Health Campaigns: Underserved/Vulnerable Populations

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Health campaigns are interventions that seek to promote health by educating, persuading, or motivating action over a defined period of time for noncommercial reasons. Typically, health campaigns aim to change behaviors that undermine health, or to create or reinforce healthy behaviors. However, health campaigns can also seek to change public policies that affect health or educate or persuade people about health-related topics (e.g., increase knowledge or affect beliefs, attitudes, norms, etc.). Although campaigns sometimes target people en masse, often they are interested in reaching specific population segments, such as those perceived to be particularly at risk for health issues addressed by the campaign. Considering vulnerable and underserved populations in health campaigns is important for eliminating *health disparities* and achieving *health equity*. Health equity is commonly defined as "the state in which everyone has the opportunity to attain full health potential" with the added stipulation that "no one is disadvantaged from achieving this potential because of social position or any other socially defined circumstance" (National Academies of Sciences, Engineering, and Medicine, 2017).

Vulnerable populations are populations that are defined as more susceptible to risk (i.e., a negative outcome or harm). For example, COVID-19 has had a disparate impact and highlighted health equity concerns around the world. Some groups are better insulated from the risks of the pandemic due to their social position or other socially defined circumstances. Vulnerability can be delineated in terms of demographic and other categories that are relevant to health equity. This includes but is not limited to country or global region, urban versus rural location, age, gender, race/ethnicity, socioeconomic status (e.g., measured by education, income, occupational status, etc.), incarceration status, immigration status, health status (e.g., populations with chronic illnesses or who are immunocompromised, those who are pregnant) and health behavior (e.g., people who smoke). In the case of the COVID-19 pandemic, issues surrounding vaccine equity and vulnerability have surfaced. This includes poorer countries having less access to vaccines technology and vaccines and thus having less ability to protect their populations. Vaccine equity concerns are also raised by uneven access and uptake in wealthy countries where less vaccinated populations face higher risks of hospitalization and death. At the same time, individuals in occupations where they must interact with large numbers of people in person, such as retail workers and servers, have more opportunities to contract the disease. Those who are chronically ill are also subject to greater risks from the pandemic than those who are healthy. The COVID-19 pandemic reflects

the fact that vulnerability arises as a result of a confluence of individual-level and social, economic, and environmental factors.

Although vulnerability is context dependent, in health campaigns it is often conceptualized in terms of audiences the campaign wishes to reach directly or indirectly. Such populations can include *intersectional* populations where a person simultaneously belongs to multiple non-mutually exclusive groups that affect *positionality* and risk and resilience. Vulnerable populations can overlap with related classifications, such as special populations, key populations, disparity populations, priority populations, and at-risk populations. While there are some distinctions, the various terms are sometimes used synonymously when a particular population fits multiple designations. For example, in an HIV health campaign intervention, men who have sex with men comprise a population where multiple classifications could apply. When vulnerable populations are structurally disadvantaged, they are likely to be *underserved* and lack equitable access to resources that help people achieve their highest levels of health. This includes not only access to medical care, but also other *social determinants* that are associated with health status and health-related outcomes. For example, people in underserved rural and urban communities may have to travel longer distances to access hospitals and specialty healthcare. They may lack access or have worse quality access to technologies that facilitate health communication, have fewer healthy food options, and suffer greater exposure to environmental pollutants compared to their more advantaged counterparts.

It is not just factors associated with access to material resources and services that affect ability to reach full health potential. Communities that are struggling economically or facing high levels of conflict and violence are more prone to suffer negative health effects due to stress and trauma, particularly when there is a lack of social cohesion. If there is discrimination toward social groups, that can result in worse experiences and outcomes for those groups even when overall policies are the same or resources are technically equally available. Groups such as racial and ethnic minorities, religious minorities, and other social groups that are excluded from equal participation in society due to systemic racism or other group-based discrimination are considered *marginalized*. Beyond affecting access and quality of access to resources, racism and discrimination can also worsen health by causing stress; chronic stress has in turn been linked to a number of health problems. In addition, historically rooted and ongoing traumas can lead to distrust of institutions. For example, *medical mistrust* can affect willingness to utilize potentially beneficial health services even when they are available.

