FEATURE ARTICLE

COVID-19: UNMASKING DISPARITIES AND INEQUITIES IN HEALTH

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Abstract

Health care should be borderless, and people must have liberty and timely access to health services regardless of color and status. Different cultures appear to interconnect the world but threaten conflict because of how public health policies are implemented. Considering the social determinants of health in public health policy is essential to halt the following disparities and inequities in this pandemic: (a) compromised right to education has been linked to poverty and without a regular income, disease conditions aggravate, even worse; (b) due to labor market segregation, people in color were losing jobs at a high rate than whites- these minorities have least to cope on health and economic fall-out of the pandemic; (c) racial residential segregation has forced minorities to live in unconducive substandard multifamily units; (d) due to food insufficiency related to joblessness, over 21,000 homeless people may need to be hospitalized; (e) Because of the wrong perceptions of the disease, the whites intently discriminate against the East Asian ethnicity for fear of contracting COVID-19; (f) social media has influenced the development and spread of health-related 'conspiracy' and people became resistant to public health policies; (g) telehealth is advantageous in population with excellent internet service but not for the homeless and those living in depressed areas; (h) urbanization has led to climate change, biodiversity loss, which arises in zoonotic transmission/diseases; (i) pollution was associated with a 15% increase in the COVID-19 death rate in California; and, (j) populations living in coldest areas are at risk of contracting COVID-19 virus. This study unveils racial inequities and disparities in COVID-19.

Keywords: *COVID-19, public health, social determinants, health disparities, health inequities, pandemic*

Introduction

Health care should be borderless and not only for particular strata (Napier et al., 2014). Access to Health is the availability of excellent health services within reasonable reach that allows people to timely obtain it when they need (WHO, n.d.), especially in this difficult time of the pandemic. Every country is doing its best to mitigate the impact of COVID-19 and comply with the essential recommendation on the new normal. But the public is becoming uncomfortable in the implementation of Public Health Policies brought by a disturbed socioeconomic equilibrium across the globe (Pirtle, 2020). Lockdown or community quarantine measure becomes a burden dimension towards attaining the people's physiologic needs (Ryan, Coppola, Canyon, & Brickhouse, 2020). As evidence, going outside for essential errands is a bit challenging for public transport commuters. In the Philippines, the primary transport automobiles have been banned, including alternative vehicles such as motorcycles, scooters, and auto rickshaws (Lau, Hung, Wilson, 2020; Vallejo & Ong, 2020). In China, walking and cycling remain among the primary means recommended for most city commuters to meet their essential needs. Hence, city curfews' policy has been worsening by limiting critical sectors to selling services within the prearranged timeframe and making all consumers flock without considering social distancing measures (Renzaho, 2020). Social Determinants of Health is "… circumstances [which] shaped by the distribution of money, power, and resources at global, national and local levels… It is responsible for unfair and avoidable differences in health status seen within and between countries" (WHO, n.d.). Braveman (2014) defined health disparity as ". . . a particular type of health difference that is closely linked with economic, social, or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater

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social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic status, gender, age, or mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion." On the other hand, health inequity is defined by Asada (2005) as "health inequality by factors beyond individual control." Reyes et al. (2017) said "the total inequality [in the Philippines] is higher in terms of opportunity in education, [and] access to safe water…" These are challenges to the government to ensure every household receives and have equal access to health services despite threats of losing the economy and worsening poverty amid mitigation of COVID-19 aftermath (Vallejo & Ong, 2020; Shah, Shankar, Schwind, & Sittaramane, 2020). The COVID-19 pandemic has been unmasking multiple realities of how countries and world leaders respond to Public Health concerns wherein social determinants of health continuously affect people of different status, race, and ethnicity, and public health policies do not reach the grassroots (Pirtle, 2020).

