



Our Perspective as Clinical Embryology to integrate with Post graduate curriculum in Anatomy

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Human Anatomy is considered as one of the major subjects which includes the study of Gross and microscopic structures, genetics and Embryology, radiological anatomy, anthropometry, comparative anatomy, living anatomy etc. So, Anatomy as one of prime preclinical subject has great role to understand human body structure, which is very much relevant to understand and explain the core concepts of clinical subjects. Similarly, Genetics and Embryology is taught in detail at undergraduate and postgraduate level and is very much included in UG and PG curriculum as approved by National medical commission (NMC) [1]. Practical aspect of embryology, skills related to embryology has not been adopted in Anatomy Curriculum. Level of competency is only "knows how" and focusing only to theoretical aspects of genetics & Embryology. So Students lose interest in these areas in the absence of practical & skill training activities and as a result, Student face difficulty in understanding molecular regulation, genetic basis of clinical conditions, transmission etc during Undergraduate studies. Even at PG level, students pursuing post graduate course in Anatomy have no exposure of clinical embryology or practical training related to genetics & embryology. They are not exposed to technologies in embryology during PG studies [2]. As per PG curriculum only theoretical aspects are focused upon. They are supposed to know details of human development from gametogenesis (First week of development) to term, development of organ and organ system, molecular regulation of systemic development, theories & concepts of development, abnormalities associated with maldevelopment, genetic and Chromosomal abnormalities, birth defects. but never being oriented to skills, technology related to embryology related to patient care. Few apex medical Institutes in India have now shown willingness to train post graduate students in Anatomy in cyto-molecular genetics and involving postgraduate Anatomy students in research activity in areas related to genetics or to adopting genetic labs to upgrade department, Institutes are also adopting training of students in medical genetics and have included skills & Training in medical genetics in their post graduate curriculum but as far as training in clinical embryology is

concerned, No Medical College or Institute is providing any course or training to students in clinical embryology in anatomy Department. Many centers are providing training in clinical embryology as MSc course/certificate courses in isolation. The mandate of these courses remain to train students to develop skills to basically handle various procedures in IVF labs. This course is mainly offered to nonmedical students having no prior exposure or knowledge of Human embryology at undergraduate level. These courses are basically designed to train students as Technician in clinical embryology labs. While Clinical embryology branch is in very early phase of development, where we need competent clinical embryologists to provide a high standard of practice and treatment in ethical manner and extensive researches in this field are much needed worldwide. The students enrolled for these courses are never exposed for research activities in clinical embryology during their training period. Here comes need of clinical embryologists who have much exposure of embryology at graduate and postgraduate level. So Clinical embryology should be integrated in Anatomy curriculum uniformly across medical institutes and adopted by NMC post graduate curriculum in Anatomy. There should be focus on establishment of Clinical embryology labs in anatomy departments of medical Institutes and colleges. The role of clinical embryologist and Technicians in clinical embryology Laboratories should be well defined. This kind of approach will definitely help to facilitate focused research activities in embryology and its applied aspects. The minimum qualification to be considered as Clinical embryologist should also be MD/MS in subjects dealing with genetics and Embryology.

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