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Updates in Medical Colleges' Curriculum in Iraq

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ABSTRACT

Medical colleges are the only places where doctors earn their knowledge and skills for their future career roles in treating patients and helping the community. The curriculum taught in these colleges has a vital role in preparing them for postgraduate continuous education as the sciences in general and medicine in special have been modernized and updated. There are different types of curricula used in Iraqi colleges of medicine, the most prominent one was the traditional subject based. Relatively, the best curriculum used is the summation of the integrated, student-centered, and community-based. The best available way to evaluate the medical curriculum in Iraq is by the certificate of the accreditation standard issues of the National Iraqi Council for Accreditation.

1. Introduction

The general term curriculum represents "the academic content and lessons taught in a school or educational institution or a specific course or program". It also represents a plan that is arranged in a good matter leading the educational processes. Another explanation for the curriculum is an experience of knowledge and practices that are forwarded to students in a standard way. It was defined by different educators and philosophers like John Dewey as" a continuous reconstruction, moving from the learner's present experience out into that represented by the organized bodies of truth that we call studies" (Mizan, 2022).

The medical college is one of the colleges and schools that uses curriculum to reach its mission. The delivery of doctors who can manage the health problems and deal with the changes and updates in community needs regarding community health priorities is still the main objective of the medical college up to date. This cannot be reached without the full participation of other health sectors, related governmental agenesis, and community presenter (Al-Damegh et al., 2005).

In addition to theoretical learning, clinical training is the goal of medical colleges to graduate doctors who can practice medicine in their career life. All these missions and goals can be reached by implementing the appropriate curriculum. This curriculum was continuously modernized during the last periods to be consistent with the explosion of medicine and science (Yu et al., 2021).

There is a massive development in scientific research and using their result to enhance new ways and protocols in disease prevention, management, and control. Also, community health problems and priorities may expand and change over time which needs further modification in their study (Mishra, 2015). The new challenge is now what new subjects are needed to be added and what are of no value to be taught. Besides, changing the direction of more student-centered and self-directed learning rather than teacher-centered and classroom lectures (D'eon & Crawford, 2005).

World Health Organization (WHO) in addition to different medical associations like the American Association of Medical Colleges (AAMC) and Council of World Federation for Medical Education (CWFME) proposed the demand of adjusting the teaching systems in medical colleges to be based on comprehension instead of just remembering the information (Hulail et al., 2018).

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New technologies were used for the undergraduate medical students which transformed the curriculum to integration, problem answering, clinical skills, and critical judgment. Adding more subjects about disease prevention and social medicine (Riley & Michael, 2013; Soltani et al., 2017). A lot of benefits are obtained from these new strategies for example the integration of topics enhances the gaining of skills and medical knowledge in an arranged way (Wijnen-Meijer et al., 2020). The student-centered model was adopted by Oxford Centre for Staff Development (OCSD) which was termed the SPICES model. This model also included the patient-oriented practice of medicine rather than the doctor oriented, integrated instead of isolated, community-based not hospital, elective-driven rather than an apprenticeship, and changed from the subject- grounded to a system based (Hulail et al., 2018). Iraq also like other parts of the world, needs to and tried to revise its medical curriculum and system to catch the new and updated methods of teaching and learning. So, this review was achieved to find the main changes occurred in the medical college curriculum in Iraq recently.

2. Materials and Methods

2.1. Types of Medical Curriculum

Different curricula were utilized around the world in colleges and universities. Each institution chooses its special proper curriculum which is basically established from one or more types of the following types; block scheduling, non-block scheduling, problem-based learning (PBL), and clinical. There is also the systems-based or non-systems style which applied to the first-year students. Each of these types has its advantages and disadvantages giving the impression that no curriculum is typical and can follow with blind eyes (Will, 2021).

2.2. History of the Medical Curriculum in Iraq

The first type of medical curriculum adopted in Iraq was the subject-based type (post-Flexner curriculum) which was implemented in 1927 by the Royal College of Medicine in the capital Baghdad. The same curriculum type with some modifications and updates in the syllabus was operated in the 5 newly opened medical colleges in (Mosul, Basrah, Mustansiriya, Erbil, and Kufa) (Alsheikh et al., 2018b). In response to World Health Organization's (WHO) call for developing the medical education curriculum, Mosul College of Medicine made some changes in its curriculum including adding more time for clinical training and ensuring participation of clinicians in the basic science courses with more students' activities (Alsheikh et al., 2022). The semester courses entered Iraq with the starting of Saddam College of Medicine in 1987, followed by Tikrit College of Medicine which was started in 1989 and fitted the problem-based learning (PBL) with student-centered (Al-Shamsi, 2017).