There can be overlap between vulnerable, underserved, and marginalized populations because underserved and marginalized status is associated with fewer resources and opportunities, including resources and opportunities for achieving health. However, intersectionality – a term coined by scholar Kimberlé Crenshaw – can complicate the picture, because people may simultaneously belong to more and less advantaged social groups (e.g., someone who is highly educated, well-to do and White in the United States, but also a gay man living with HIV is likely to experience living with HIV differently than a Black man who is otherwise demographically similar or a Black woman). While populations can be classified as vulnerable, underserved, and marginalized, these should be considered in relative terms as the concepts are implicitly comparative in

nature. In other words, a vulnerable group implies a less vulnerable group. Marginalization implies a mainstream (i.e., a dominant group or culture). The existence of underserved groups implies a group or groups with a greater share of resources. Groups can be more or less vulnerable, underserved, or marginalized depending on the context. Moreover, individuals within these groups may be more or less vulnerable, underserved, or marginalized depending on intersectional identities and how those combined identities shape positionality in a particular context.

Ultimately, barriers to fully realized health potential exist at multiple levels ranging from the material to psychosocial and from the individual to the institutional. Health campaign guides such the US National Cancer Institute's "Pink Book" are clear that communication campaigns alone cannot address systemic barriers, inadequate services, or produce sustained change for complex behaviors; often campaigns need to be part of larger health promotion efforts and partnerships. Health campaigns that focus too narrowly on individual behavior can perpetuate disparities. If those health campaigns work better for advantaged groups than for disadvantaged groups, they can widen health gaps. Even if they work equally well, they may not close gaps but instead maintain existing levels of health disparities. Tobacco mass media campaigns have helped to reduce smoking, for example, but their health equity impact is less clear and tobacco disparities remain. A best practice in health campaigns is to conduct formative research to understand audience needs and preferences prior to launching a campaign. Primary data collection, however, can be a challenge with "hard to reach" populations, such as marginalized groups. Such populations can be difficult to recruit and retain, requiring extra effort and resources. Moreover, lack of prior research, lack of data collection, or categories that obscure cultural and other intersectional differences in research can mean secondary data are absent or misleading. Without good formative research, campaigns run the risk of undermining health equity goals; without evaluation data, campaign impact is hard to ascertain. A "one-size-fits-all" health intervention that doesn't take relevant barriers that disadvantaged populations face into account, however, runs the risk of having a disparate impact and exacerbating health disadvantages.

Minding the gaps: communication inequalities and health campaigns for disadvantaged populations

Communication inequalities focus on how communication-related differences between social groups affect health-related outcomes. The communication inequalities lens is an outgrowth of work by scholars such as Philip Tichenor, George Donohue, and Clarice Olien on the *knowledge gap hypothesis*, which posited that mass media communication campaigns increase knowledge faster for those with higher socioeconomic status. Knowledge gaps imply that campaigns that seek to educate people about health issues have the potential for disparate impact, especially when knowledge or awareness is a first step in affecting health-related behavior. Communication inequalities address differences in communication at multiple levels. The framework, rooted in research by Kasisomayajula Viswanath and colleagues, considers differences in groups' ability to create, adapt, and disseminate health-related communication. Communication

inequalities also encompass differences in how people access, process, and act on health-related information. Below, a communication inequalities framework is used to structure the discussion and elaborate on ways health campaigns can have a disparate impact on vulnerable, underserved, and marginalized populations.

