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NEED OF INTEGRATION OF COURSE ON MEDICAL DEVICES IN UNDERGRADUATE PHARMACY CURRICULUM SUKHPREET KAUR

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Dear Editor,

The medical devices sector in India is an indispensable constituent of the Indian healthcare sector, particularly for the prevention, diagnosis, treatment, and management of all medical conditions, diseases, illnesses, and disabilities. It forms an important constituent of health-care delivery system along with health-care providers, pharmaceuticals, and health insurance industry, thereby helping achieve the key values mentioned in the National Health Policy 2017 in terms of provision of good quality, affordable, and comprehensive healthcare to all citizens. The medical device is a vast sector, with the following broad classifications: (a) Electronics Equipment; (b) Implants; (c) Consumables and Disposables; (d) IVD reagents; and (e) Surgical Instruments. The current market size of the medical devices sector in India is estimated to be USD11 bn [1] and is expected to rise to USD 50 bn by 2025. India imports 80% of medical devices and is greatly reliant on foreign suppliers, particularly for high-end equipment such as cancer diagnostics, medical imaging, ultrasonic scans, and polymerase chain reaction technologies. There are 750-800 domestic medical device manufacturers in India. Medical device market is highly funds intensive with an extensive commencement period and requires knowledge of new technologies and training of health-care professionals to adapt to new technologies for rapid innovation. It is very important to develop a skilled workforce that supports the medical device sector by a steady supply of skilled workforce across the innovation value chain (e.g., scientists, regulators, health experts, managers, and technicians) is necessary for the growth of the sector. Availability of skilled workforce remains a challenge in the development of the medical device sector in India. As per a survey by Andhra Pradesh MedTech Zone, approximately half of the workforce in medical device sector is unskilled [1], indicating the necessity for developing skills to enhance productivity levels. There are very few institutions offering courses in medical device across country [2]. Various training programs are conducted under Skill Vigyan Program for trainings regarding Medical devices. Developed countries, like Australia, have University and Industry collaboration programs which focus on unmet market and clinical needs of Med Tech Industry [3]. Further, vocational training is being encouraged. For instance, states in Germany provide free training services to companies as a non-cash incentive that improves the quality of the local labor force [4].

The government of India launched a scheme in March 2020 named as "Promotion of Medical Device Parks" with a total budget of 400 crores. This scheme will develop robust network for medical device manufacturers in the country. However, availability of skilled workforce is very essential to work for Medical Device industry.

Further, medical devices are an essential part of the delivery of high quality healthcare and their procurement and management in the hospital setting is often under the authority of hospital pharmacists. Faculty experts in pharmaceutical sciences and regulatory officers are of the view that study of medical devices should be made a mandatory discipline for all pharmacy courses approved by the Pharmacy Council

of India (PCI) because, like medicines and other health technologies, these devices are also necessary for patient care.

The governing establishments of the pharmacy education, the PCI, and the AICTE must take it seriously and do the needful, the experts responded regarding the need of medical devices in pharmacy education.

The subject has now become a point of discussion not only among the academic community but also among the members of the drug control office. The pharmacists' need to have skills to help patients for optimum results from their medical devices.

Both the academic and the regulatory experts find that a dedicated chapter on medical devices should be included into the syllabus of B Pharm and a larger space should be found in the PG curriculum.

As result of efforts by various senior professors and dignitaries in field of pharmacy, the Education Regulations, 2020 for Diploma Course in Pharmacy, include 2 h lecture in Pharmacy Law and Ethics [5]. This is not sufficient as the use of medical devices is increasing drastically in health-care sector.

Today, the focus of pharmacy education is more on drugs. It is absolutely necessary to include course of medical devices into the syllabus of D. Pharm, B Pharm and M Pharm. The role of medical devices in the curriculum of pharmacy education will definitely make the new generation graduates full-fledged pharmacists in the present day technologically advanced era. This will open up new avenues of employment of pharmacy students in the Med Tech Industry.

AUTHORS' CONTRIBUTIONS

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CONFLICTS OF INTEREST

Nil

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