Invited Paper

A Network of Networks: 40 Years of Uniting Global Agendas toward Universal Health and Equitable Care

Jan De Maeseneer¹, Amy R. Clithero-Eridon², Aricia DeKempeneer³, Arthur Kaufman⁴, David Bor^{5,6}, Ian Cameron⁷, Robert Woollard⁸, Roger Strasser⁹, William Burdick¹⁰, Nicholas Torres¹¹

¹Department of Public Health and Primary Care, Ghent University, Ghent, Belgium, ³The Network Towards Unity for Health, Philadelphia, ²Department of Family and Community Medicine, University of New Mexico School of Medicine, ⁴Department of Family and Community Medicine, University of New Mexico, Albuquerque, New Mexico, ⁵Cambridge Health Alliance, Cambridge, ⁶Department of Medicine, Harvard Medical School, Boston, Massachusetts, ⁷University of Newcastle, Newcastle, Australia, ⁸Co-Chair, Global Consensus for Social Accountability, Professor of Family Medicine, University of British Columbia, Vancouver, Canada, ⁹Northern Ontario School of Medicine, Lakehead and Laurentian Universities, Thunder Bay, Ontario, Canada, ¹⁰Foundation for Advancement in Medical Education and Research, USA, ¹¹University of Pennsylvania, Philadelphia, Pennsylvania, USA

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Background

The Network: Towards Unity for Health (TUFH) celebrates 40 years of collaboration between academic and community organizations focused on identifying and addressing the needs of communities and populations worldwide. This invited paper to *Education for Health* summarizes a rich history and charts new directions in networking that are responsive to and instrumental in programming and innovative initiatives to help ensure access to and quality care for all. Social network theory^[1] makes a distinction between intent and relationships within organizations on the one hand and networks on the other. Relationships within organizations are defined by structure, governed by policy, and have a defined web of reporting, usually clearly hierarchical. Conversely, networks are defined by relationships, governed by shared

values and intentions, and adapt to changing interests and environments. Organizations tend to assume and act upon a worldview and function like a complicated rocket ship, i.e., there are definable laws of behavior, similar to laws of physics, which can be measured and drawn upon to elicit desired outcomes. Networks, in their best form, function as complex adaptive systems. This involves a worldview that biological and social systems are complex, with few linear cause-effect-relationships. Instead, they are composed of feedback loops grounded in relationships as the unit of analysis. This is outlined by the historian Arnold Toynbee:

“Society is the total network of relations between human beings. The components of society are thus not human beings but the relations between them. In a social structure, individuals are merely the foci in the network of relationships. A visible and palpable collection of people is not a society; it is a crowd. A crowd, unlike a society, can be assembled, dispersed, photographed, or massacred.”^[2]

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Address for correspondence:

Prof. Jan De Maeseneer, Department of Public Health and Primary Care, Ghent University, Ghent, Belgium.
E-mail: jan.demaeseneer@ugent.be

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Networks, like the ecosystems they represent, tend to function near the “edges”^[3] of more static systems and it is on the edges where most creativity and productivity reside – consider the edges of forests, riparian zones, and sea shores. Thus, the Network: TUFH, existing at the edge of the World Health Organization (WHO) and the many international organizations working on health delivery and education, seeks the nimbleness and impacts such a stance affords.^[4]

As the 40th anniversary of the Network: TUFH approaches, a review is important for sharing progress. From forming new alliances and sustainable partnerships to reaffirming commitment to addressing the numerous and deleterious effects resulting from disparities within and between populations, we are hopeful that the current review encourages like-minded organizations and individuals to join our “network of networks.”

The Network originated 40 years ago with two WHO initiatives separated by 22 years. The Network welcomed into the organization the WHO project, TUFH, which promoted collaboration between different health and community stakeholders. Over the past 40 years, The Network: TUFH has focused on three key content pillars to address local and global health needs. Activities undertaken based on the three pillars are summarized below.

1. Social accountability and networking strategies: Application of the “partnership pentagram” in positive systems change in projects around the world; establishing the task force on social accountability and accreditation influencing criteria for medical school accreditation; led the Global Consensus on Social Accountability (Global Consensus for Social Accountability of Medical Schools, n. d.); and co-hosted the 2017 World Summit on Social Accountability at the University of Tunisia, fostering responsive integrated interprofessional services
2. Innovative medical education pedagogy including problem-based learning (PBL), longitudinal integrated clerkships, community-based education, and interprofessional education and care
3. Communities at risk, including: rural and indigenous communities; deprived townships; task force on women’s health; and task force on the care of the elderly

Specific task forces were created at the conferences to focus on these themes. As progress was made or emerging opportunities, priorities, or challenges presented themselves, task forces may have dissolved, grew, or were (re-) established. These task forces wrote position papers and policy documents presented at influential venues including the WHO General Assembly (e.g., in 2010, when the World Health Report (WHR) 62.8 “Primary Health Care, including health system strengthening,” was adopted^[5]).

