



**Association for Evaluation and Accreditation
of Medical Education Programs (Turkey)
(TEPDAD)**

**SULTAN QABOOS UNIVERSITY
COLLEGE OF MEDICINE AND HEALTH SCIENCES
UNDERGRADUATE MEDICAL EDUCATION PROGRAM
FINAL REPORT**

Site visit team (28.04.2024 - 01.05.2023)

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General Evaluation

Sultan Qaboos University College of Medicine and Health Sciences (SQU-COMHS) was evaluated with a face-to-face site-visit carried out between 27 April – 1 May 2024. The site-visit was conducted by the above mentioned group on behalf of Association for Evaluation and Accreditation of Medical Education Programs (Turkey) (TEPDAD) to evaluate status of the school against the WFME global standards (2015).

SQU-COMHS was established with the name of College of Medicine in 1986 and became the College of Medicine & Health Sciences (COMHS) in 2002. The school offers an MD degree at the end of 6-year medical education program. Additional one-year internship is mandatory for the graduates to work in Oman Health System.

A major curricular change has been started in 2008 by switching to outcome-based and clinical presentation curriculum. The current total number of the undergraduate students is 996 and 2145 physicians have graduated from SQU-COMHS so far.

During the face-to-face site-visit, the deputy vice-chancellor of the university, dean and assistant deans, 100 faculty members, 44 students and 16 residents were interviewed and educational infrastructure was visited.

Evaluation of WFME Global Standards (2015) for Basic Medical Education

1. MISSION AND OUTCOMES

Stating Mission: Mission, vision, values and institutional aims of the school in terms of education, research and service are defined and shared on the website.

The mission statement refers to excellence in medical education, research, and patient care besides life-long learning and some aspects of social accountability.

Recommendations:

We recommend the institution to:

1. Define the mission statement in detail and include social accountability more explicitly and promote social accountability to include research and service besides education institutionally.

1.2 Institutional Autonomy and Academic Freedom:

The school has autonomy in the design, content, management, and evaluation of the curriculum, budgeting and utilization of resources as defined by the university laws.

1.3 Educational Outcomes: The school has defined 32 graduate competencies under 10 domains in terms of knowledge, skills and attitudes.

The graduate competencies are shared with the stakeholders through the website.

The SQU-COMHS has defined an appropriate conduct policy for the students with respect to fellow students, faculty members, other health care personnel, patients and their relatives.

Appropriate foundation for future career, roles in the health sector, readiness for subsequent postgraduate training, life-long learning, the needs of health sector and health needs of community, and research are adequately represented within the intended outcomes of the school.

Outcomes of the courses, clinical blocks and rotations are linked to graduate competencies, however students can see this relationship when they start the relevant course/block/rotation.

Course/block/rotation outcomes are not mapped with learning objectives of teaching sessions

Recommendations:

We recommend the institution to:

1. Articulate graduate competencies with outcomes of each program unit and make it visible for students at all levels of medical education.
2. Consider adding a graduate competency related to global health in the next revision period of the IEOs.
3. Map course/block/rotation outcomes with learning objectives of each teaching session

1.4 Participation in formulation of mission and outcomes:

Principal and majority of external stakeholders (government bodies, teaching hospital staff, health higher education and research institutes and other stakeholders) have participated in definition process of the current mission statement and program outcomes.

Recommendations:

We recommend the institution to:

1. Consider including the stakeholders in preparing or modifying mission statement at the initial phase proactively.

2. EDUCATIONAL PROGRAMME

2.1 Framework of the Program: The SQU-COMHS offers an MD degree at the end of 6-year medical education program. One year of mandatory internship is required for graduation. There are various number of core and elective courses and clerkships in the three-phase program. The first phase is composed of two semesters to build up the fundamental concepts of basic sciences and mandatory university courses. Phase II includes courses integrating basic medical and clinical sciences given in 4 semesters. Phase III is constructed on clinical presentations held in pre-clerkship, junior clerkship, senior clerkship and pre-internship stages by different clinical departments in 3 years. “Supportive learning topics sessions” are included to teach underrepresented topics in this phase.

Student centered and outcome (competency) based medical education is the main educational strategy of the program.

The teaching and learning methods mainly used in the educational program includes lectures, laboratory and simulation applications, flipped classroom, case-based and team-based learning sessions, and project-based learning activities, bedside teaching, rounds, seminars and journal clubs.

