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COMMENTARY

COVID-19 fosters social accountability in medical education

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As a commentary for which no new data were collected this manuscript is exempt from requiring Ethics Review.

ABSTRACT:

The COVID-19 pandemic has highlighted embedded inequities and fragmentation in our health systems. Traditionally, structural issues with health professional education perpetuate these. COVID-19 has highlighted inequities, but may also be a disruptor, allowing positive responses and system redesign. Examples from health professional schools in high and low- and middle-income countries illustrate pro-equity interventions of current relevance. We recommend that health professional schools and planners consider educational redesign to produce a health workforce well equipped to respond to pandemics and meet future need.

Keywords:

community-based education, COVID-19, medical education, primary health care, social accountability; social mission.

FULL ARTICLE:

Health professionals for a pandemic response

Health professionals have found themselves at the global frontline of the COVID-19 pandemic. An acute global shortage of appropriately trained health professionals and equipment to handle a pandemic is apparent. Clinical training has not prepared graduates well for public health emergencies, and health professionals at the coalface have confronted the uncertainty and anxiety provoked by COVID-19[1]. Here, we discuss the impact of the COVID-19 pandemic on medical education and how we must seize the moment to produce a fit-for-purpose health workforce. This workforce must be ready to respond to pandemics and address the social injustice and inequalities COVID-19 has revealed, including their effects on vulnerable populations. In our view, this is a transformational moment for medical education; a disruptor offering opportunities for true reform. Achieving this requires integration of competency-based, place-informed health

education with virtual care, informatics and attention to both health system and physician resilience while rethinking the scope and breadth of the health team trained to meet looming challenges.

Learning from the impacts of the pandemic on medical education

There have been many adjustments over the past year, including suspension or restrictions on medical student clerkships and campus-based learning, wholesale moves to remote and online learning, use of the virtual environment for clinical skills and laboratory sessions, online examinations, adaptation of accreditation requirements and sending students out into the community to help. COVID-19 has also highlighted the embedded inequities and fragmentation in our health systems, shedding light on unfair financing, service delivery and education models that systematically exclude the most disadvantaged from health care and education options[2,3].

An important topic that has yet to receive much attention is how these adaptations and disruptions in conventional approaches to medical education might actually help drive greater social accountability of health professional schools towards the populations that they serve.

For example, given the COVID-19 experiences, how might we now approach medical program design that educates and trains graduates 'from, in, with and for' underserved and rural communities? How might medical education adapt to evidence of service interventions measurably improving community health? How might community priorities become the driver of academic programming rather than academic priorities being the main driver of what is offered to communities? How might the challenges imposed by the COVID pandemic accelerate responsiveness, adaptability and the pace of change? For example, rapid deployment (and uptake) of telemedicine for clinical care (previously thought too difficult) can also facilitate distributed teaching and learning models[4]. Additionally, growing recognition of the role of community health workers in promoting community health now finds them integrated into the health system and healthcare teams[5].

Implications of COVID-19 for ongoing medical education

The United Nations High Level Commission on Health Employment and Economic Growth argued that an increased investment in health workforce must yield better societal outcomes, effectively and efficiently[6,7]. In medical education, there are many examples of public spending on medical workforce (often in the name of underserved and rural populations) translating instead to urban medical subspecialisation, fragmentation of care, inefficient and ineffective health spending and economic medical migration[3]. This pandemic caught health systems by surprise. More than 80% of hospitalised COVID-19 patients had underlying conditions easily treatable by primary care teams[8]. Yet, health systems and traditional medical education are still specialty driven, with insufficient emphasis on primary care or integration of public health into clinical education and basic health systems[9,10].

Effective and efficient care demands high quality primary care and social services for:

- appropriate community-based triage, testing and tracing
- prevention and treatment of comorbidities in the communities where patients live
- strong integration with hospital care when needed[10,11]
- broadening the scope of medical education to encompass skills in population health and intersectoral bridge-building.

It is no surprise then that key strategic challenges for medical education include:

- promotion of 'generalist' careers among medical graduates[12,13]
- achieving a more equitable geographic distribution of medical workforce
- growth of public health degrees and certificates as medical school options[14]
- in-country retention of medical graduates in low- and middle-income country (LMIC) settings.

Promoting the 'social mission' of medical schools and other health education institutions is seen as an important way to contribute to better health outcomes[3]. The development of 'socially accountable medical education' and the practical learning among medical schools committed to this agenda are highly relevant in this regard.

THEnet: a community of practice for social accountability in health professional education

The Training for Health Equity Network (THEnet) is a community of practice of 13 medical and health professional schools with a commitment to producing and supporting a health workforce to meet the needs of the communities they serve (Box 1). Located largely in rural and underserved areas of 10 low- and high-income countries, these schools share a focus on:

- recruiting students from underserved and under-represented populations
- providing a balanced curriculum with a primary care focus that integrates the psychosocial, biological and clinical sciences
- delivering the program in large part in the community in underserved areas
- providing postgraduate training options that address local health workforce needs[15].

Box 1: Health professional schools in the Training for Health Equity Network

Ateneo de Zamboanga University School of Medicine, Philippines
Ghent University, Belgium
Flinders University, Australia†
Imperial College, United Kingdom
James Cook University, Australia
Latin American School of Medicine (ELAM), Cuba
Northern Ontario School of Medicine, Canada
Patan Academy of Health Sciences, Nepal
Walter Sisulu University, South Africa
University of Gezira, Sudan
University of New Mexico, USA
University of the Philippines, Manila, School of Health Sciences, Leyte, Philippines
University of Sherbrooke, Canada
University of Texas, El Paso, USA

† Founding school; recently withdrew from THEnet.

