

Suggestions for Improving Health Care Delivery: Al-Qalam University College Perspective

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Quality improvement of health care in Iraq is an essential social standard demand now [1]. The health care system, health care providers, and delivery of health care have confronted a series of extremely unusual difficulties during the period from 1980 to date. When the infrastructure of Ministry of Health and health care availability to Iraqi community unexpectedly started to deteriorate [2] because of the wars (Iraqi-Iranian war which lasted for eight years and two Gulf wars), the economic sanctions imposed upon the country and the American invasion of Iraq in 2003 [3-9].

Medical education is under reform as it has started to change from teacher-centered to student-centered education [10,11]. Researchers are working seriously to find and set a workable system to improve the medical education in Arab Countries [12]. The medical research is important as it led to health development, breakthrough and medicine future shaping, as it provides the required information that is vital in improvement of disease diagnosis, disease prevention, community health, establishment of new treatment approaches, discovery of new drugs, and economical benefit [13,14].

The medical research is performed by medical institutions, Ministry of Health and research centers, which should be the actual place for carrying out most of the medical research works. The medical schools; colleges of dentistry, pharmacy, nursing, and technical health institution and colleges are core of health care system research. These medical and health institutions should be able through conducting their research work to anticipate the health needs of society, evaluate health care levels, availability of sound health care, induce collaboration between stockholders and health system and continuous improvement in health care delivery, research

and professional medical education [14-20]. Appendix 1 shows a list of some community research that were performed by faculty and students of Tikrit University College of Medicine which with reflection on the improvement of health care delivery and health system.

Evidence- based medicine is a vital practice that is mainly based on research findings and, which leads to the improvement of disease diagnosis, disease treatment, prevention and patient outcome improvement [21,22]. Health system outcomes bridging with medical education goals was evaluated in a study of O'Brien et al [23] who concluded that students' engagement add a value to health systems. Other studies reported that student can add to health care delivery on individual, community and health systems levels [24-32]. Gonazalo et al [33] reported summary of a meeting that is held in 2016, that included representatives from 32 US medical schools in American Medical Association Accelerating Change in Education Consortium which points out that the medical students new roles may add value to health system as: patients navigators, health coaches, care transition facilitators, safety and patient care analysts, quality improvement team extenders, population health managers, patient care technicians or medication reconciliation assistants and medical scribes. Health research results in community benefits and improvement of health care delivery, health system and individual health evolution progress [34].

Tikrit University College of Medicine (TUCOM) is the first Iraqi medical college that introduced an innovative curriculum incorporating problem-based learning [35]. TUCOM community-based curriculum extend to cover the study period [36] and include a variety of activities, such as the community research project to be performed by 2nd, 3rd, 4th, and 5th years students [35-37]. These researches provided potential benefits on health care delivery in Salahuldean Governorate and health care system in general [38].

In Al-Qalam University College, which has 15 scientific departments, that include 5 medical departments. Seventy one graduation community research papers was written by the graduates of 2022-2023 as shown in Table 1. Twenty-two (31.0%) of the projects dealt with dental problems, 18 (25.4%) cover anesthetic problems, 16 (22.5%) evaluated radiology problems, 12 (16.9%) focused on laboratory investigations and 3 (4.2%) dealt with criminal evidence research projects.

The findings of the studies addressed many conclusions that are important for the illustration and clarification of health care problems in Kirkuk Governorate [39,40]. The research projects outcomes cover epidemiological, diagnostic, social health impact, laser application in dental technology, dental health problems, effectiveness of different types of anesthesia, obesity influence on anesthesia, biochemical changes in some diseases, prevalence of hypertension, effectiveness of anesthetic drug combination, anesthesia complications, CT scan and MRI in disease diagnosis, mammography and ultrasound predictive value in diagnosis of breast cancer, insect as criminal evidence, crime forecasting in Kirkuk province, and the professional role of forensic medicine doctors.

Table.1. Distribution of research projects according to disciplines

No.	Department	Number [Percent]
1	Dental Industry Technology	22[31.0]
2	Anesthesia Technology	18[25.4]
3	Radiology and Ultrasound Technology	16[22.5]
4	Laboratory Investigation Technology	12[16.9]
5	Criminal Evidence Technology	3[4.2]
Total	Total	71[100]

Actually, the findings of Al-Qalam graduation research projects will be strengthening the health care system and health care delivery, which may also provide information that may be helpful for health care decision makers. Academic institutions partnerships with regional and national health care system play an important role in strengthening of health care delivery and availability of health care [41]. Many studies were conducted worldwide to evaluate the role of medical colleges and health allied sciences colleges in the improvement of health care system and health care delivery. These studies concluded that medical institutions play a vital role in health care delivery improvement through their research programs [41-46]; therefore, we suggest that all medical colleges and institutions should be required to conduct field research to participate in improving the health care system in the country, and higher education institutions give a greater role to research centers.

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Appendix 1. List of some titles of community research projects performed by students of Tikrit University College of Medicine

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