AJPM FOCUS

INCLUSIVITY IN PEOPLE, METHODS, AND OUTCOMES

EDITORIALS

Community Medicine, Community Health, and Global Health: Interdisciplinary Fields With a Future Lens Inclusive of Local and Global Health Equity



Andrew S. Knecht, DO, MPH, Namita Akolkar, MD, MPH, Alexander H.W. Molinari, DO, MPH, Melissa L. Palma, MD, MPH⁴

▼ his editorial presents guiding definitions of community medicine (CM), community health (CH), and global health (GH) as wide-ranging sites for primary prevention, clinical preventive medicine, and GH quaternary care with a view toward the challenges and opportunities within these fields. These concepts are complex and sometimes difficult to define because they are not always mutually exclusive. Nevertheless, they are all important to understand the larger concept of public health and preventive medicine. Figure 1 spatially demonstrates these 3 fields and how they are related. It also shows how these 3 fields include clinical patient care in varying amounts.

COMMUNITY HEALTH

CH is a "collaborative enterprise that uses public health science, evidence-based strategies, and other approaches to engage and work with communities, in a culturally appropriate manner, to optimize the health and quality of life of all persons who live, work, or are otherwise active in a defined community or communities." As seen in Figure 1, the breadth of CH lies between GH and CM. It is fostered by coalitions of community organizers, public health workers, and clinicians to address local health concerns. Involving these groups, the practice of CH is executed through the assessment of disease burden and barriers to obtaining optimal health within defined communities, data- and evidence-driven initiatives, development of effective CH messaging, and analysis of outcomes.

The great challenge of CH is lack of funding. In 2020, the top causes of death in the U.S. were largely preventable and chronic disease conditions—except coronavirus disease 2019 (COVID-19) and unintentional injury.²

Although these conditions have multiple underlying causes, lifestyle is a major contributor.³ Funding and reimbursement for prevention and intervention activities focused on lifestyle contributors of chronic disease on both CH and individual patient care levels is difficult to obtain. Although CH efforts have had success in the prevention and control of the diseases mentioned earlier, future funding advocacy efforts to address lifestyle components of chronic diseases are crucial.

The 2022 Mpox outbreak, which mostly affected the LGBTO+ community, is an example of CH at work. The outbreak was controlled through combined efforts of public health departments and LGBTQ+ organizations, which included social media campaigns to raise awareness and reduce stigma along with widespread vaccination during community events such as pride parades, at gay bars, and at community centers.^{5,6} Central to this example is the targeting and application of the concepts of social determinants of health.

Social determinants affect almost every community and are a focus of Healthy People 2030; thus, future work and research in CH should target these concepts. Five key domains of social determinants of health have been identified (Table 1).7 Often, these domains are used to

From the ¹Nassau County Department of Health, Mineola, New York; ²Department of Family, Population & Preventive Medicine, Renaissance School of Medicine, Stony Brook University, Stony Brook, New York; ³Department of Family and Preventive Medicine, Emory University School of Medicine, Atlanta, Georgia; and ⁴Department of Family Medicine, The Warren Alpert Medical School, Brown University, Providence, Rhode Island

Address correspondence to: Andrew Knecht, DO, MPH, Nassau County Department of Health, 200 County Seat Drive, Mineola, NY. E-mail: aknecht@nassaucountyny.gov.

2773-0654/\$36.00

https://doi.org/10.1016/j.focus.2023.100165



Figure 1. The relationship between community medicine, community health, and global health and their relative alignment with clinical care.

^aGlobal health, community health, and community medicine are interrelated but independent. The size of the squares is indicative of the breadth of geopolitical boundaries that each area influences, with global health having the greatest and community medicine having the smallest.

^bClinical care may either be individual patient care or clinical care of small groups of people. Each area has a component of clinical care; however, with increasing geopolitical breadth, the relative amount of clinical care decreases.

address health outcomes in minority racial and ethnic health inequality; however, they should also be applied to issues in women's health (especially reproductive health), sexual and gender minorities, those living in poverty, and many more.

COMMUNITY MEDICINE

CM is the collaborative science focusing on health promotion and disease prevention within various populations and the individuals who comprise them.⁸ This application of health promotion and disease prevention may involve the greatest amount of clinical care on an

Table 1. Social Determinants of Health, 5 Domains

Domain
Economic stability
Education access and quality
Healthcare access and quality
Neighborhood and built environment
Social and community context

individual or small group level compared with the other fields discussed in this article and as visualized in Figure 1.

Although CH emphasizes community partners and understanding disease presence in a population with data-driven assessments, CM focuses on understanding and preventing the occurrence of those diseases at their source using measurable interventions created from CH data. Thus, CH and CM are intimately related but different in scope. CM may comprise an interdisciplinary team of community members, physicians and other health professionals, epidemiologists, statisticians, public health leaders, and policymakers.

CM is becoming an integral part of health care as population-level problems become increasingly recognized. Identifying certain populations that are prone to chronic diseases, such as hypertension or diabetes, or infectious diseases, such as HIV or sexually transmitted infections, facilitates appropriate allocation of resources to reduce the incidence of disease. Health inequities, specifically regarding social determinants of health and how they may negatively incur upstream, generational challenges for systematically excluded communities, also are becoming more apparent. This gap highlights the role of CM and its constituents to most efficiently preserve and protect the health of all groups of people by promoting equitable policies and a culture of wellness. Understanding how to support this field will aid all individuals in their efforts to push forward as one collective community.

