JK SCIENCE pISSN: 0972-1177

REVIEW ARTICLE

Fighting COVID-19: Time to Revisit Primary Health Care and Healthcare Allocation

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Abstract

As the epidemic of COVID-19 is surging on and so are the deaths. Trends show that people belonging to certain races and ethnicities, and with abysmal exposure to primary health care, are more vulnerable to the disease. A disproportionately higher number of deaths of African Americans and Hispanics have highlighted the lacunae of existing healthcare systems and access to care. Factors like poor living standards and housing, inadequate testing and treatment, lack of communication, and predominance of comorbidities, are major contributing factors in this dissimilarity. Also, this pandemic has made us comprehend that timely and proficient primary health care, can decrease the proneness to major complications with COVID-19. Inability to alleviate this incoherence will eventually intensify the strain due to the disease. Intuitive measures needed to be taken, for cessation of the current disease prevalence and brace the community for a future surge.

Key Words

COVID-19, Primary health care, Healthcare allocation

The COVID-19 pandemic has accentuated the importance of efficacious and constructive Primary Care and the vast role it plays in palliation of the aftermaths of disease. Ever since the first confirmed case of coronavirus in the USA in January 2020, there has been a conspicuous rise in the cases and deaths, which has been a complete setback to the health care system. Over the months, COVID-19 has manifested in various forms with multifarious symptomatology and severity, thus stirring huge unrest among the medical fraternity. Most people affected, presented with minor symptoms with a fairly good recovery, but the presence of comorbidities and prior medical conditions took a great toll on morbidity and mortality (1).

Ethnicity/Race, genetics, socioeconomic factors, and age are a few prognostic factors defining the severity and prevalence of coronavirus (*Fig. 1*). From the very beginning, disparities have been evident over the world, between people getting infected by the coronavirus, and the number of deaths (2). This is a result of various behavior patterns and access to primary healthcare, which can be appraised by the incidence, mortality, and severity of disease. Nearly 20% of U.S. counties have a significantly disproportionate black population, and have accounted for more than half of COVID-19 cases, and almost 60% of COVID-19 deaths nationally (3). Similar trends have been seen worldwide; an analysis conducted by the UK Office for National Statistics highlighting the increased risk of COVID-19-related death among certain ethnic groups than those of White ethnicity (4). Deaths from COVID-19 in some states in the USA were more in African American people than in White Americans (5). This difference can be assessed by the fact that in the state of Chicago, where African Americans make just

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Manuscript Received: 16 August 2020; **Revision Accepted**: 30 September 2020; **Published Online First**: 15 December 2020

Open Access at: https://www.jkscience.org/

Cite this article as: Dass B, Gupta A, Lukose K. Fighting COVID-19: Time to Revisit Primary Health Care and Healthcare Allocation. JK Science 2020;22(4):155-58.

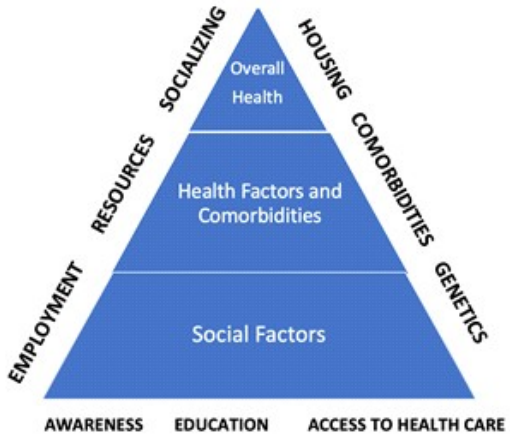

Figure 1: Factors Determining the Overall Health Status in a Population

30 % of the population, they account for almost 52% of the mortality form COVID-19 (6).

