Public Health Preparedness and Populations with Low Socioeconomic Status (SES) Characteristics

Public health preparedness is "the ability of the public health system, community, and individuals to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those in which scale, timing or unpredictability threatens to overwhelm routine capabilities."[1] During these uncertain times of COVID-19, public health preparedness is vitally important, especially for vulnerable or at-risk populations, which are defined by the U.S. Department of Health and Human Services as those that "before, during, and after a disaster event may have or require additional needs in one or more of the following categories: communication, medical care, maintaining independence, and transportation."

Populations with Low Socioeconomic Status (SES) Characteristics

Specific examples of vulnerable populations include low-income or economically disadvantaged, uninsured, elderly, populations with chronic health conditions, and homeless populations. These populations' susceptibility to negative health-related outcomes is further exacerbated by factors such as the absence of routine medical care. Their health status and healthcare problems intersect with additional socio-economic factors, including housing, poverty, and inadequate education. Most vulnerable subpopulations fall into one or more of the following categories: economic, language, literacy or health literacy, medical conditions or disability, isolation (cultural, geographic, social), and age (children, elderly).[2]

The World Health Organization's Commission on Social Determinants of Health's recommendations for improving health equity include not only improving the physical and environmental circumstances in which populations are born, grow, live, work, and age, but also addressing the inequitable distribution of resources and measuring the multi-dimensional problems or issues as well as evaluating action.[3] Recovery planning after a pandemic, such as COVID-19, can help attain these goals. "Long-term recovery planning is an opportunity to improve a community's quality of life and disaster resiliency. It has the potential to inspire communities to set goals beyond restoration of the status quo."[2]

The evolution of the Coronavirus pandemic reinforces the need for constant surveillance, prompt diagnosis, and robust research to understand the basic biology of new organisms and our susceptibilities to them, as well as to develop effective countermeasures alongside equity-oriented solutions to COVID-19 to minimize impact among vulnerable populations.[4]

Emerging Issues in Preparedness

As the United States begins to address a range of emerging issues related to preparedness, communities can be affected in several ways. Healthy People 2020 notes that stakeholders can:[5]

- Plan for the increased prevalence of emerging and re-emerging infectious diseases.
- Incorporate Disaster Risk Reduction as an approach to preparedness.
- Focus on health disparities and variations in preparedness across geographies, communities, and demographics.
- Analyze how demographic trends are changing the vulnerability of populations during public health emergencies.
- Increase opportunities for public-private partnerships.
- Protect against threats to Electronic Health Record systems.
- Identify how to take advantage of trends in technological innovation.
- Increase transparency and flexibility in supply chain management.
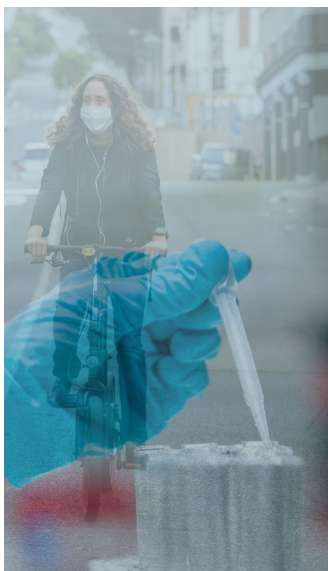
Background Information on Populations with Low Socioeconomic Status Characteristics and COVID-19

Cultural competency and Clinical Preventive Services

Ensuring the delivery of clinical preventive services and other medical services that align with patients' culture, language, and health literacy skills also can improve patients' trust, facilitate adoption of healthy behaviors, and increase health services utilization. In addition, establishing mechanisms that increase awareness of and access to clinical preventive services among populations with physical, sensory, and cognitive disabilities should occur, even during pandemics, natural disasters, and unexpected manmade disasters.[6]

Underlying medical conditions

Health risk factors for COVID-19 include conditions such as heart disease, diabetes, obesity, and hypertension that can reflect environmental and sociological factors, especially among populations with low socioeconomic status (SES) characteristics. Stratification of COVID-19 data by socioeconomic status characteristics is one step towards providing opportunities to strategically target resources and the development of culturally appropriate interventions that are accepted by the highest-risk populations. COVID-19 is not the "great equalizer" but the great tester of differences.[7]

Where Low SES Populations Live, Work, Play, and Learn

Populations residing in economically disadvantaged or low-resourced communities are often more vulnerable to disease due to employment and housing instability as well as inadequate social support networks. Some low-income populations are especially vulnerable during community disruptions and disasters and may lacking the resources to protect themselves.[8]

Disasters have direct and indirect effects on physical and/or mental health that may manifest in the short-, intermediate-, and long-term post-disaster periods. These effects are worse for vulnerable populations. Indirect effects occur through the disruption of access to health-sustaining goods and services and deterioration of living conditions immediately following a disaster and, in some cases, for extended periods of time thereafter. In many cases, disasters exacerbate preexisting health conditions at the individual and community levels.

There are eight "levers" that can be used by communities to strengthen community resilience in the context of the health security: wellness, access, education, engagement, self-sufficiency, partnership, quality and efficiency. Wellness and access contribute to the development of the social and economic well-being of a community and the physical and psychological health of the population. Specific to the disaster experience, education can be used to improve effective risk communication, engagement and self-sufficiency are needed to build social connectedness, and partnership helps ensure that government and nongovernmental organizations (including community-based organizations, faith-based organizations, non-profit organizations) are integrated and involved in resilience-building and disaster planning. Quality and efficiency are ongoing levers that cut across all levers and core components of community resilience.[9]

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