

How the Internet Risks Widening Health Inequalities

In a world where knowledge is power, the Internet has been hailed as a means of redressing longstanding inequalities in health. Anyone with access to a smartphone can connect with others almost anywhere in the world and can access a wealth of knowledge. Those who are disadvantaged can organize and question the status quo, whether to challenge the actions of a multinational corporation polluting their environment, to hold politicians to account for policies affecting health, or, for those with rare or neglected diseases, to create online support groups.

Knowledge, Power, and the Internet

Yet as the French philosopher Michel Foucault argued, power can also be used to control and shape knowledge in its own interests. Thus, despite its potential for empowering the disempowered, there is also a risk that the Internet will entrench existing inequalities. So far, this has attracted the most attention in relation to the “digital divide” between those inhabiting the newly connected virtual world and those excluded from it,¹ especially as interactions once conducted face-to-face, such as arranging medical clinic appointments or obtaining welfare benefits, are automated. The risks are not limited to those who are disconnected, lacking access to the Internet, but include those who are connected but, for

various reasons, are especially vulnerable, such as those who fall victim to online fraudsters. These concerns are well recognized, even if effective responses remain elusive.

POWER IMBALANCES

There is growing acceptance that many inequalities in health originate in the unequal distribution of power in society. Although the Internet can serve to challenge the status quo, it may also sustain or exacerbate the health inequalities that arise from existing power disparities. We have identified three recent developments that pose such a threat.

Ending Net Neutrality

The first is the threat to end the principle of net neutrality in the United States. On June 11, 2018, the prevailing open Internet rules expired and, although at the time of writing Democrats are challenging this decision in the House of Representatives, the outcome is uncertain. Under these rules, the only factor determining what information moves over the Internet, and how quickly, is the capacity of the transmission system. The physical infrastructure is neutral regarding who is communicating with whom and about what. Considering the power of information, whether to find health-related knowledge or to draw attention to health-related

inequalities and their causes, equal access to data is highly valued by populations suffering disadvantage of many types. These individuals include those experiencing discrimination on the grounds of race or sexuality, whose advocates are concerned about possible corporate controls on what information can be shared; they describe this threat as “the social justice issue of our time.”²

Other disadvantaged individuals include those in isolated rural areas, who already experience slow Internet speeds that deny their children access to learning materials and prevent small businesses from operating. Should Internet speeds become worse, as many fear, these relatively deprived settings may experience a downward spiral of disinvestment and depopulation, exacerbating what has been described as the “graying of rural America,” in which an increasingly isolated aging population faces growing barriers to good health.³ There are now concerns that such areas are likely to suffer further in a competitive market for data connectivity.

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This editorial was accepted June 15, 2018.
doi: 10.2105/AJPH.2018.304616

Although the current proposals relate to the United States, there is an obvious danger that the global communications corporations will seek to extend this model elsewhere, for example through trade agreements by which the United States can exploit power imbalances.

Demographic Profiling

The second concern is the use of profiling to target marketing. Market segmentation is a long-established principle in promoting products. For example, designer handbags are more likely to be advertised in *Vogue* than in *Popular Mechanics*. Now, Internet corporations, such as Google and Facebook, have the means to classify users in unprecedented detail. This allows advertisers to direct their messages extremely precisely. In many cases, this will not matter and, in some, could even be used to improve targeting of health-promoting messages. But there are also concerns.

Health is strongly influenced by where people live, and disadvantaged minorities often live in less healthy environments. If the Internet reduces mobility, it could entrench or exacerbate health inequalities. The investigative journalism organization ProPublica recently showed

how it was possible to restrict advertisements for rental properties on Facebook in a way that excluded groups such as African Americans, Jews, and those who had expressed an interest in wheelchair ramps.⁴ Any explicit exclusion of such groups in the wording of advertisements would be illegal under federal law, but this means of segregated advertising offers an indirect pathway for owners to prevent them even from being aware that the properties exist and thereby, in effect, exclude them from more desirable, and potentially more healthy, neighborhoods.

Advancing Vested Interests

The third development, only now being recognized, is how powerful vested interests exploit the Internet for political purposes. It is now clear that there were massive covert operations using social media to influence the United Kingdom's European Union referendum and the 2016 US presidential election.⁵ Some messaging was straightforward, supporting Brexit or Trump, but some also supported causes advancing White supremacist and African American rights or anti-fascist activities in ways that encouraged hostility between the different groups. Sowing division undermines the ability of populations divided by race but sharing disadvantage to come together in an organized collaborative effort to tackle the social determinants of health, such as alleviating poverty and improving unhealthy living conditions. There is extensive evidence that divided communities, in the United States and internationally, are less likely to invest in measures that benefit those who are disadvantaged.

Of more immediate concern for the public health community are

reports that users of social media may now be seeking to exploit fears about vaccination to undermine confidence in Western democracies; this is especially worrying, considering evidence that misleading messages in print media can suppress vaccination uptake.⁶ Similarly, efforts to promote public health policies, such as increasing tobacco taxes, face massive Astroturf campaigns, which exploit the Internet to flood users with anti-tobacco control messaging.⁷

CONCLUSIONS

Technological advances have influenced health throughout history, for good and for bad. Internal combustion engines power fast cars that injure people and the ambulances that rescue them. Nuclear power stations can kill people, as in Chernobyl, or save their lives by producing medical isotopes. Too often, health professionals have struggled to catch up with these changes. We believe that the Internet can promote health, but it can also threaten it. The challenge for the public health community is to employ the tools developed in horizon scanning and health impact assessment to maximize the benefits and minimize the dangers. *AJPH*

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M. McKee wrote the first draft of the editorial, which D. Stuckler edited and revised.

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