Examples of CM in action include the growing number of postgraduate medical education training programs in preventive medicine, family medicine, internal medicine, pediatrics, and emergency medicine with a focus on the intersection of social justice and health equity. Since 1987, the Health Resources and Services Administration has provided federal funding for the Teaching Health Center Program, which has developed generations of CM-trained, primary care physicians in Federally Qualified Health Centers in both rural and urban areas. 10 Hospital systems have also recognized the need for this larger view of population health through CM demonstrated by the creation of population health departments and centers that assess the health of the communities they serve and work closely with community groups and local departments of health to deliver care more appropriately and effectively.

GLOBAL HEALTH

GH focuses on health care, research, and policy that transcend geopolitical borders and focuses on the health of all people and the world. The modern-day foundations of GH posit that every human should have the

opportunity to live a life that supports good health. ^{10,11} The WHO states the "enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition." ¹³ The issues addressed by the field are broad, including primary health care, infectious disease, human rights, political conflict, and environmental justice.

GH aims to improve the health of all people through evidence-based, collaborative processes that address both population-wide policy strategies and public health education programs as well as individual healthcare encounters. For example, the One Health movement has a goal of "achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment." The COVID-19 pandemic's devastating impact highlights increasing transnational interconnectedness through biological spillover from zoonotic disease accelerated by climate change and its effects on human health.¹⁴ Decisions made in one country have consequences in others; environmental pollution is disproportionately committed by the global north, yet the global south bears the brunt of the consequences in the form of increasing climate and environmental disasters. It is imperative that the foundation of GH is rooted in GH equity. The future of GH research and practice must include this as a guide.

The struggle of developing a comprehensive GH policy amidst competing nationalistic agendas was exemplified by the disparate approaches to COVID-19 mitigation strategies in high-income countries versus low- or middle-income countries. As the global public health agency, WHO guidelines rightfully focused on the needs of low- or middle-income countries that could not develop COVID-19 mitigation strategies heavily reliant on vaccine procurement. Because high-income countries had purchased the bulk of the world supply, even a well-intentioned WHO COVAX program could not make up for the disparities. 15

CONCLUSIONS

CM, CH, and GH are interdisciplinary fields that are part of a larger whole at the intersection of preventive medicine and public health. Future practice, teaching, and research in these fields should be done with a lens inclusive of social and environmental determinants of health and GH equity, looking at all areas of life where people live, work, and play.

ACKNOWLEDGMENTS

Declaration of interest: None.

REFERENCES

- Goodman RA, Bunnell R, Posner SF. What is "community health"? Examining the meaning of an evolving field in public health. *Prev Med.* 2014;67(Suppl 1):S58–S61. https://doi.org/10.1016/j.ypmed. 2014.07.028.
- Murphy SL, Kochanek KD, Xu JQ, Arias E. Mortality in the United States. NCHS Data Brief, 427. Hyattsville, MD: National Center for Health Statistics, 2020;427:2021. https://doi.org/10.15620/cdc:112079.
- Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000 [published correction appears in JAMA. 2005;293(3):298] [published correction appears in JAMA. 2005;293(3):293–294]. JAMA. 2004;291(10):1238–1245. https://doi. org/10.1001/jama.291.10.1238.
- Freeman KJ, Grega ML, Friedman SM, et al. Lifestyle medicine reimbursement: a proposal for policy priorities informed by a cross-sectional survey of lifestyle medicine practitioners. *Int J Environ Res Public Health*. 2021;18(21):11632. https://doi.org/10.3390/ijerph182111632.
- Mpox equity toolkit; Updated 2023. Centers for Disease Control and Prevention. https://www.cdc.gov/poxvirus/monkeypox/resources/ reducing-stigma.html. Accessed February 5, 2023.
- Dawson L, Moss K, Michaud J, Kates J. Key questions about the current U.S. monkeypox outbreak; Henry J Kaiser Family Foundation. https://www.kff.org/other/issue-brief/key-questions-about-the-current-u-s-monkeypox-outbreak/. Published 2022. Accessed February 5, 2023.
- Healthy People 2030. Social Determinants of Health. U.S. Department of Health and Human Services. https://health.gov/healthypeople/priority-areas/social-determinants-health. Accessed February 5, 2023.
- Jadotte YT, Leisy HB, Noel K, Lane DS. The emerging identity of the preventive medicine specialty: a model for the population health transition. Am J Prev Med. 2019;56(4):614–621. https://doi.org/10.1016/j. amepre.2018.10.031.
- Joseph A, Kadri AM, Krishnan A, et al. IAPSM declaration 2018: definition, role, scope of community medicine and functions of community medicine specialists. *Indian J Community Med.* 2018;43(2):120–121. https://doi.org/10.4103/ijcm.IJCM_115_18.
- History. Health Resources & Services Administration. https://www. hrsa.gov/rural-health/about-us/history. Updated 2022. Accessed February 5, 2023.
- 11. Beaglehole R, Bonita R. What is global health? *Glob Health Action*. 2010;3. https://doi.org/10.3402/gha.v3i0.5142.
- Chen X, Li H, Lucero-Prisno DE 3rd, et al. What is global health? Key concepts and clarification of misperceptions: report of the 2019 GHRP editorial meeting. Glob Health Res Policy. 2020;5:14. https://doi.org/10.1186/s41256-020-00142-7.
- Constitution. WHO remains firmly committed to the principles set out in the preamble to the Constitution. World Health Organization. https://www.who.int/about/governance/constitution. Accessed February 5, 2023.
- One health basics. Centers for Disease Control and Prevention. https://www.cdc.gov/onehealth/basics/index.html. Updated 2022. Accessed February 5, 2023.
- Holzer F, Roa TM, Germani F, Biller-Andorno N, Luna F. Charity or empowerment? The role of COVAX for low and middle-income countries. *Dev World Bioeth.* 2023;23(1):59–66. https://doi.org/ 10.1111/dewb.12349.