The following overview of the first 25 years summarizes the organization’s formation along with the inclusion

of professionals from different disciplines and emerging education and teaching innovations to better address the needs of the community.^[6]

1979–2002

The first “gathering” was a WHO meeting in the aftermath of the WHO conference on Primary Health Care in Alma Ata in 1978. The WHO invited, to Cuba, what it saw as 18 innovative medical schools in 1979. This was followed by a meeting of the schools in The Rockefeller Centre Bellagio which formalized the relationship into The Network. The first conference of The Network was held in Kingston, Jamaica, also in 1979.

The initial aims of The Network were headlined as community-oriented medical schools, encompassing academic-community partnerships. The original medical school members had many strategies in common: development of problem-based learning (PBL) involving small group self-directed learning; community-oriented medical education (COME); and challenging traditional medical student selection criteria. This development was influenced by the worldwide student movement of 1968 (e.g., in Berkeley, Paris), with a strong focus on emancipatory processes and participation. Central to this was the integration of new content in a new didactic design.

The first wave of The Network schools including Newcastle and Beersheva was almost all new schools able to make a fresh start with a new vision. However, they struggled to provide a roadmap to change for traditional schools seeking to transition to COME or PBL. The second wave of schools joining The Network was creating change via innovative, parallel tracks such as the University of New Mexico and Shanghai Second Medical. Their efforts were documented in a book published by the WHO in 1987, *Innovative Tracks at Established Institutions for the Education of Health Personnel: An Experimental Approach to Change Relevant to Health Needs*.^[7]

With the growth of The Network, regional patterns of innovation emerged in a complementary fashion. School innovations in high-income countries, such as McMaster and Maastricht, tended to emphasize PBL, while school innovations in low-income countries such as Suez Canal University and the University of the Philippines tended to emphasize COME. Both were extremely important in the oral as well as written dialogue of the Network. The two innovative groups learned from and often adapted each other’s innovations.^[8]

The 1999 WHO conference in Phuket, Thailand was built around a framework developed by Charles Boelen, MD, Director of Workforce Development at WHO in Geneva. This first TUFH conference included 12 developmental papers, some on health, but others on social development (e.g., the rejuvenation of

Liverpool, England). Central to TUFH was expansion beyond academic community partnerships to include a minimum of health service organizations, health service providers, and policy-makers.

In 2000, it became apparent that the two trends had much in common. Amalgamation was proposed and accepted at a 2002 meeting in Sicily, Italy. The Network: TUFH built on the history and aims of the two programs, and while independent of the WHO, it remains in official relationship with the WHO.

2002-Present

Taking into account the historical origins of The Network: TUFH and network theory, the period from 2002 to the present reflects the manner in which The Network: TUFH, by virtue of its own evolution in an evolving world of health care and health education, has not only survived but has contributed to the advancement of both.

The Network: TUFH is not an insular organization, but rather it is an ever-evolving and inclusive network that embraces other organizations that are striving to create educational best practices and share community health approaches and partner on research to develop evidence for what works. The strategy to become a “network of networks” was very explicit in the 2012 conference in Thunder Bay, Canada, which was co-hosted with the WONCA Rural Health World Conference, as well as the Northern Ontario School of Medicine, Flinders University Australia conference on Community-engaged Medical Education, Global Health through Education, Training and Service, the Consortium for Longitudinal Clerkships, and the Training for Health Equity network. Other examples of the implementation strategy to become a “network of networks” were in 2004 at the Atlanta conference co-hosted with the Community Campus Partnerships for Health and from 2002 to 2016 in which The Network: TUFH supported the activities of the Women’s Health Task Force of The Network.

Another key aspect of The Network: TUFH is it is supported by a Secretariat, defined as a backbone agency that supports The Network and its initiatives. For the first 25 years, the Secretariat of The Network: TUFH was at Maastricht University in the Netherlands. In 2008, the Secretariat moved to Ghent University in Belgium. In 2012, informal discussions began about the Secretariat’s future home. Ghent had provided an excellent home for the organization, but that relationship was ending in 2016. The Board of Directors of The Network: TUFH, at their annual meeting in Ayutthaya, Thailand, in 2013, analyzed a range of possibilities. The group agreed to articulate a plan for The Network: TUFH, incorporating the concept of locating the Secretariat at the Foundation for Advancement of International Medical Education and Research (FAIMER). In February 2014, a strategic plan for The Network: TUFH was approved by the

Board of Directors. It delineated The Network’s mission, current strategic assets, future plans, and potential advantages of re-locating the Secretariat to FAIMER. For The Network: TUFH, collaboration with FAIMER meant a stable Secretariat location independent of the Secretary-General’s home institution and possible synergy with faculty development initiatives.

For FAIMER, collaboration with The Network: TUFH was a logical fit with an organization that had a matching mission of improving health through health workforce education. It also provided a convening point for the FAIMER community and other aligned entities, an opportunity for advocacy, and capacity building in areas of mutual interest such as accreditation, social accountability, interprofessional education, and an opportunity for greater engagement with the WHO. Over a transition period from mid-2015 to January 1, 2016, the Secretariat relocated to FAIMER.