Culture is a "shared pattern of behaviors and interactions, cognitive constructs, and understanding that are learned by socialization ..." (Center for Advanced Research on Language Acquisition, n.d.) All cultures, regardless of race and ethnicity, are social constructs, a volatile fluid that may shape and reshape society over time (Napier et al., 2014). There are no superior or inferior among them in contrast to ethnocentric ideas. Different cultures appear to interconnect the world but threaten conflict because of the innate norm and particularities, especially in the healthcare delivery system. Napier et al. (2014) said, "… Ideas about health are cultural, and a tendency to standardize human nature can be, paradoxically, driven by both an absence of awareness of [cultural] diversity and a commitment to express both patient needs and caregiver obligations …" Meaning, neglecting cultural diversity, especially in the pandemic, impedes the concept of care without borders. Therefore, in place of this notion, modifying the public health policies to consider social determinants of health is essential. This study is focused on global health disparities and inequities due to COVID-19.

Social Determinants of Health

Education

Filipinos have adequate access to and more equal access to primary education services, but lesser and unequal access to secondary education services (Reyes, Mina, & Asis, 2017). In this pandemic, it's challenging to deliver classes using the traditional mode of learning. The reopening of classes in the Philippines is transitioned towards remote learning modality. Disproportionately, the modality carries a substantial burden to jobless parents caused by the pandemic (Toquero, 2020; Cuaton, 2020). Consequently, parents may venture to risky job options amid a pandemic, or else their student(s) will stop schooling (Tria, 2020). In reality, primary and secondary school quality determines the capacity and likelihood to carry tertiary education and direct the future occupation. The occupation will reinforce or challenge socioeconomic status through income earned. The socioeconomic status affects living and housing conditions and the safety of outdoor spaces. (Rollston & Galea, 2020). Impaired non-medical social needs such as education have led to disparities and aggravating disease conditions even worse (Gray, Yeboa, Balzora, Issaka, & May, 2020).

Labor Market Segregation

Ramirez and Lee (2020), Jackson and Johnson (2020), Price-Haywood and Burton (2020) believed that the elevated cases of COVID-19 in Latinos, Hispanics, and Blacks (45.3%) are due to racial and ethnic disparities secondary to labor market segregation. In fact, 11% of healthcare workers in the U.K. are infected, and nearly 50% of those health workers were Black and Latina females earning <$15 per hour (Larochelle, 2020). Induced by fear of COVID-19, psychological state, job satisfaction, and retention among frontline nurses were explicitly affected (Labrague, de los Santos, 2020). In the Philippines, Luzon employees have been forced to work from home due to a disease outbreak since March, if not terminated (Tee et al., 2020; Vallejo & Ong, 2020). The social distancing of work from home jobs for low-income groups are quite challenging. They have crowded residential areas, attending to work physically and working closely with other workers increases the risk of contracting the virus. They were also losing their jobs at a high rate than whites. In fact, 49% of Hispanics have lost their job due to the pandemic because their jobs do not allow them to work remotely (Shah, Shankar, Schwind & Sittaramane, 2020). And without worker protection, these minorities have the least capacity to cope from illness and the economic fall-out, which might lead to violence and family feud (Guinto, 2012).

Moreover, the quality of health insurance is based on a monthly premium and those who cannot afford to have less access to quality and equitable health services. Due to racial capitalism, African Americans, Hispanics, Latinos were poorly insured and were less likely to receive lifesaving management, screening tests, and treatment for advanced or terminal diseases. Because of the scarcity of food, comorbidities, and less access to quality healthcare services, these vulnerable populations are likely to succumb to COVID-19 infection (Gray, Yeboa, Balzora, Issaka, & May, 2020).

Racial Residential Segregation

The vulnerable population is those underserved, poor access to, and low utilization of quality health care. These are people with

disability, people living in poverty, racial and ethnic minorities, prisoners, sexual and gender minorities, and residents of poor rural communities due to impaired access to public health infrastructure and services, uncertain socioeconomic status, the problem of transportation, and food scarcity (Gray, Yeboa, Balzora, Issaka, & May, 2020; Pirtle, 2020; Shah, Shankar, Schwind, & Sittaramane, 2020). Historically, these groups were labeled to be in lower-income class or less educated strata. As an exemplar, the kind of social discrimination of minorities like Southeast Asian migrants from Myanmar, Philippines, Cambodia, and Laos brought racial residential segregation and pushed many to isolation, even to the extent of living in an unconducive substandard multifamily unit (Yaya, Yeboah, Charles, Otu, & Labonte, 2020; Rollston & Galea, 2020; Jackson & Johnson, 2020; Pirtle, 2020). The article by Scagliarini and Alberti (2020) stated that "… [There is] increased risk of COVID-19 transmission for 1.2 billion people living in congested and overcrowded urban settlers where the condition is worse and unhealthy for humans."