This substantial difference is because of the difference in the rate of healthcare access, socio-economic factors, racial discrimination, and individual conduct (7). The racial minorities also constitute disproportionately higher numbers in prisons, correction facilities, and jails, further making them predisposed to infections due to shared services and limitations of social distancing in these places. Poor living conditions and lack of good transport facilities, lead to irregular health checkups and inadequately treated medical conditions due to existing healthcare disparities (8). Due to inescapable factors, most minorities stay in more densely populated areas or are forced to stay in a designated residency, having poor access to health care, basic amenities, and hygiene. Consequently, it becomes very difficult for them to cope up with the untoward emergencies (9). Minorities are less likely to benefit from physical activity and exercise and are more exposed to alcohol and drugs.

Lack of communication in minorities is a major setback in healthcare access by different races and ethnic groups. Even in hospitals, sometimes medical professionals find it difficult to interact efficiently due to a lack of communication with the Hispanic population. There was significant variation for the testing of COVID-19 according to different ZIP codes in New York, the severity of the disease being more in the areas with a predominant population of color, which is mainly in Brooklyn/Manhattan. The data showed that 22 of the 30 ZIP codes with the most effective testing, were either whiter population or wealthier than the city's average population (*Table 1*).

Chronic medical conditions like diabetes and hypertension, are more prevalent in African and South Asian minority groups in European countries and the USA (10). Also, increasing age, which itself comes with the challenge of multiple comorbidities, is also associated with increased incidence and complications due to COVID-19 (*Fig. 2,3*). The CORONADO Study showed that people suffering from diabetes have broader symptomatology and complications when they suffer from COVID-19, both in terms of directly related effects or metabolic derangements along with a 29% rate of tracheal intubation and death, secondary to complications. Similarly, the Body Mass Index showed a positive correlation with outcomes like intubations and deaths (11). Disparities in health insurance coverage rates account for a sizable difference in access to health care. The number of uninsured individuals in The United States shows a great disparity with African Americans and Hispanics much more likely to be uninsured (12). These gaps in insurance benefits, broadly influence the quality of care obtainable to people of different color, race, gender, and status.

Majority of the minority populations are involved in jobs requiring manual labor and physical work, especially service industries, where they are less able to work from home. Referring to statistics from the U.S. Bureau of Labor Statistics, only one out of six Hispanics and one out of five Black Americans have the capacity to work from home (13), which is a great factor in ascertaining the health safety and social distancing norms. Being on the frontline, black health care workers are affected disproportionately due to COVID-19, according to a report by the Center for Disease Control (14). The minorities are typically less capable than the white population in handling financial setbacks, as businesses which are owned by most of them, have limited access to the conventional financial lenders, making it even harder to access coronavirus relief programs. According to a report by Kaiser Family Foundation, 57% of Blacks and 42% of Hispanics experienced problems in affording health insurance in the recent scenario, on contrary to 21% of White population in The United States (15). Such economic vulnerability leads to undesirable health outcomes.

Due to the unfortunate consequences in the COVID-19 pandemic, these differences, have caught the attention of leaders in health care. Factors such as housing, food,

income, education, and safety are coming up to be considered a greater deciding factor on the overall health outcome. The following are few measures to be taken in this COVID-19 era to mitigate the effects of the factors mentioned above and to avoid long term adverse consequences on the health care system, as periodic surges of COVID-19 haven't been entirely ruled out (16). Clearly, extensive surveillance, data accumulation, and interpretation are the best guides to focus on vulnerable communities. This would ascertain proficient implementation of preventive measures, testing, contact tracing, and isolation. Not only priority should be given to educate and inform the population at risk, but also appropriate interventions should be executed through close collaboration among various sections of the health care sector (17). In addition to this, serious measures should be taken to eliminate racial disparities by ensuring equal health opportunities, social awareness through programs, essential health checkups in underserved and underdeveloped areas, and providing satisfactory housing. Additional plan of actions to eliminate the racial disparities in testing and availability of treatment opportunities should be executed and the high-risk groups like African Americans and Hispanics should be given equal opportunities to get tested. Furthermore, providing adequate protective equipment to people who are not able to work from home is another measure to curtail social inequality.

