



THERE IS NEED OF INTEGRATION OF ULTRASOUND EDUCATION IN UNDERGRADUATE MEDICAL CURRICULUM IN SOUTH ASIA INCLUDING PAKISTAN.

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INTRODUCTION

Ultrasound, an imaging technique has widely been used in the management of patients in almost every specialty of medical sciences.¹ It is a portable and an inexpensive tool with no hazard of radiation, demonstrate the images in real-time, relatively easy to learn, may be repeated multiple times and helps in urgent decision making.² In an attempt to improve the efficiency of patient care and safety, clinicians have started performing ultrasound scans by themselves.¹

The need for ultrasound teaching/learning in undergraduate medical education has increasingly been recognized globally and ultrasound curriculum for teaching ultrasound to undergraduate medical students have been developed and implemented.³ Majority of the schools in United States of America (USA), Canada and North America have incorporated ultrasound curriculum for teaching and training of their undergraduate medical students.³⁻⁴ Medical School in United Kingdom has developed ultrasound curriculum for medical undergraduates and integrated it.¹ Germany has also developed comprehensive ultrasound curriculum for all medical undergraduate students.² Saudi Arabia too has developed an integrated curriculum for educating ultrasound to undergraduate medical students.⁵

Chiem et al have defined 4 motives for the motive of incorporating ultrasound curriculum in undergraduate scientific education; 1) it may improve conventional learning; (2) it may train the destiny

clinician to enhance their diagnostic and procedural skills; (3) it may foster synchronized and powerful affected person care; and (4) it may function a version for advanced, specialty-specific, or interdisciplinary ultrasound education in graduate scientific education.⁶

Evidence has shown that ultrasound improves a medical student's understanding of anatomy and physiology and physical examination skills.^{4,6} Wide variation has been observed worldwide in ultrasound education of undergraduate medical students but over all focus is to teach basics of ultrasounds and hand on practice utilizing simulation. Ultrasound simulators have the potential to enhance and transform ultrasound education. Teaching of simple ultrasound ideas on the preliminary tiers of scientific training results in the improvement of basis of ultrasound-particular cognitive and motor abilities which are later implemented to extra annoying scientific packages preformed at a better cognitive load.⁴ Personal hand-held ultrasound gadgets had been added within side the first-year scientific faculty curriculum in a few faculties in USA and majority of the scholars has discovered that it has stepped forward their know-how of the 3-dimensional anatomy.⁷

Birrane J et al. in scoping review of ultrasound teaching in undergraduate medical education concluded that ultrasound education can be integrated into the under graduate medical school curriculum which is possible, achievable and beneficial to medical students.⁸

Ultrasound has yet not been incorporated in undergraduate medical education in South Asia including Pakistan. There is need to incorporate ultrasound education in undergraduate medical curriculum and integrate within existing curriculum. It is feasible and essential for effective and safe practice in future. The faculty involved in teaching undergraduate students needs to be trained in imparting ultrasound education of the undergraduate medical students.

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