Student-centered educational activities such as Flipped classroom, CBL or TBL exist in the program and these activities support independent self-study and life-long learning attitudes of the students.

The curriculum is delivered regarding principles of equality.

Recommendations:

We recommend the institution to:

1. Increase the number of learner-centered methodologies in the program
2. Consider decreasing the number of lectures and promote the use of interactive methods in large groups.

2.2 Scientific method:

The students learn and practice principles of scientific method, research and EBM in three phases (Good practice). The first phase includes “Hospital and Community

Attachment Course” and “Research Methodology Course” in which basic analytical skills, epidemiological and scientific principles are taught. In phase 2, scientific principles are applied through conducting student research projects in “Student Project I and II” courses. The third phase includes utilizing students' learnings in phases 1 and 2 to develop their ability to apply EBM principles in the EBM course both in theory and practice.

All students are involved in research actively in the “Student Project I and II courses”. The research is completed and published all as mini thesis and some as scientific articles.

Structured curriculum elements such as case-based learning, team-based learning, student projects, EBM course and journal club activities exist in the program to support students to improve their analytical and critical appraisal skills.

Recommendations:

We recommend the institution to:

1. Increase EBM teaching in the clinical phases using a design that fosters students to practice EBM on real patients.

2.3 Basic Biomedical Sciences: Basic biomedical sciences are taught in the first three years of the program with reference to use of basic science principles and knowledge in clinical practice through integrated phase II and some problem oriented learning activities like CBL.

Basic biomedical sciences curriculum in its current form creates understanding of both scientific knowledge and concepts required for applying clinical sciences and contributes to the needs of the society and health care system.

2.4 Behavioral and Social Sciences, Medical ethics and jurisprudence:

Behavioral Sciences components are covered in Phase II and III. Some components of social sciences are mainly covered in the “Hospital and Community Attachment Course” and in “Family Medicine Rotation” as topics.

Medical jurisprudence is taught in “Forensic Medicine Course” in phase III and practiced in other rotations of the same phase.

Medical Ethics is covered in the “Integrated Module 1 and 2” in phase II and practiced in phase III.

Recommendations:

We recommend the institution to:

1. Expand ethics courses throughout the entire educational program
2. Consider establishing a longitudinally structured communication skills training program
3. Enhance representation of behavioral and social sciences (medical anthropology, humanities etc.) in the program

2.5 Clinical sciences and skills: The clinical sciences and professional skills are taught through various methods and courses along with the entire curriculum.

Clinical skills are taught in the clinical skills and simulation laboratory using phantom models and simulated patients. Students who completed preclinical clerkship period are awarded with a Basic life support certificate.

The students spend a reasonable part of the program in planned contact with patients in relevant clinical settings.

Preventive medicine and health promotion subjects are taught mainly in “Hospital and Community Attachment course” (phase II) and Family Medicine rotation (phase III) and covered in some topics of other courses.

In terms of patient safety, the basic principles of WHO patient safety curriculum is introduced to medical students in pre-clerkship rotation and student involvement in

patient care is directly supervised by teaching staff in clinical settings. The students are not authorized to change patient care plans in the electronic patient records. Medical students are exposed to simulated patients in the second semester of Phase II in the Integrated Module Courses (I, II, III). In order to ensure early contact of students with real clinical settings, the summer clinical placement program was started in Phase II in 2023, whereby students spend four weeks of observed clinical experience in a variety of clinical settings.

2.6 Programme Structure, Composition and Duration: The content, extent and sequencing of the courses are defined in the curriculum.

Phase 1 is structured in a discipline-based manner with some horizontally integrated tutorials held by contribution of faculty members from different disciplines.

Phase II has an organ/system-based curriculum ensuring horizontal integration. Vertical integration is supported in phase II by integrated modules (Good practice).

Phase III is structured as independent clerkships.

The program of Phase II and III is structured around 124 clinical presentations that support horizontal, vertical and spiral integration (Good practice).

Coordination between the biomedical, behavioral and social sciences is established in the preclinical training program while limited in clinical training.

Medical electives are present in the third phase of the program.

Non-medical elective courses which are offered by other SQU colleges are an integral part of the MD program. Students are obliged to take three elective courses of their choice

There are no non-medical electives offered by the COMHS.