Table 1: COVID-19 Testing in Different ZIP Codes in New York

ZIP Code/Area	Number of Tests/100 People
Staten Island	3.8
Bronx	2.9
Queens	2.5
Brooklyn/Manhattan	1.9

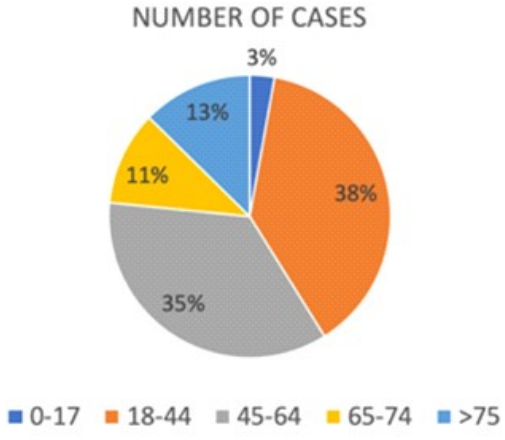

Figure 2: Percentage of Cases of COVID-19 According to the Age Group

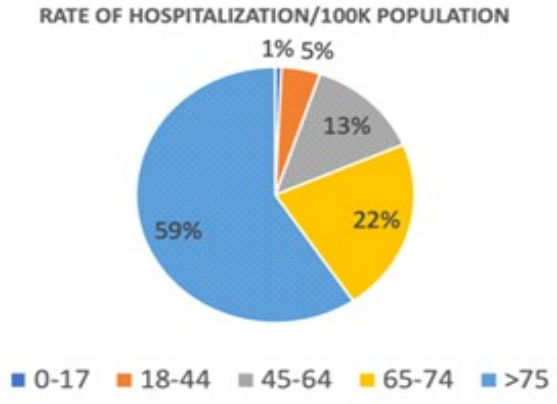

Figure 3: Rate of Hospitalizations as per Age (per100k Population)

In relation to Hispanic population particularly, measures should be taken to decrease the Language barriers, by using language-matched treatment, telephone- and video meetings, thus allowing easier and better access to health care services by the minorities. Appropriate and relevant information should be effectively delivered in multiple languages. Financing and reimbursement for health care and providing the latest technology in community health care centers or rural centers can improve the capacity to provide care to uninsured people or those with a low income. By building a sound healthcare system focusing on early and timely primary care for vulnerable minorities and underserved populations by training and encouraging primary care physicians and nurses to practice in underserved areas.

Patients receiving effective primary care have better access to disease preventive techniques like annual flu shots and regular screening for chronic diseases like blood pressure, diabetes, and cancer, which eventually improves overall health. Providing the first point of contact and earlier treatment, primary care reduces the number of people actually requiring hospital admissions, leading to lower chances of complications due to COVID 19 and less expenditure on health services. These discrepancies in the UK and the USA in the COVID-19 pandemic, have unfolded the inequalities neglected over a long time. Thus, a mutual and global, action is needed to mitigate racism and inequalities, with efforts to abolish inequalities prevalent globally. More attention to primary care and

judicious allocation of health care resources should occur in order to avoid long term adverse consequences on the health care system, as periodic surges of COVID-19 haven't been entirely ruled out for the future. Being the level of the first contact for the people with the national health system, primary healthcare should be within the reach of people and constitute the first element of a continuing healthcare process (18). COVID-19 pandemic has unmasked the reality of unequal healthcare opportunities and facilities in the minority population, and therefore measures must be adopted adeptly in order to fill the gap in the trends (19). A pandemic like COVID-19, even with adequate treatment, precautions, and early identification, took a huge toll on the health of the people. It would be wiser if primary care is given more importance, which will help in better disease management and prevention (20).

Financial Support and Sponsorship
Nil.

Conflicts of Interest
There are no conflicts of interest.

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