THEnet is a learning network, where innovations are shared among members and across sectors, but where member schools learn from institutions across the globe and share their innovations in kind. Evaluation to hold ourselves accountable for outcomes is an important part of this work. Our research shows excellent outcomes in terms of intentions to practice and actual practice in rural and underserved areas, practice in generalist disciplines, broadening the health team to include community-based health workers[16] and health extension regional officers[17], and remaining in country to serve rather than emigrating, for LMICs[18]. Longer term data from some schools suggest that these intentions translate well into actual practice[19,20].

Many of these innovations, used with demonstrated success in THEnet schools, may be of considerable utility to other medical schools trying to adapt their ways of doing things to a post-COVID world, while advancing social good and health equity. Some examples follow from THEnet partner schools of innovations that, as a result of COVID-19, may now have accelerated adoption among mainstream schools (Box 2).

Box 2: Examples of prosocial innovations in education from THEnet schools[21,22]

1. Broadening participation in HPE (modified selection processes; schools located in underserved areas)
• THEnet schools are nearly all located in regional, rural and underserved areas • Selection processes in THEnet schools rely on more than just academic criteria, including adjustments for rural schooling (JCU; NOSM), intake quotas for underserved population groups (NOSM, PAHS, WSU) and community participation in student selection (UPM-SHS; ADZU; JCU) [ref. 21]. This results in a student demographic profile more similar to population • Using a specific social inclusion matrix at admission, PAHS has been successful in enrolling eligible candidates from remote areas and underprivileged communities to facilitate later deployment of the graduates to these communities
2. Distributed, community-engaged course delivery (learning in the community and responding to community needs, technology enhanced learning/assessment, curricula focus on primary health care and local priorities, promoting person-centred care)
• Engaging with the community in student selection and performance evaluation, PAHS has developed a motivated community providing a powerful learning experience for students • UGhent pioneered a curriculum centred on community oriented primary care with community needs assessment and 'diagnosis' [ref. 22]. • ADZU students have longitudinal engagement with a rural community, culminating with 10 months of learning in the community while working together to solve a local issue. • JCU's distributed model has the whole course in regional and rural areas, including 20 weeks of learning in small rural and remote communities, supplemented with technology-enhanced learning and assessment
3. Promoting clinical generalism (integrated clerkships rather than specialty 'rotations'; emphasis on outcomes rather than process, generalist facilitators, mentors and leaders; postgraduate rural generalist training pathways)
• UPM-SHS: Medical students undergo two quarters of community clerkship in their second year and one year of community internship in their fifth year. At each, they are deployed to remote and underserved areas and are trained to become systems-thinking generalists rather than specialist-practitioners. This allows them to adapt to the new demands of the pandemic while not losing focus on the broader, fundamental issues in primary health care. • Generalists in senior leadership positions at most THEnet schools (eg JCU, UPM-SHS, PAHS, NOSM, UGhent) • Primary care embedded in curriculum from year 1, with extended placements helping graduates to develop a holistic approach to patient care and acquire competence and confidence to work in a resource-poor setting (PAHS, UGhent and others) • UGhent: Primary care physicians and specialists jointly discuss patient cases with students, showing their complementarity of skills and tasks in addressing patient's problems • Exposure to inspirational generalists and primary care physicians as mentors
4. Decentralised graduate medical education/specialist training and CPD (regional and rural specialty selection and training; incorporating generalism in specialty training; engagement, support and professional development of local practitioners)
• Using local and rural family doctors as preceptors and supporting them in teaching undergrad medical students at PAHS and UGhent distributed teaching sites has helped capacity building of these local and rural primary care doctors • UPM-SHS: Medical students undergo a unique community internship (other medical graduates in the Philippines do hospital-based internships). When the COVID-19 pandemic started, UPM-SHS medical interns were already integrated in their home communities and familiar with their local health systems. Thus, they were well prepared to augment the health workforce in their already understaffed rural health centres • Developing and auspicing appropriate postgraduate training and CPD to meet needs for rural generalists (JCU and NOSM) • Supporting rapid institutional and systemic level responses (from admissions, curriculum to recruitment), eg to the anti-racism movement (NOSM)
5. Producing well-rounded health professionals who are lifelong learners and problem-solvers (with solid competencies in public health, the social determinants of health and working in flexible interprofessional teams)
• 25% of undergrad curriculum at PAHS comprises community health sciences, providing a strong base for public health • ADZU graduates all emerge with public health in addition to medical qualifications • UPM-SHS: The UPHS curriculum integrates the training of midwives, nurses and doctors into one sequential, community-based program. Thus, its medical graduates are better able to work in interprofessional teams • Emphasis on social determinants of health, health inequity and how to address these across all classes and year levels (all schools) • Attention to shaping knowledge but also attitudes and skills training (how to deal with diversity in practice, how to make use of translators, knowledge of the landscape of social services (UGhent and others)

ADZU, Ateneo de Zamboanga University School of Medicine (Philippines). CPD, continuing professional development. HPE, health professional education. JCU, James Cook University (Australia). NOSM, Northern Ontario School of Medicine (Canada). PAHS, Patan Academy of Health Sciences (Nepal). UGhent, Faculty of Medicine and Health Sciences, Ghent University (Belgium). UPM-SHS, University of the Philippines, Manila, School of Health Sciences, Leyte (Philippines). WSU, Walter Sisulu University (South Africa).

Moving forward: educating future health professionals

To play an optimal role in strengthening societal health and wellbeing, health professional schools must respond and hold themselves accountable for addressing regional health and health system needs. Accreditation of medical schools needs substantial reform with new standards that require schools to prepare physicians to be competent to treat marginalised and vulnerable populations. As leaders in health professional education, we see a role in assisting health systems to respond quickly to emerging crises with pre-emptive disaster planning that includes necessary adjustments to health professional training to ensure that our students and graduates are important drivers of change into the future.

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