Exposure is a fundamental component in successful health campaigns (Hornik, 2002). Where messaging is placed, when it is placed, and how much messaging is placed affects who is most likely to be directly exposed to that information and sets the stage for further communication-related processes. When mapping out communication strategies, campaigns should consider what mediated and interpersonal channels their target audiences have access to and use. In addition to traditional sources like television, newspapers, and radio, health interventions are increasingly using digital elements such as social media, texting, online scheduling, and other digital means to reach campaign audiences and disseminate information, support, reminders, and other services. Digital technologies can be a relatively private and convenient way to access and disseminate information or engage with target audiences. For example, in the United States, text4baby is a free text messaging service for underserved pregnant women and mothers to promote maternal and child health. Digital strategies such as incorporating mobile text messaging into health promotion efforts are a promising approach for reaching some vulnerable and underserved populations. However, the evidence base is still developing and the literature points to a continuing need to be sensitive to *digital inclusion* concerns when integrating digital components into health campaigns, including the need to consider the local context of the intervention. Despite increased mobile penetration with underserved groups such as racial and ethnic minorities in the United States, *digital inequalities* in access still remain. Some communities, such as underserved rural communities, still lack broadband and other infrastructure that facilitate high quality digital experiences and shape how people use digital technologies. Globally, mobile penetration rates vary, as does access to other digital technologies.

Inclusion concerns extend beyond infrastructure and access to other constraints that affect health-related communication, including issues surrounding quality of access, attitudes, sustained connectivity, and privacy. Even people who have personal private access to digital technologies and who want to use them face barriers. People may need to ask for help to troubleshoot problems that arise during use in order to maintain consistent connections or effectively navigate digital technologies, raising issues of technical expertise within social networks and *social capital*. This is particularly true of those who have low digital literacy or technical skills and are situated in social circles with similar others. Providing free or subsidized access to technologies and offering technical support or training are ways to address these issues, but such approaches can be resource-intensive and raise issues of funding and sustainability as well as scalability challenges. For vulnerable populations who have physical disabilities, accessibility and *inclusive design* are important considerations. Devices and platforms that are hard to use can limit exposure or change the context of exposure. This is not to say that there cannot be classic *two-step flows* of information where audiences learn about mediated campaigns indirectly through interpersonal communication, such as conversations, or have others navigate digital devices on their behalf. However, this has the potential to

change the communication context, including fidelity of the health messaging, and also depends on social networks (Southwell, 2013).

Assuming campaign exposure, comprehension of health information can be a barrier. Some underserved and marginalized populations have low literacy, including low *health literacy*. Some may be highly educated, but non-native speakers of a country's national language(s). Some vulnerable populations such as those with chronic illness or disabilities may be highly educated, but nevertheless have trouble processing information or have memory problems due to illness, medical treatments, or stress. Health literacy is not solely an individual responsibility, but also an organizational and institutional one, the US Department of Health and Human Services' Healthy People 2030 framework and the World Health Organization (WHO) note. Campaigns can play a role in health literacy by making sure that health messages are accessible and understandable for audiences – including those who have low literacy and numeracy – and by providing messaging in multiple languages and modalities when appropriate.

Even if a person can technically access and understand a message, that does not necessarily mean they will. Attention is a limited resource. Identity and its intersection with message source and content play a role in media selection and attention (Knobloch-Westerwick, Westerwick, & Sude, 2020). A campaign may need to adjust its communication to increase cultural or personal relevance in ways that make people more likely to pay attention to it, trust the content, and act on the messaging. Health campaigns use *audience segmentation* as a strategy to try to improve campaign effectiveness. The underlying logic to segmentation is that those within an audience segment are alike in ways that mean they will respond similarly to communication efforts. *Targeting* aims to find effective communication strategies based on common ground within an audience segment. This could be based on attributes such as cultural identity, demographics, beliefs, or behavior. For example, cultural considerations related to channel, source, language, and content are potentially relevant when creating messaging for marginalized groups who may not pay attention to or trust mainstream sources. However, who is considered a credible source varies based on the population and issue. Communicators should not assume that messaging that taps into a particular identity is preferred or will be most effective; rather, theory and research should guide the process (Hornik & Ramirez, 2006). To the extent that groups like teen smokers, Hispanic immigrants, or Black women have within-group differences, *tailoring* attempts to provide more customized approaches to campaign communication to increase effectiveness. With tailoring, health communicators collect data and then adapt communication to align with individual preferences and personality characteristics.

