Table 2 Major challenges faced by different institutions in the EMR due to the disruption of education and transition to online learning during the COVID-19 lockdown

a. Digital infrastructure in the country
- Weak digital infrastructure (unavailability of internet service, bandwidth issues, and high cost of internet) in several EMR countries with protracted crises, especially in remote areas
- Lack of institutional capacities to introduce online learning, especially for specialties other than medicine and dentistry
- Frequent disruption of electric power supply
- Cost implications for institutions, faculty, and students to access online learning
- Lack of IT technical support for customization of software to institutional needs
- Initial cost of establishing IT departments, hiring IT staff, cost of software customization, especially in institutions with limited resources

b. Clinical or practical training
- Delays in the completion of clinical or practical training due to closure of institutions.
- Increased clinical workload on faculty in response to COVID-19 clinical care, resulting in reduced educational activities
- Prioritization and rescheduling of clinical or practical training to compensate for the delays
- Management of clinical or practical training sessions for large groups

c. Adjustments to curricula for online learning
- Challenges with the reduction in content due to delays
- Revision of curricula to align with online teaching methods
- Challenges with improving student engagement in online teaching and learning methods

d. Online assessment
- Limitation of digital technologies in online assessment
- Regulatory issues for the acceptance of online assessment
- Institutional readiness for online assessment
- Student and staff training on online assessment methods
- Validity and reliability of online assessment methods

e. Faculty readiness and capacity
- Hesitancy and reluctance among some faculty to accept online learning
- Limited skills and experience of faculty in online learning
- Increased workload on faculty in contributing to the development of the online learning systems