Recommendations:

We recommend the institution to:

1. Reconsider the discipline-based structure of the first phase of the program
2. Consider broader work-based mapping of the clinical presentations (expectations from the students for each clinical presentation in terms of physician roles such as taking medical history, examining the patient etc.)
3. Strengthen the integration of social and behavioral sciences through the whole program
4. Consider adding medical and nonmedical electives into the preclinical training program to strengthen flexibility of the outcome-based curriculum

2.7 Programme Management: The medical school has “Curriculum Committee” which functions as the central curriculum committee under the governance of the College Board. The committee has the responsibility for planning and implementing the curriculum.

The Curriculum Committee includes faculty members and representatives of students, affiliated hospitals and staff.

2.8 Linkage with Medical Practice and the Health Sector: In order to establish an operational linkage between the educational program and the subsequent stages of education or practice after graduation, the school has adjusted its curriculum according to the need of the Oman community for healthcare services.

The COMHS seeks input from the environment, in which graduates will be expected to work, via COMHS Advisory Board consisting of high-stake officials from relevant and important sectors within the community

3. ASSESSMENT OF STUDENTS

3.1 Assessment Methods: The SQU-COMHS has defined the principles, methods and practices used for student assessment and documented in “Assessment Policy Regulations & Guidelines” and “Undergraduate Assessment Policy” documents which are available on the website.

The SQU-COMHS uses assessment methods including written exams (MCQ tests, short answer questions), Spotter, OSCE, evaluations of presentations, posters and thesis, observation-based assessments like Mini-CEX in clinical settings, portfolio and log-books. Assessment utility is considered in selection of the assessment methods. There is a clearly defined appeal system regarding the process and results of the exams.

External examiners nominated by the departments take role in exams upon appointment by the university.

Recommendations:

We recommend the institution to:

1. Expand the use of portfolio throughout the program in line with intended educational outcomes
2. Use feedback mechanisms effectively on portfolio content (especially student reflection).

3.2 Relation between assessment and learning: Assessment and evaluation practices are compatible with the objectives and methods used for teaching. Construct and content validity is ensured using blueprints that match the expected outcomes with assessment methods and exam content.

The assessment system promotes student learning.

An appropriate balance exists between formative and summative assessment.
Feedback is provided on student performances after formative exams.
Sessions after all exams to discuss exam content with the students are irregularly held.

Recommendations

We recommend the institution to:

- 1- Share correct answers of all summative exam questions with the students to support student learning and effectiveness of appeal mechanisms.
- 2- Consider placing regular post-exam discussion sessions scheduled in the syllabus to discuss exam content with the students (for example the reason behind correct and wrong options after an MCQ test).
- 3- Use a programmatic assessment approach to evaluate achievements of every student cohort for each graduate competency. On this purpose, map the graduate competencies with teaching/learning and assessment methods and make this mapping visible for students at all levels.

4. STUDENTS

4.1 Admission Policy: The COMHS has adopted a non-discriminative student admission policy and defined criteria and procedures of student selection.
Information for admission and selection processes is through the website of the Deanship of Admission and Registration.

The COMHS offers one seat annually for students with disability.

Student selection is based on academic success.

A system for transfer of students to/from national/international medical schools has been established, documented and used.

There is an appeal system for admission decision results.

4.2 Student Intake: The school has autonomy to determine student intake regarding capacity and resources at COMHS and in affiliated hospitals.

Around 155 students per year are enrolled to the MD program with a female/male ratio of 1/1 for Omani students as dictated by national regulations.

4.3 Student Counselling and Support: Each student is assigned to an academic advisor. Each academic advisor may have up to 25 students. Academic advisors also help students with social and health problems by guiding and directing them to utilize the available SQU services and resources. In the clinical years (Phase III), academic advising task is delegated to rotation coordinators. A comprehensive academic advising guide is available for the students in clinical phase.

Student Counselling system is needs-based and the advisors and students meet when necessary. Meetings are not documented and reported.

The school arranges academic advising workshops for the students.

The university has student support system addressing social, financial and personal needs of the students. There is a “Student Wellness Clinic” in the SQU hospital.

The university has a “Center for Career Guidance”. Oman Medical Specialty Board arranges regular forums called “Open Day” for career guidance.

Recommendations

We recommend the institution to:

1. Consider placing a space in the program for advisor-student meetings to be regularly held and ensure documentation of these meetings

4.4 Student representation: Students are represented in the college board and various education management committees.

All student cohorts are represented by two students, one for the males and one for the females elected by their peers by voting. These representatives are the member of Student and Staff Liaison Committee which provides students with a forum in

which they can discuss any matters related to their education, learning and social environment with the college administration.

