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#### **EDITORIALS**

# Health Promotion, Health Protection, and Disease Prevention: Challenges and Opportunities in a Dynamic Landscape



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ublic health aims to promote health, protect population health, and prevent disease and injury through the core functions of assessment, policy development, and assurance. These public health actions, at various governmental and community levels, have helped manage complex health challenges globally. Specifically, health promotion is a collective strategy that creates the right social and physical conditions individually, institutionally, and societally to improve the determinants of health and empower individuals to improve their health by increasing their control over the factors that influence health and does not focus resources solely on treatment.<sup>2</sup> The development of positive health policies, expansion of collective efficacy in the community, and the progression of a health literate citizenry are actions by which to implement health promotion.<sup>2</sup> Health protection relies on the expertise and collaboration of governmental agencies as well as public health and healthcare systems to identify, mitigate, and prevent health threats to populations.<sup>3</sup> Disease prevention also has the desired outcome of attaining a healthy population, but efforts are focused on averting specific morbidities.4 Health promotion, health protection, and disease prevention serve as 3 interconnected constructs to fulfill the public health mission, which is ultimately to ensure that populations are healthy and achieve positive states of well-being.5

The effectiveness of these constructs is evidenced by the historical initiatives (e.g., Alma Ata Declaration), health equity initiatives (e.g., Healthy People 2030), and the greatest public health achievements of the twentieth century, which have contributed to a lengthening of the average lifespan by 25 years.<sup>6,7</sup> Yet, ongoing challenges persist or continue to emerge, such as the coronavirus disease 2019 (COVID-19) pandemic, which has reduced gains in life expectancy globally.8 Furthermore, the COVID-19 pandemic illuminated the already existing health and social disparities that disproportionately impact marginalized populations because of significantly challenging upstream determinants.9

#### **HEALTH PROMOTION**

The breadth of health promotion activities includes systemic regulatory, political, educational, and organizational actions that result in conditions conducive to individuals, groups, and communities. 10 The pandemic has had lasting, albeit not uniform, effects on health promotion behaviors as evidenced by an increase in obesity incidence, notably for children during school closures and social distancing policies. 11 Disparities exist not only for health outcomes, but also for health promoting activities, such as physical activity, in which gaps have widened substantially between various populations, such as men and women, racial and ethnic groups, rich and poor persons, and people with different levels of educational attainment.

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#### **HEALTH PROTECTION**

Health protection focuses on safeguarding the health of populations against external threats via governmental policies, regulations, and laws. It is a responsibility of municipal, state, and federal governmental agencies to assure access to quality, accessible, and affordable health care. Governments occupy a unique position in stewarding health through policies and decisions that shape not only health delivery directly but also promote health and well-being via economic, environmental, and societal frameworks. One of the essential factors that could potentially influence health protection will be how the electorate and governments evolve in directing public health goals based on societal and ethical values, as well as the management of conflicting public health guidance and communication. 14,15

#### **DISEASE PREVENTION**

Disease prevention efforts identify and assess health risks and develop and test interventions aimed at reducing harmful exposure, disease onset, and progression across all life stages, populations, and conditions. 16 However, views promoting individual liberty and opposing mass restrictive measures, other than the focused protection of high-risk older demographics, are often deemed unfair to less vulnerable individuals, thus complicating disease prevention efforts.<sup>17</sup> In contrast, the notion of equality and utility, where restrictive measures are universally applied to achieve the greatest reduction of morbidity and mortality for the entire population, have also been championed. 18 These ideological differences manifest a new world of public health policy for disease prevention whereby the scope of public health restrictions greatly depend on shared ethics and values. Table 1 highlights examples of health promotion, health protection, and disease prevention.

## **CHALLENGES AND OPPORTUNITIES**

Concurrent with the complex role of government in public health management is the evolving challenge of misinformation and disinformation. In response, public health leaders have prioritized novel partnerships with social media and search engine platforms to fight an infodemic of misinformation that poses significant risk to effective public health communication. <sup>19</sup> Along with the rise in misinformation, discrepancies in federal and state presentations of important health data contribute to serious communication problems within government systems. <sup>20</sup>

Another challenge is disparate access to health care. Barriers such as lack of transportation, employment requirements, and geographical distance can restrict healthcare access. COVID-19 deepened the already pervasive digital divide, resulting in imbalances applying health-related technologies, where those with access to telehealth greatly benefit in chronic disease management. 22,23

Opportunities exist to strengthen public health response in health promotion, health protection, and disease prevention. First, by collaborating with and empowering our most vulnerable and underserved communities, these constructs can promote health equity and tackle health disparities across a variety of measures. For example, by focusing efforts on the social determinants of health; integrating health equity education in medical school curricula; and increasing collaboration efforts among communities, the public health sector, and medical professionals, we can promote health by empowering communities to live healthier, prevent disease through holistic care and addressing underlying causes, and protect health by exerting available government tools. <sup>21,24</sup>

Second, there has been an unfortunate erosion of public confidence and trust among health authorities because of the COVID-19 pandemic.<sup>25</sup> Health promotion, health protection, and disease prevention implementation offer actionable ways through which health authorities can win back the trust of their communities. By integrating community stakeholders, engaging in transparent and genuine relationship building, and creating sustainable, community-driven plans, health authorities can garner community buy-in and trust as

Table 1. Definitions and Examples of Health Promotion, Health Protection, and Disease Prevention

Levels of prevention	Health promotion	Health protection	Disease prevention
Definition	Encouragement of activities that facilitate healthy living and well-being	Safeguarding the public's health against external threats	Assessment of health risks and development of interventions that halt disease progression
Example interventions	Primal and primordial prevention - Physical activity guidelines - High-quality and safe housing	Primary prevention - Emergency preparedness - Communicable disease control	Secondary prevention - Cancer and other disease screenings - Chemoprophylaxis

well as demonstrate the power of prevention and public health to those who are skeptical.

