



Brief report
COVID-19 and emerging trends in health professions education
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Emerging trends in health professions education during COVID-19 times: an overview

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- More than ever before, we need to see “health professions education” in the context of health systems and services (HSS) and responding to population needs. This requires looking at issues related to inequities, models of care, primary health care (PHC), investment, and gender. It also requires us to look at digital education for building health workforce capacity and the moral determinants of health.
- The Americas region is the most inequitable in the world. Differences exist between and within countries. Medicine continues to be a field of the ‘rich’.
- The field of health profession education is composed of different stakeholders such as undergraduates, faculty, interns/residents, post-graduates, continuous education, and administrative and support personnel. Each of these groups is facing the “new normality” depicted by the pandemic.
- The health workforce is largely comprised of women.
- The pandemic has had transformational effects in that education has needed to:
 - Support a robust public health response to the pandemic
 - Adapt curriculum to current issues in real time
 - Graduate a class of well-prepared health professionals each year, on time and without lowering standards
 - Protect limited educational resources and treat learners equitably. The pandemic has highlighted inequalities in this sector in which not all students and teachers are the same.
 - Engage in crisis communication and active change leadership
- Building the region’s health work capacity through the use of technology has become an innovative field of action and a priority. Some examples have been seen in the Caribbean, where collaboration between universities and private companies has resulted in projects to improve accessibility to information through the Internet for students and faculty members.
- “Education is the most powerful tool that can be used to change the world” Nelson Mandela
- Improving health professions education constitutes an important building block for larger goals such as Universal access to health and universal health coverage, the compact 30-30-30 and human resources for universal health. Regarding human resources for universal health, two important concepts need to be taken into account. Firstly, social mission or social accountability, which is about making health not only better but fairer - more

reliable, just and universal. And inter-professional education. Several resources as results of PAHO meetings are available regarding these topics.

- Resources can be found in The Consortium of PAHO / WHO Collaborating Centers on Medical Education which is comprised of medical schools advancing social mission in the Americas and the Indicators of social accountability (I-SAT) working group. Two specific resources were mentioned; a guide for medicine faculties towards the excellence in social mission and the I-SAT indicators of social accountability tool.
- Accreditation is mentioned as an important point to consider for the future. Canadian medical schools are the first in the world to include in their accreditation items for social accountability.
- Students should be kept in the center. We need to work with them; not just for them.

COVID-19 and emerging trends in health professions education: A Caribbean perspective

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- The trends in health professions education at the University of the West Indies were presented.
- The University prepares seeks to prepare students for a dynamic healthcare market and inculcate and develop beliefs, values and priorities. How these priorities are balanced in practice in the future is what makes the health workforce effective in meeting the needs of society. So the challenge is how to best train them to do this.
- The areas emphasized in the curriculum are: Ethics & Society (non-analytical, humanistic skills); Analytical thinking –physiology, pathology and clinical decision-making; and Technical skills. The final exit exam tests history-taking, examination skills, technical skills, recall of factual knowledge and clinical reasoning.
- However, the pandemic has necessitated a rapid and new perspective regarding the future of health professions education. Easy access to biomedical information has made recall less important; the emerging role of artificial intelligence promises to reduce the efforts required by physicians to interpret digital data and improve their ability to establish a diagnosis and prognosis. On the other hand, since the humanistic aspect of medicine can't be replaced by technology it should be strengthen and emphasized.
- Advanced technology and AI will be the heart of medical education. However, this will need to be complemented by a humanistic approach in which social skills are improved. Therefore, health professionals of the future should be trained within a patient oriented curriculum that targets social interaction, prioritizes patient safety and responds to social changes and respects diversity.
- Augmented reality will also play an important role on the study of the body and patients.
- Technologies to be implemented are based on social contracts. Collaborative practice and life-long learning are extremely important.
- The education of health professionals of the future may require a paradigm shift from time-based to competency based.
- The pandemic has highlighted the importance of e-learning, which allows students to access top-class learning material regardless of geographical restraints. This trend is rising as a new alternative to traditional learning.
- Simulation training will be a further component of training in the future. It offers students practical, hands-on experience in a safe and realistic manner and therefore allows for an enhancement of patient care. Virtual anatomy adds the dimensional component to the study of this subject and has become a new way of learning anatomy.

- The technologies supporting health care are rapidly evolving but it will never replace human touch.
- Interprofessional education (IPE) allows for better preparation of health professionals for future collaborative practice in the best interests of the patients and to treat chronic conditions.
- However, IPE finds resistance due to logistical obstacles (timetabling), cultural and beliefs of health professions, political dominance of physicians against IPE, and the lack of a sense of urgency about changing the health care delivery system. The resistance can be overcome with research and funding on IPE topics, top-bottom leadership, engagement of key stakeholders and faculty development.
- In summary, the future of health professions education in the Caribbean entails:
 - more emphasis on humanistic skills
 - advanced technology and AI at the heart
 - augmented reality will replace a lot of didactic teaching in HPE
 - social contract will be enhanced by more emphasis on life-long learning and IPE
 - competency-based HPE may replace time-limited HPE in the long term
 - E-learning is already commonplace in just 1 year
 - A change to simulation training will be costly but it will enhance patient safety

Reflections - The COVID-19 pandemic and the implications for health education

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- The effects of the COVID-19 pandemic on the delivery of health education are: a rapid end of face-to-face interactions followed by a quick transition to online delivery with a need to improve both hardware, software and access to internet; limited access to clinical areas in hospitals; modification of assessment methods; and psychological impact on staff and students due to increased levels of stress.
- The pandemic aggravated social inequalities and disparities, for example, an uneven access to technology (the “digital divide”); affected the level of student engagement; increased the need for innovation to stimulate ongoing interest and commitment by students; caused technology fatigue given the limited number of hours for delivery and learning; and increased the need for self-directed learning.
- All these changes require a regulation through policy, for example through policy on remote learning and delivery facilities or policy and guidelines on student assessment.
- Factors to be considered regarding education and training delivery are that the changes caused by the pandemic had an impact on the curricula, affecting teachers’ preparedness who had to adapt to provide online classes. This rapid change showed inequities in students’ access to technology. There is a need to clarify when and how to resume face-to-face sessions, and to consider the importance of interaction for interprofessional training. The new normal in terms of health education requires tailoring assessment methods and enabling spaces for training in clinical areas (i.e. virtual labs/ simulations).
- The pandemic also disrupted academic research, wherein researchers had to shift their efforts to treating patients, leaving much of their research work on standby.
- There has been a change in the research agenda. Despite the crisis, funds to support COVID-19 research have been secured. Research funders have developed strategies to continue funding research, even during the pandemic and have provided guidance from proposal development to access to funds. There was also a disproportionate impact on women researchers versus men, thereby accentuating existing gender inequalities in research.

- Long term lessons can improve future research efforts: improvement in research design; greater collaboration/sharing of data and information; development of “crisis standards” to guide research efforts during disasters that impact the research for the preservation of scientific research quality.
- The impact on student interaction in the communities have been mainly marked by the changes occurring in the way services are delivered in community facilities:
 - Increased use of telehealth
 - Increase in health education and health promotion–relationship between uncontrolled NCDs and COVID
 - Greater focus on improving the prevention of NCDs and compliance in patients with NCD
 - Greater availability of Rehab Services at the community level –respiratory therapy
 - The importance of preventive approaches, including proper nutrition
 - Educating the public on the importance of personal hygiene and sanitization
- Aside from clinical or technical skills and competencies, human resources for health will also need to become increasingly comfortable with technology in all spheres, sooner rather than later. This, in turn, has implications for health professions education.