Campaigns often use stories and highlight people's experiences as part of strategies to craft attention-getting messaging that engages audiences cognitively and emotionally, helps communicators overcome resistance to counterattitudinal content, models behavior, and advances various campaign goals. These *narratives* and *exemplars* can be used as part of mass, targeted, and tailored health campaigns. They act as a vehicle for conveying campaign messaging. If stories resonate with audiences, they can spark interpersonal discussion, raise awareness, help to change people's minds (e.g., change beliefs, attitudes, norms), instill efficacy (i.e., demonstrate how to do something and

increase beliefs that people can perform a behavior themselves or collectively), and change behavior. *Entertainment-education* (EE) is a popular approach that capitalizes on strengths of narrative approaches and has been used in health interventions with vulnerable and underserved populations around the world (Singhal, Wang, & Rogers, 2013). As is suggested by the name, the approach incorporates campaign messages into entertainment. Although stories can be effective educational and persuasion tools, they do not always result in intended effects.

Worldviews and how they align with prevalent frames and sources can affect how people respond to messaging in news and entertainment. While exposure and attention are key to health campaigns, when topics become high profile and are framed in a way that makes them culturally controversial, a *belief gap* can form along political or other cultural divides (Hindman & Yan, 2015). Depending on the *framing* of the health-related issue, different individuals and groups may be more or less supportive of behavior and policies that help underserved or marginalized communities (Niederdeppe et al., 2013). Because vulnerable and underserved groups are also often marginalized groups, campaigns that aim to address health equity may need to address not only "knowledge gaps" and "belief gaps," but also "*power gaps*" (Wallack et al., 1993). *Media advocacy* campaigns focus on changing behavior of those who have power to effect policy changes, such as policymakers and community leaders. The approach utilizes communication – including messaging strategies that affect how issues are framed in the media – to mobilize changes in health-related policy. Media advocacy approaches have targeted a variety of health-related issues, including smoking policies and HIV funding. For health campaigns seeking to change policy, a lack of understanding of the local context and ineffective messages can undermine success.

Approaches like media advocacy that address upstream factors are important for making it easier for positive changes at the community and individual level. Health interventions that focus on behavior change at an individual level, including health campaigns, have been criticized for placing responsibilities on individuals rather than focusing on how societal structures and issues surrounding power contribute to health disparities. Without social and structural supports that facilitate action, health campaigns can be ineffective or even harmful for underserved, vulnerable, and marginalized communities. Even when there are ways to act on messaging, there are other considerations surrounding ethics in campaigns with such populations. When campaigns disseminate negative messages and feature groups that are vulnerable, underserved, or marginalized, they may also create or reinforce stigma. This tension has come up in the context of health campaigns that address issues such as HIV/AIDS, domestic violence, and obesity, and in framing that emphasizes disparities based on race and sexual orientation; the question of what is effective and beneficial in campaign messaging generates debate not just outside, but also within marginalized communities. One strategy is to avoid mass media channels for potentially stigmatizing messages. However, campaigns that take an "everything but the kitchen sink" approach to maximize exposure want to use multiple channels to reach their audiences, and often seek to generate additional communication and free media coverage to amplify reach and frequency of campaign messaging.

While exposure and content are separate aspects of health campaigns, content can affect exposure and subsequent sharing of health messages within communication networks. Health interventions, including health campaigns, can specifically seek to address *conversation gaps* – differences in likelihood of talking about health topics within social networks due to norms, knowledge, or attitudes in one's social network (Southwell, 2013). Some campaigns promote communication, such as discussions about condom use or quitting smoking. For example, the Centers for Disease Control and Prevention's Act Against AIDS campaign includes messaging and efficacy information about having interpersonal discussions to reduce stigma surrounding HIV. Scholars have argued that health interventions that focus on addressing connections at multiple levels within communication networks in communities – including community organizations and local and ethnic media – are a promising way to address communication inequalities and health disparities by using multilevel approaches (e.g., see Moran et al., 2016, for an overview of related communication approaches such as the structural influence model and communication infrastructure theory).