Health promotion, health protection, and disease prevention cover a broad scope of public health concepts that can be applied clinically, in organizations, within communities, and by government entities. When used at each of these strata, they can be powerful tools for improving the health and well-being of individuals and the overall population.

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## REFERENCES

- Centers for Disease Control and Prevention (CDC). Ten essential public health services. https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html. Accessed June 13, 2022.
- World Health Organization (WHO). Health Promotion. https://www. who.int/westernpacific/about/how-we-work/programmes/health-promotion. Accessed June 13, 2022.
- Rural Health Information Hub. Defining health promotion and disease prevention. https://www.ruralhealthinfo.org/toolkits/health-promotion/1/definition. Accessed June 13, 2022.
- Rubin G. Health protection: Principles and Practice. Int J Epidemiol. 2017;46(5):1722–1723. https://doi.org/10.1093/ije/dyx094.
- 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.
- Raingruber B. History of Health Promotion in Contemporary Health Promotion in Nursing Practice. Burlington, MA: Jones and Bartlett Publishers, 2017.
- Centers for Disease Control and Prevention (CDC). Ten great public health achievements - United States, 1900–1999. MMWR Morb Mortal Wkly Rep. 1999;48(12):241–243.
- Aburto JM, Schöley J, Kashnitsky I, et al. Quantifying impacts of the COVID-19 pandemic through life-expectancy losses: a populationlevel study of 29 countries. *Int J Epidemiol*. 2022;51(1):63–74. https:// doi.org/10.1093/ije/dyab207.
- Chen JT, Testa C, Waterman PD, Krieger N. Intersectional inequities in COVID-19 mortality by race/ethnicity and education in the United States, January 1, 2020—January 31, 2021. Harv Cent Popul Dev Stud. 2021;21(3):1–20. https://cdn1.sph.harvard.edu/wp-content/uploads/ sites/1266/2021/02/21\_Chen\_covidMortality\_Race\_Education\_HCP DS\_WorkingPaper\_Vol-21\_No-3\_Final\_footer.pdf. Accessed July 20, 2022.
- Green LW, Kreuter MW. Health Promotion Planning: an Educational and Ecological Approach. Mountain View, CA: Mayfield, 1999.

- Lange SJ, Kompaniyets L, Freedman DS, et al. Longitudinal trends in body mass index before and during the COVID-19 pandemic among persons aged 2–19 years — United States, 2018–2020. MMWR Morb Mortal Wkly Rep. 2021;70(37):1278–1283. http://doi.org/10.15585/ mmwr.mm7037a3.
- Sher C, Wu C. Who stays physically active during COVID-19? Inequality and exercise patterns in the United States. Socius. 2021;7:2378023120987710. https://doi.org/10.1177/237802312098 7710.
- Largent EA, Persad G, Sangenito S, Glickman A, Boyle C, Emanuel EJ.
   U.S. public attitudes toward COVID-19 vaccine mandates. *JAMA Netw Open.* 2020;3(12):e2033324. https://doi.org/10.1001/jamanetworkopen.2020.33324.
- Gurdasani D, Drury J, Greenhalgh T, et al. Mass infection is not an option: we must do more to protect our young. *Lancet*. 2021;398 (10297):297–298. https://doi.org/10.1016/S0140-6736(21)01589-0.
- Great Barrington Declaration. https://gbdeclaration.org/. Published October 4, 2020. Accessed July 18, 2022.
- National Institute of Health, Office of Disease Prevention. Prevention research defined. https://prevention.nih.gov/about-odp/preventionresearch-defined. Updated February 18, 2020. Accessed July 18, 2022.
- Kim DKD, Kreps GL. An analysis of government communication in the United States during the COVID-19 pandemic: recommendations for effective government health risk communication. World Med Health Policy. 2020;12(4):398–412. https://doi.org/10.1002/wmh3.363.
- Hunt P. Health and well-being: the role of government. *Public Health*.
   2012;126(suppl 1):S19-S23. https://doi.org/10.1016/j.puhe.2012.05.
   017.
- 19. World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020; 2020. https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-11-march-2020. Accessed July 18, 2022.
- Mheidly N, Fares J. Leveraging media and health communication strategies to overcome the COVID-19 infodemic. J Public Health Policy. 2020;41(4):410–420. https://doi.org/10.1057/s41271-020-00247-w.
- Hojat LS. Breaking down the barriers to health equity. Ther Adv Infect Dis. 2022;9:20499361221079453. https://doi.org/10.1177/20499361221 079453.
- Cheshmehzangi A, Zou T, Su Z. The digital divide impacts on mental health during the COVID-19 pandemic. *Brain Behav Immun*. 2022;101:211–213. https://doi.org/10.1016/j.bbi.2022.01.009.
- Nouri S, Khoong EC, Lyles CR, Karliner L. Addressing equity in telemedicine for chronic disease management during the COVID-19 pandemic. NEJM Catal Innov Care Deliv. 2020;1(3). https://doi.org/10.1056/CAT.20.0123.
- Braveman P, Gottlieb L. The social determinants of health: it's time to consider the causes of the causes. *Public Health Rep.* 2014;129(suppl 2):19–31. https://doi.org/10.1177/00333549141291S206.
- Henderson J, Ward PR, Tonkin E, et al. Developing and maintaining public trust during and post-COVID-19: can we apply a model developed for responding to food scares? Front Public Health. 2020;8:369. https://doi.org/10.3389/fpubh.2020.00369.