Annual Conferences

The early aims of The Network: TUFH, as reflected in conference themes and papers and publications, were built around academic community partnerships and concentrated on PBL and small group learning. It was inherent within this context that medical schools were concentrating on producing graduates who would be better able to serve disadvantaged people and communities.

The Network: TUFH is an intergenerational community where students and experienced professionals engage in bidirectional learning. Over 40 years, we have created a cohesive community that connects on a continuous basis. The key to networking is forging and nurturing wide-ranging relationships that make The Network: TUFH a society and not just a crowd. The annual conferences are the soul of The Network: TUFH and they are singular in that “every participant has a story to tell” and that story “matters.” The conferences rotate through regional areas, hosted by member organizations.

In addition to holding the annual general meeting, this venue is where regional representatives and task forces (groups working on a specific topic, mostly on a permanent basis), meet face-to-face. The conferences are highly participatory, with few plenaries. Participants share ideas and experiences enhanced by site visits to local nonprofit organizations, health care centers, and/or co-operatives such as microbanks. Site visits help ground experiences in a place and time, thus offering attendees a first-hand look at innovations and activities of the host country. Active engagement with communities and understanding of local context and approaches provide opportunities to reflect on one’s home context and act upon the learning gained.^[9]

At the annual conference, participants present their work in three different formats. The primary format is highly

interactive oral poster presentations organized by themes. Moderated group discussions and brainstorming sessions provide a rich discussion for all involved. Authors can also present their work in workshop format designed for attendees to learn particular skills. Finally, the authors can present a TUFH Talk. Like TED Talks, they deliver time-limited powerful talks moderated by experts and followed by an interactive discussion. Participants are also invited to attend, participate, and engage during the keynote speeches; task force meetings; regional meetings; solutions challenge; and the general assembly meeting.

The Network: TUFH believes in communicating and sharing member's work internally via a quarterly newsletter and externally through an open-access and indexed peer-reviewed journal, *Education for Health*. Dissemination of research and ideas can be cost-prohibitive for many resource-poor countries. Having an open-access journal that actively encourages submissions from international contributors as well as from students decreases the divide in the publishing world where the majority of accessible publications represent a northern hemisphere bias.

The annual conferences provide an opportunity to present work orally and network with others. The journal of the Network TUFH, *Education for Health*, furthers these efforts by allowing publication of this work in the journal. A special issue of *Education for Health* was published following the "RendezVous" conference in Thunder Bay, where there were a number of articles published highlighting the conference themes and Network: TUFH directions.^[10] Overall, this network allows oral presentations to be shared in a larger community through publication.

Education for Health has published 864 articles from 72 countries since 2000. An important feature of the journal is the support and assistance given to first-time authors. It is also important to note that during the editorship of Hilliard Jason, MD, EdD, there was a success in getting *Education for Health* accepted for Medline indexing that increased the prestige of papers published in the journal as well as results in worldwide dissemination of publications.

Reflections

From the initial 18 WHO-selected medical schools, the membership of The Network: TUFH widened to include a greater range of organizations and partnerships. Similarly, the consolidation of the Network and TUFH shifted the focus beyond medical schools to include other health professions, organization management, and policy-makers. A focus on education within schools also shifted to include distance education and the health of indigenous populations and refugees.

Arthur Kaufman, M. D., a past Secretary-General, notes that the Student Network Organization (SNO) grew as a vital component of The Network annual conferences. In earlier years, SNO activities focused more on political activities, electing officers of SNO in parallel with officer titles of The Network. However, in more recent years, SNO has become more visible by participating in each component of conference activities including thematic poster sessions, workshops, and policy discussions. They have a "track" of advertised activities, to which all conference attendees are invited. They provide the energy behind social events, a highlight of any gathering. Importantly, SNO "graduates" are now assuming leadership roles within The Network: TUFH.

Summary

The Network: TUFH has always been a self-adapting network,^[11] meeting goals both by evolving and leading in a changing environment. The impact of The Network: TUFH has been important in the development of health professions education^[12] and in health policy development by increasing social accountability in education and delivery of care. Since 2006, the strategy of The Network: TUFH has been to become a "network of networks," bringing together like-minded organizations to collaborate and become more than their individual parts. The strength of The Network: TUFH rests in its membership – the people whose web of relationships animates a global society out of an inchoate crowd. At a TUFH conference, "every person has a story to tell" and "has made a difference in his/her community or globally." The highest function of a network is to foster ways in which the many relevant organizations and initiatives dedicated to building a healthy and enduring planet achieve emergent behavior – become more than the sum of their parts. Finally, we want to recognize those who have assumed leadership of the organization over the past 40 years and look forward to equally successful leadership in the coming years.

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Conflicts of interest

There are no conflicts of interest.

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