Food Shortage

Food and water are basic needs that provide nourishment to our body, give daily energy, and strengthening the immune system. In the Philippines, transportation of essential services between and among provinces is exempted during Enhanced Community Quarantine; thus, the government implemented a price freeze for essential commodities (Vallejo & Ong, 2020). However, people opt for panic buying or hoarding, resulting in poor access to food and safe potable water- different ethnic groups have been drastically affected by this inequity amid pandemic (Reyes, Mina, & Asis, 2017). With these threats to physiologic need, the World Health Organization said, "quantities and disruption of the food [and water] supply chain will adversely affect the poorest and most vulnerable people… [Furthermore] the closing of border and trade [of other countries] may limit the access to adequate nutritious food." And due to pandemic disruption of the USDA School Breakfast and Lunch Program and Child and Adult Care Food Program, nearly 35 million children could not receive vital nutrition and family assistance (Dunn, Kenney, Fleischhacker, & Bleich 2020). It is estimated 21,000 homeless people may need to be hospitalized due to food insufficiency related to joblessness and homelessness (Shah, Shankar, Schwind, & Sittaramane, 2020).

Racial Perception of Disease

In the study of Geldsetzer, the U.S. and U.K. participants voiced to intently discriminate against the East Asian ethnicity for fear of contracting COVID-19 (Geldsetzer, 2020). In the Sub-Saharan region, wives suspected of having COVID-19 were kicked out of their house by their husbands and in-laws (Renzaho, 2020). On the other hand, Yancy (2020); Li et al. (2020) asserted that the Black community always contradicts social, religious norms, and practices imposed by the government. The Blacks are 3x higher risk to contract the virus (C.I. 95%) and more likely to die (case fatality of 100%) due to present underlying condition-hypertension, diabetes, obesity, chronic arterial disease, heart failure, and myocardial injury, and being old and male- in addition to high residential density, high crime rates, and poor access to nutritious foods (Rollston & Galea, 2020). African Americans' clinical presentation upon hospital admission reflects a longer waiting time to access care (Price-Haywood & Burton, 2020). They were also less likely to be tested for COVID-19 due to the high cost and proximity of testing centers (Jackson & Johnson, 2020). Although they were identified as high risk yet, they still have long-standing distrust in the healthcare institution Geldsetzer (2020) linked to racial discrimination.

Drawbacks of Technology

Various cultural views of COVID-19 as a "conspiracy theory" were higher in populations with lower education levels. Social media has very influential power in developing and spreading health-related conspiracy beliefs, which is why these people were more likely to be resistant to public health policies (Nicomedes & Avila, 2020; Lau et al., 2020; Georgiou, Delfabbro, & Balzan, 2020). In fact, 20.7% of Filipinos used social media to update themselves about COVID-19 (Lau et al., 2020). Concerning social media platforms, the U.S. and U.K. community admitted to being overwhelmed by COVID-19 news in social media; they shared this information on their newsfeeds and started to create emotion and loud noise, although shreds of evidence were not in place or wrong at all (Geldsetzer, 2020). As a result, feedback went viral and negatively impacted government countermeasures' compliance (Nicomedes & Avila, 2020; Casero-Ripollés, 2020).

Apart from that, most countries implement the Telehealth policy on screening suspected COVID-19 clients via a quick online platform and directed via drive-through care centers. However, this kind of innovation is advantageous in populations with excellent internet service but not for the homeless and people in isolated and depressed areas. As evidence, only 1/3 of patients in rural care hubs have access to the internet at home (Ramsetty & Adams, 2020). Also, the U.S. Federal Communication Commission in 2018 noted that 31% of rural households lack access to broadband internet, and due to lockdown measures, access to public Wi-Fi is limited or nothing. To press deeper, the degree of digital literacy varies from person-to-person. Perhaps, the vulnerable population cannot afford to buy or upgrade a device, and those with existing comorbidities may affect the ability to use telehealth service (Ramsetty & Adams, 2020; Shah, Shankar, Schwind, & Sittaramane, 2020).