Medical Students Community Group organize academic and social events supported by the COMHS.

Recommendations:

We recommend the institution to:

- 1- Encourage students to establish an independent student committee for medical education that will prepare independent student reports evaluating educational program, faculty performance, facilities etc. from the student perspective.

5. ACADEMIC STAFF/FACULTY

5.1 Recruitment and Selection Policy: Faculty recruitment and selection policy is defined considering the balance between the educational and scientific activities besides healthcare services in line with “Academic Recruitment Regulations” of the university.

The school has acceptable number of academic staff for its education, research and service load. A constructive relation exists between clinical tutors in the university hospital and college faculty members. Clinical tutors in the SQUH prioritize education equally with college faculty (Good practice).

The COMHS has several systems (self-administered reports and self-determined objectives via “Ejadah System”, peer and student opinions etc.) to monitor and evaluate faculty’s teaching, research and service activities.

5.2 Staff activity and staff development: “Staff Academic Activities and Development Policy” and “Staff Promotion Policy” is defined and documented.

Center for Excellence in Teaching and Learning at the SQU offers faculty development and continuous professional development activities.

Faculty development programs have provided faculty members with high level of awareness about the principles and facts of medical education.

SQU financially supports the staff for conference attendance and provides sabbatical leave opportunities.

Outperforming faculty members in teaching, research and service are awarded with different type of prizes by the university.

Recommendations:

We recommend the institution to:

1. Consider offering structured and periodic advanced faculty development courses (i.e. assessment and program development)

6. EDUCATIONAL RESOURCES

6.1 Physical facilities: SQU-COMHS has an educational infrastructure suitable for implementation of its curriculum in a safe learning environment.

The SQU-COMHS has a well-designed and organized skills and simulation laboratory which is used for OSCE as well. Simulation training is available in the SQUH setting as well.

6.2 Clinical Training Resources: Clinical training is given at SQU Hospital which has good infrastructure for training with sufficient bed capacity and number of patients

and in affiliated hospitals. Clinical training in different affiliated hospitals is well-coordinated (Good practice).

Various primary care centers, which are well organized and professionally equipped with dedicated educators, are used for community-based clinical training (Good practice).

There is a balance between number of students and clinical training capacity. Clinical practice of students is supervised by clinical tutors and residents. The physician/student ratio for clinical training is adequate for supervision of the students during their hospital training.

6.3 Information Technology: Electronic and web-based resources are available and accessible for the students and staff both within and outside of the campus. Regulations related to the use of information technology and resources are defined by the university.

The use of technology in medicine is included at various levels such as virtual clinics. All medical students are provided with an introductory session to the Hospital Information System (HIS). Before accessing the system, they should sign the confidentiality and security agreement form. Students are given a limited accessibility to HIS to prevent changes in patient data by the students.

6.4 Medical Research and Scholarship: The SQU-COMHS uses medical research and scholarship as a basis for the curriculum

The relation between medical research and education is established.

The SQU-COMHS attaches importance to research activities and has multidisciplinary biomedical research facilities.

6.5 Educational Expertise: The school has a highly competent Medical Education and Informatics Department which provides internal educational expertise related to faculty development, program development and evaluation.

Some faculty members and clinical tutors have pursued further qualifications in medical education, including certificates, diplomas, and master degrees (Good practice).

The College, recently formulated a Medical Education Committee comprised of a team of experts in the field of medical education.

COMHS strengthens teaching competence of faculty members by offering regular training programs in medical education. Participation in these programs is required for affiliation of staff from Ministry of Health hospitals.

The school utilizes internal and external educational expertise at a satisfactory level in development, implementation and evaluation of its curriculum.

Recommendations:

We recommend the institution to:

1. Consider the expectations of the faculty members stated in the final (3rd) program evaluation report content emphasizing teachers' needs for more professional training and faculty development.

6.6 Educational Exchange: The SQU-COMHS has signed bilateral agreements with various regional and international universities for student exchange.

IFMSA programs are commonly used for student exchange.

Exchange opportunities offered by the COMHS are limited to elective clinical rotations in phase III.

SQU-COMHS students transfer the earned credits to their SQU-COMHS transcripts

Recommendations:

We recommend the institution to:

1. Consider increasing exchange opportunities for students at various stages of the program.

7. PROGRAM EVALUATION

7.1 Mechanisms for program monitoring and evaluation: The SQU-COMHS has a program monitoring and evaluation system principles of which are defined in “Program Evaluation Policy” document.

