

## CURRICULUM FOR TOMORROW'S DOCTORS

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'...there's no greater challenge outside of war time than actually being a junior doctor...' It's a comment of a junior doctor published in a recent paper<sup>1</sup>. This comment has a tremendous depth. Ultimate aim of undergraduate medical curriculum design is to enable smooth transition to work as a junior doctor. Brennan N et al in a study in United Kingdom (UK) sought to gain an understanding of how junior doctors experienced the transition from the role of student to that of practicing doctor and how well their medical school education had prepared them for this. The findings showed that, despite recent curriculum reforms, most participants still found the transition stressful. The stress of transition was reduced by the level of clinical experience gained in the undergraduate years, continuing 'meaningful' contact with patients and increasing opportunities to 'act up' to the role of junior doctor, even as students<sup>1</sup>.

Curriculum reforms in medical and health care professional education are now ongoing, not only intensively, but also extensively on a global scale. The big question then concerns how we should best educate today's medical and health care professional students for their roles as tomorrow's health care professionals and how we should ensure that they are equipped with the professional competencies (knowledge, skills, attitudes) they will require to meet the challenges and demands of health care delivery in the 21st century.

Century ago Carnegie Foundation for the Advancement of Teaching took effort to modernize medical education<sup>2</sup>. Abraham Flexner's Report prepared at that time on the status of medical education in the United States of America (USA) and Canada. In an editorial it was suggested that the Carnegie Foundation was in a position in which it may exert a powerful and growing influence on the development of medical education in that country and undoubtedly would meet the highest expectations of those who had been watching for that<sup>3</sup>. Since then, medical educators working out the limitations of operating curriculum and indicting various ways of overcoming those limitations. Requirement of evaluation of present curriculum is still there.

Early clinical contact is an important part of the process of socialisation, as it allows students to enter the

community of practice that is the medical profession<sup>4</sup>. At Radboud University Nijmegen Medical Centre, Netherlands the first clinical experience of medical students is a 4-week nursing attachment in Year 1 of medical school. The main educational goal set by the medical school are entering into conversation with patients, acquiring some practical skills, such as washing and dressing patients, and reflecting on feelings that accompany the provision of physical care. Other important objectives include reflecting on professional behaviour, gaining insight into the organisation of care, reflecting on being a member of a team, and getting to know one's own boundaries. Helmich E et al conducted a study to observe the effect of that curriculum on students. Result showed that students' learning goals corresponded with educational goals with a main emphasis on communication and empathy<sup>5</sup>.

Interesting counter comments are also available. During the last 10 years, several universities in the US and the UK have abandoned dissection and have moved from a cadaver-oriented to a cadaverless anatomy. This development results in a fundamental discussion on the role of the "dissection course" in the medical curriculum; ultimately raising the question as to whether teaching anatomy by dissection should continue. Korfa HW et al in a study reinforced the central role of the dissection course in medical education by means of nine subjectively selected arguments<sup>6</sup>.

Diemers AD et al observed following effects of real patients' contacts on student learning<sup>7</sup>:

- p motivate students to study
- p create understanding of the impact of illness on patients' lives
- p promote professional socialization
- p stimulate memory processes
- p stimulate students to study basic sciences

Students perceive basic science knowledge as a prerequisite for understanding how patient problems are related to underlying concepts. Seeing real patients motivates students to brush up on their basic science knowledge<sup>7</sup>.

Sometimes gaps in curriculum design may lead to blind spot in the knowledge of junior doctors. Clinical

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undergraduate ophthalmology education is not compulsory in the UK. So, there is great variability in undergraduate ophthalmology training - some students receive none. Study showed that 21% of the UK medical schools had no compulsory attachment to that area. Author opined that some graduating doctors may not be able to elicit ophthalmic signs and understand their importance, which may put patients at risk<sup>8</sup>.

Recently, the medical educationist paying special importance to the development of curiosity in the learners. The teaching approach of present system is encouraging passive learning more. Curiosity, inquisitiveness and related habits of mind can be supported in medical education through specific, evidence-based instructional approaches. Medical educators should balance the teaching of facts, techniques and protocols with approaches that help students cultivate and sustain curiosity and wonder in the context-rich, often ambiguous world of clinical medicine<sup>9</sup>.

Many a time educationist tried to develop tools to assess the working efficiency of the curriculum and system. Schaub-de Jong et al advised the STERLinG (Teachers' competencies to Encourage Reflective Learning in small Groups) to assess teacher competencies essential for facilitating reflective learning in small groups and claimed its effectiveness<sup>10</sup>.

Conscientiousness, as measured by the Neuroticism-Extroversion-Openness Personality Inventory Revised (NEO PI-R), is an important personality factor which has been found to predict long-term success in medical training. The conscientiousness personality factor has emerged as an important predictor of not only academic success, but also of vulnerability to stress if it is present with high levels of neuroticism and low levels of extraversion<sup>11</sup>. Conscientiousness correlates with A-level scores. Higher A-level scores related to better pre-clinical performance. Pre-clinical scores significantly predicted better clinical performance<sup>12</sup>.

Journal of Armed Forces Medical College (J AFMC) always encourages researches related to medical education. This issue has published one prospective study conducted by Alam MR and Zahurul MI to evaluate the students view regarding course of Anaesthesiology in present undergraduate curriculum. Authors conducted study on five batches of final year (5th) undergraduate students. The study revealed that majority of the students were in favour of practical training. More studies involving facilitators and the learners in future shall help the educationist to update curriculum in more practical way.

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