Year	SECOND YEAR
Basic Sciences (3)	PHYSIO THERAPEUTICS (3)
Biomechanics, Exercise Physiology & Exercise Prescription	Physio Therapeutics-1
Research Methodology & Biostatistics	Physio Therapeutics-2
Physiotherapy Evaluation	Thesis
MPT thesis plan	
I term	Research Literature Review/Proposal
II term	Pilot Study/Data Collection
III term	Data Collection/Statistical Analysis/ Thesis Writing
IV term	Thesis Writing/Submission

3. Discussion

The proposed syllabus outline for the Bachelor of Physiotherapy has been thoroughly revised and clarified to ensure a comprehensive and structured knowledge acquisition process. This syllabus structure is designed hierarchically, allowing students to build upon their foundational knowledge as they progress through the program. In the first year, students will engage with five basic science papers, three of which will be taught by experienced physiotherapists. This ensures that students not only gain a strong foundation in the fundamental sciences but also receive specialized instruction from professionals with practical experience in physiotherapy. Moving on to the second year, the focus shifts towards pre-clinical and physiotherapeutic knowledge. During this stage, students will also be introduced to research methods, references, and citations. This is of utmost importance as it enables students to gain a clear understanding of the sources from which clinical contents are derived. By familiarizing themselves with research methods and proper referencing, students will be able to critically analyze and evaluate the clinical information they encounter in their third-year clinical subjects. This integration of research skills within the curriculum promotes evidence-based practice, a cornerstone of modern healthcare. The third year of the program entails the study of clinical papers alongside physiotherapy evaluation papers. This synergistic approach allows students to apply their theoretical knowledge in a practical setting and enhances their clinical involvement during their clinical postings. By combining the study of clinical papers with

evaluation papers, students can reinforce their understanding of the subject matter and develop the necessary skills to assess and treat patients effectively. Furthermore, the proposed syllabus includes the inclusion of psychology, sociology, ethics, and evidence-based medicine (EBM) in the final year. This addition serves to broaden students' perspectives and deepen their understanding of these subjects concerning physiotherapy care and practice. By incorporating these interdisciplinary topics, students are equipped with a holistic understanding of the factors that influence patient care and well-being. One of the notable features of the proposed syllabus is that 76% of the papers are covered by physiotherapy teachers. This ensures that students receive instruction from experts in the field who possess specialized knowledge and practical experience. By having physiotherapy teachers deliver the majority of the curriculum, the syllabus becomes more unique and tailored to the specific needs of physiotherapy students. Additionally, the proposed syllabus includes the option for practical and viva in 12 out of 21 papers. This practical component allows students to apply their theoretical knowledge in a hands-on manner and further enhances their learning experience. The inclusion of practical and viva provides students with the opportunity to demonstrate their skills and proficiency in various aspects of physiotherapy. In contrast, the proposed syllabus for the Masters of Physiotherapy places less emphasis on written theory papers and instead prioritizes speciality and research. This shift in focus recognizes the advanced level of knowledge and skills that students at the master's level possess. By emphasizing speciality areas and research, the syllabus aims to prepare students for more

specialized roles within the field of physiotherapy and encourages them to contribute to the advancement of knowledge through research.

4. Conclusion

In conclusion, the proposed Bachelor of Physiotherapy syllabus offers a comprehensive and structured curriculum that encompasses foundational sciences, clinical knowledge, research skills, and interdisciplinary subjects. By incorporating practical components, involving physiotherapy teachers, and prioritizing speciality and research at the master's level, the proposed syllabi aim to equip students with the necessary knowledge and skills to excel in the field of physiotherapy. Addressing these issues in the physiotherapy curriculum is crucial for producing well-rounded, competent professionals who can effectively contribute to the healthcare system.

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