2.3. Recently Available Medical Curriculum in Iraq

There was a continuing increase in the number of medical colleges in Iraq reaching 34 colleges in recent years. About 32 of them were identified curriculum as follows: Subjects or disciplines curriculum (SBC) in 20 colleges, integrated curriculum (IC) in 10 colleges, and problem-based curriculum (PBLC) which was undertaken by 2 colleges. Each of these types consisted of different features and methods for teaching, learning, and training (Alsheikh et al., 2018b).

2.4. Subjects or Disciplines Curriculum (SBC)

The traditional subject teaching curriculum is the type used by the majority of medical colleges in Iraq. It means that each subject like histology, anatomy, epidemiology, and pathology is taught in a separate course or block (Alshehri, 2001). This system is based on the teacher (teacher-centered) who is responsible for lecture presentation in both theoretical and practical lessons without focusing on skills and professions (Alsheikh et al., 2018a). The main disadvantage of this system is the student cannot relate subjects with each other's, especially the basic and applied sciences. In addition to the relevance of these sciences with clinical training and future practice. This curriculum effect students' motivation as they acted as passive recipients of the knowledge without preparing them for critical thinking. Even, some advantages were reported for this type as it makes teachers be specialized in deep with one subject area besides being updated to their field. As a result, students tend to forget what they learned in these courses just immediately after passing the exam (Obi, 2022).

2.5. Integrated Curriculum (IC)

This type of curriculum was adopted in Iraqi medical colleges in 2010. Iraqi colleges like Kufa, Wasit, Duhok, Babylon, and Baghdad were turned into the integrated curriculum with student-centered (Zaidi & Abutiheen, 2019). These colleges follow a schedule that begins with lectures, and after that teacher-centered small group teaching and then item discussions (Alsheikh et al., 2022). This integration means gathering knowledge, attitudes, and skills of different subjects resulting in a better understanding and learning of these subjects. There are two types of integrations which are horizontal and vertical. Vertical integrations mean that both basic and clinical sciences were learned in an integrated way from the first year of medical education, while horizontal means the integration happened within the subjects. The best type of integration is the fully spiral integration which appears integrated both vertically and horizontally with both subject and time integration (AbdulZahra & Al-Aaridhi, 2012; Buja, 2019; Brauer & Ferguson, 2015). This type makes students hold a more active role and works in getting them out of the circle of reading, memorizing, and remembering. Some researchers went behind the integration of basic and clinical sciences to call for the adding humanism, and population health in vertical integration also. This curriculum is still under evaluation and needs further follow-up and investigation to confirm its benefits to medical students (Quintero et al, 2016).

This is a system-based curriculum that permits the student to learn everything about each system or organ in the human body, it is considered student-centered which helps to improve the education quality (Obi, 2022). Despite its advantages, the integration curriculum is a very complex system and should be sequenced properly for gaining the full benefits and never lose the principal concepts. It is time and staff-consuming and needs well training for the academic staff (AbdulZahra & Al-Aaridhi, 2012). On the other hand, a lot of integration´s benefits were mentioned in the literature including the flexibility in the improvement of students' skills and knowledge, aid in their full vision of the world and guaranteeing better learning, uniting the curriculum, and revealing the actual world by the students (Atwa & Gouda, 2014).

2.6. Problem-Based Curriculum (PBLC)

This curriculum was applied by only two Iraqi colleges (Tikrit and Karbala). This type of learning is based on a group of students who shared solving a given problem under the supervision of their teacher. It helps students to learn about teamwork besides intensifying their critical thinking. The teacher's role is to provide his students with all the required information and skills essential to solve this problem while students are responsible for actively dealing with the situation and trying to act as if they are in real work (Kurt, 2020). The used curriculum is characterized by being concerned with the community priorities, student-centered, and organ system (Al-Hilfy, 2007). This teaching approach required training of the staff and elaboration of new instruments. Academic staff carries a higher work burden, they need to prepare for the modules for a long time in addition to joining new training courses. Students also have to spend more time arranging their modules as they are instantaneously expected to show high-level achievement in all modules (Ghufron & Ermawati, 2018; Heuchemer et al, 2020).

2.7. National Accreditation of Medical Colleges in Iraq

Achieving national accreditation became in the last years the focus point of the medical colleges in Iraq. It acts as an evaluation tool for these colleges to improve the quality of health services and to be recognized by international accreditation agenesis globally. The college of medicine to be accredited, need to meet the standard criteria of national and international accreditation councils for medical colleges. These standards are difficult to apply with the traditional subject-based curriculum type. So, most colleges in Iraq already changed their learning process, curriculum, and syllabus to keep up with the recent requirements (AbdulZahra & Al-Aaridhi, 2012; Alsheikh et al., 2022).

3. Conclusion

The medical college curriculum needs continuous updating and reforming due to the huge and endless expansion of medical sciences around the world. These curricula are no longer dependent on passive learning by teachers in the lecture rooms but have to stimulate students for being active thinkers with team collaboration.

Competing Interests

The authors have declared that no competing interests exist.

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