Program Evaluation Committee is the main structure that runs the program evaluation system by gathering data from multiple resources, analyzing them and sharing the analysis results through annual reports. Each annual report focuses on different aspects of program evaluation.

“Course Portfolio” is used to monitor and archive all information regarding a specific course/module/rotation.

“College Program Evaluation Policy” recommends adopting a mix of CIPP and Kirkpatrick program evaluation models. Currently, program evaluation system does not refer to the components of those two models obviously.

Recommendations:

We recommend the institution to consider:

1. Preparing holistic annual program evaluation reports for the entire curriculum including analysis results of all gathered data instead of focusing on specific parts
2. Sharing the reports with both principal and external stakeholders.
3. Using one of the common program evaluation models such as Kirkpatrick, CIPP, Logic model etc.
4. Collecting and evaluating data on how the curriculum covers societal needs

7.2 Teacher and student feedback: The SQU-COMHS gets regular feedback from students using structured feedback forms available in digital platforms at the end of each semester or each rotation as defined in the “Standard Operating Procedure” document.

Feedback from teaching staff are received during meetings of faculty administration and departments. Structured teacher feedback forms have been developed and used on various occasions.

Areas for improvement of different aspects of the curriculum are identified regarding feedback results.

Recommendations:

We recommend the institution to:

1. Receive personal feedback from teaching staff on a regular basis as it is done for students.
2. Consider having feedback of final year (or internship year) students on the whole undergraduate medical education program using a comprehensive query form (exit survey).
3. Make and realize action plans for improvement areas determined by program evaluation analysis results.

7.3 Performance of students and graduates: SQU-COMHS monitors and analyzes performance of cohorts of students.

SQU-COMHS has analyzed achievement of interns on the basis of their rotation evaluation results. Oman Medical Specialty Board selection exam results of the graduates are monitored by the school.

Student cohort and graduate performance analysis results on the basis of the current 32 graduate competencies are not available.

Recommendations:

We recommend the institution to:

1. Monitor student cohort and graduate performances in relation with achievement of all of the current 32 graduate competencies

2. Consider use of performance-based assessment in the final year of medical education to evaluate achievement rate of program competencies by the students
3. Consider measuring and analyzing the effect of the change of resources on the performance of students and graduates

7.4 Involvement of stakeholders: SQU-COMHS involves the principal stakeholders in program evaluation as well as some external stakeholders and experts.

Recommendations:

We recommend the institution to:

1. Consider increasing involvement and awareness of external stakeholders (especially those who contributed to definition process of program outcomes) with the program evaluation processes and results.

8. GOVERNANCE AND ADMINISTRATION

8.1 Governance: SQU-COMHS has an experienced and competent governance that gives priority to medical education.

Governance structures and functions of SQU-COMHS are defined including relationships within the university.

There are 23 committees involved in governance issues and management of medical education. The educational committees work in close collaboration with well-defined terms of references.

Principal stakeholders are represented in the administrative and educational committees.

Recommendations:

We recommend the institution to:

1. Consider establishing a well-being committee to support teaching/ learning climate in the institution.

8.2 Academic Leadership: SQU-COMHS has defined the responsibilities of its academic leadership for management of the medical educational program. Performances of the departments are monitored by the college administration through regularly submitted reports.

8.3 Educational budget and resources allocation: SQU-COMHS has autonomy in planning and using the budget for resourcing the curriculum.

The operational budget is requested annually from the university governance.

8.4 Administration and management: SQU-COMHS has a proper administrative and professional structure supporting the implementation of the educational program. Quality Assurance and Academic Accreditation Unit exists to standardize administrative and management operations at the college by developing and documenting policies for educational or other procedures.

8.5 Interaction with the health sector: SQU-COMHS has considerable constructive interaction with the health and health related sectors via educational and research activities besides healthcare services.

9. CONTINUOUS RENEWAL

SQU-COMHS has an institutional culture of continuous quality improvement evident by:

- Presence of a university strategic plan (2016-2040) and annual operational planning of the SQU-COMHS
- Former external evaluation on the basis of WFME standards by AMEEMR (2013-23)
- Presence of Quality Assurance and Academic Accreditation Unit.
- Ongoing educational developments under the guidance of Medical Education and Informatics Department

Recommendations:

We recommend the institution to:

1. Create and share an official document including strategies to be referred for maintenance of education in cases of unexpected conditions that may lead to suspension of instruction.