The level of participation that communities have in shaping health interventions varies widely. Participatory research approaches place an emphasis on partnering with communities throughout interventions so that intervention goals and messages are generated within target communities rather than from outside the community. Such approaches exist along a continuum; the degree of involvement and control that community partners exert varies. For example, the level of participation that communities have in creation, adaptation, and dissemination of communication messages in health interventions can be one where the community members provide input on messaging created outside the community or one of co-creation where representatives from a community generate campaign goals and messaging themselves. Creation of health messages can be seen as an intervention in itself, such as rural or Hispanic youth creating their own messages as part of a substance abuse intervention or use of visual and participatory methods like photovoice as part of efforts to empower community members and improve community well-being.

Approaches that use bottom-up or grassroots participatory strategies can have upsides, but also pose challenges. They can help build capacity to act and address issues of campaign relevance and actionability. They can also help to create trust between health researchers or practitioners and populations that health campaigns seek to reach. However, health interventions that closely partner with communities or use other methods that emphasize participatory approaches give up some control of goals and messaging. Funding, time, and sustainability can be challenges. For campaigns that seek out community partnerships and weren't explicitly funded to do so, community preferences may conflict with research or funding goals. For example, if the campaign is being funded for a specific purpose by an agency or philanthropic organization that has earmarked money for a particular disease or health topic, there may not be latitude to change a campaign to align it with community priorities. In addition, vulnerable, underserved, and marginalized groups and communities can be heterogeneous and may not necessarily share similar perspectives or lived experiences. Community advisory boards and other community groups that are enlisted as partners may not speak with a unified voice about community priorities and preferences.

Members of the community that are willing and able to partner on the campaign effort also can be different than those who are unwilling or unable to participate (e.g., due to a need for childcare, financial considerations, mistrust, etc.). There can therefore still be challenges related to inclusion that need to be consciously addressed even with participatory methods. Community-based participatory approaches to campaigns require practitioners to foster ties with and navigate local and community politics and issues of power.

Today, virtual communities exist alongside physical communities for many people. Technologies and their interaction with existing communication ecologies are reshaping generation, manipulation, and distribution of information among social groups with implications for health campaigns and health equity. Ethnic and alternative media have traditionally been seen as forums that provide voices to the marginalized. Digital platforms like Facebook, Twitter, and group messaging apps are providing new communication forums and the rise of digital media is changing the traditional news industry and information environment. Along with traditional journalists and opinion leaders within geographically bounded communities, people with diverse agendas influence what is created, shared, and amplified.

While some have hailed this trend as potentially empowering for marginalized communities and others have noted that digital technologies offer opportunities such as tailored communication, interactivity, and message amplification in health campaigns, there are also caveats. Beyond concerns related to access and digital inclusion, digital inequality issues related to media fragmentation, algorithms, and platforms raise the specter of algorithmically induced gaps that could contribute to entrenchment of health inequalities and are therefore factors to consider in modern health campaigns. In addition to people in networks who share information that undermines public health, nontransparent algorithms on platforms play a role in what is amplified and shared with different audience segments. If messaging attracts engagement, it may be further promoted by platforms that are agnostic to campaign, public health, and equity goals unless moderators actively intervene (e.g., remove content, flag misinformation, prioritize credible sources and information). This is a prominent contemporary issue for health campaigns, such as those that address COVID-19 and vaccination where spread of disinformation/misinformation is a concern.

As scholars and practitioners explore how campaigns can promote health in ways that also promote health equity, there continue to be research gaps. While multilevel and ecological approaches to health interventions are increasingly salient in the literature (see Moran et al., 2016), refinement of theory and methods as well as rigorous evaluation of health campaigns that are conducted within the context of health interventions are necessary to help advance understanding of how today's dynamic communication environment can best be harnessed to address health disparities in vulnerable, underserved, and marginalized populations.

SEE ALSO: Health Campaigns: Evaluation; Health Campaigns: Interpersonal Communication; Health Campaigns: Multicultural; Health Campaigns: Unintended Effects; Intersectionality (Gender); Knowledge Gap Hypothesis; Message Design: Health Disparities Strategies; Photovoice; Social Determinants of Health.

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