Other Determinants of Health

Urbanization. Animals became proximal to human spaces because of the subsequent loss of their natural habitat due to deforestation secondary to urbanization. Bradley and Altizer (2007) noted that 2/3 of the human population is expected to reside in cities within 30 years. In fact, Guinto (2012) mentioned that "the rapid urbanization in Metro Manila, has led to overcrowding, massive air pollution…and growing squatter areas." Guinto (2012), Bradley, and Altiezer (2007) mentioned that urbanization in disease transmission is directly related to biodiversity loss and the dilution effect, resource provisioning and contact rates within urban-adapted species, and interactions with reservoir hosts in or surrounding urbanized habitats. Gasparrini (2020) noted that climate change and biodiversity loss had pushed zoonotic diseases, a disease transmission coming from animal (wildlife-parasite interaction) to human and vice versa, e.g., COVID-19.

On the other hand, eating wildlife has been a tradition in some cultures. In the study of Roe et al. (2020), although there were policies governed to meet good animal welfare and wildlife standards, selling these products seems a free enterprise without considering the probable risks to human health and biodiversity conservation. In fact, many articles affirmed that the zoonotic transmission is linked from Seafood and Wet Animal Wholesale Market, in Wuhan, Hubei, China, where wildlife trading is rampant (Wua, Chena, & Chan, 2020; Rothana & Byrareddy, 2020; Roosa et al., 2020; Yang et al., 2020; Roe et al., 2020).

Pollution. Fine particulate matter of 1 $\mu g/m^3$ of PM2.5 is associated with a 15% increase in the COVID-19 death rate (Bashira, Bilalb, Komalc, Bashird, Farooqg, & Najar, 2020). The study added that the higher concentration of PM10 and PM2.5 had been linked to COVID-19 deaths in China. Continuous exposure to PM10 and PM2.5 has caused the rapid outbreak of COVID-19 in Italy (Scagliarini & Alberti, 2020). Furthermore, a study in California has concluded a positive correlation of increased COVID-19 infection due to exposure of the same fine particulates plus SO_2, NO_2, and C.O. (Bashira, Bilalb, Komalc, Bashird, Farooqg, & Najar, 2020).

Weather Condition. There are several articles that directly and indirectly linked geographical weather with COVID-19 transmission. Redon & Aroca (2020) concluded in their paper that colder weather <3°c in Northern China is associated with increased COVID-19 transmission. In contrast to Spain, with an average temperature of >7°c, there was no consistent evidence of survival and spread of viral disease. Another study supported that colder and dry weather condition in Chile increases the COVID-19 transmission in a geographical area with growing population size (Araneda et al., 2020). Although winter is not a significant indicator of the spread or cessation of COVID-19 (Scagliarini & Alberti, 2020), in the interim, those populations living in the coldest areas and countries that have winter season are at risk. The increase of temperature may reduce the COVID-19 caseload (P= 0.0009) but not deaths (Li et al., 2020).

Recommendations

The unmasking of health disparities and inequities associated with social determinants of health in a pandemic time is to make sure that government places stringent policies and programs that are doable to the public. The following statements are learning insights and recommendations for a flexible plan in the future pandemic. Firstly, invest in public health programs by establishing an epidemic/pandemic preparedness plan, the government may incline to contain the epidemic; Secondly, the government to include social determinants of health in drafting public health policies across the board; Thirdly, public and private sectors to invest in eliminating social determinants of health of poor health; fourthly, concerned sectors should provide safety nets to mitigate the aftermath of the pandemic; Fifthly, countermeasures against city pollution, control deforestation, neutralize urbanization projects; Sixthly, promote equal education and employment opportunities; and finally, to promote quality of health insurance for all regardless of color and status.

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