A Comprehensive Review Article
http://mjiri.iums.ac.ir
Medical Journal of the Islamic Republic of Iran (MJIRI)

Med J Islam Repub Iran. 2022 (27 Dec);36.179. https://doi.org/10.47176/mjiri.36.179

Short and Long-term Impacts of COVID-19 Pandemic on Health Equity: A Comprehensive Review

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Received: 22 Sep 2021 Published: 27 Dec 2022

Abstract

Background: The impact of the COVID-19 pandemic on human life has led to profound consequences in almost all societies worldwide, and this includes its significant impact on all aspects of health. Health equity has been among the main challenges in any healthcare system. However, with the COVID-19 crisis worsening health inequalities, the need to prioritize health equity in upstream national and international plans must receive scholarly attention. Therefore, this paper reports the findings of a review of the current synthesized evidence about the impact of the COVID-19 pandemic on health equity.

Methods: This is a comprehensive review in which we retrieved relevant studies during the period starting from 12/01/2019 to 01/15/2021 are retrieved from various databases. The PRISMA flow diagram and a narrative approach are used for synthesizing the evidence.

Results: We initially retrieved 1173 studies, and after a primary quality appraisal process, 40 studies entered the final phase of analysis. The included studies were categorized into five main outcome variables: Accessibility (95%), Utilization (65.8%), Financial protection: 15 (36.5%), Poverty (31.7%), and Racism (21.9%)

Conclusion: COVID-19 pandemic has been the most devastating global challenge in recent history. While the COVID-19 crisis is still unfolding, its multidimensional adverse effects are yet to be revealed. Nevertheless, some people, e.g., the elderly, minorities, as well as marginalized and poor persons, have suffered the COVID-19 consequences more than others. In line with the whole government/whole society approach, we advocate that governments need to strengthen their special efforts to reduce the extra burden of the pandemic on the most vulnerable populations.

Keywords: COVID-19 pandemic, Health Care Delivery, Health Equity, Health Inequality, Poverty and COVID-19, Racism and COVID-19, Social Determinants of Health (SDH), Vulnerable Populations

Conflicts of Interest: *None declared*
Funding: *This project was funded by the Health Equity Research Center at Tehran University of Medical Sciences.*

Cite this article as: Mohamadi E, Olyaeemanesh A, Takian A, Yaftian F, Kiani MM, Larijani B. Short and Long-term Impacts of COVID-19 Pandemic on Health Equity: A Comprehensive Review. *Med J Islam Repub Iran.* 2022 (27 Dec);36:179. https://doi.org/10.47176/mjiri.36.179

Introduction

The first whispers about an unknown virus were heard in Wuhan, China. A few months later, it started to spread, with the number of cases infected rising exponentially in all regions of the world so much so that on March 11, 2020, the WHO officially announced the new disease as a global pandemic. It is now one year after the first reported case of the coronavirus (COVID-19), and the aftermath has been devastating, with more than 99 million con-

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↑What is "already known" in this topic:
COVID-19 pandemic is bringing considerable effects on health equity. There is no evidence to summarize these impacts.

→What this article adds:
In this study we showed effects of COVID-19 on health equity in health system. health system. some people, e.g. the elderly, the minorities, as well as the marginalized and poor persons have suffered the COVID-19 consequences more than others.

[DOI: 10.47176/mjiri.36.179]

firmed cases and 2 million deaths as of the date of writing this manuscript (25, Jan 2020), and the virus is still spreading. After numerous experiments and failed trials, our understanding of the novel COVID-19 virus has notably deepened, and now we know its structure, how it spreads through the body and between individuals, how we can prevent it, and what the most effective methods against it are (1). As our knowledge grew, the future seemed promising until we started to realize that the virus does not merely sicken individuals or take away our loved ones. Rather, as time passed, its secondary impacts started to come to light (2) The virus has affected the economy, social life, lifestyles, and even our culture (i.e., increased poverty, unemployment, hunger and food insecurities, healthcare costs, etc.), which might stay with us for years to come.

Therefore, the importance of grasping the full impact of the pandemic on society and social life (not just the biological complications) is understood now (3). One aspect of any social life is equity. Societies have always been chasing after a just nation by setting rules and regulations so that every individual can reach their full potential. The concept of equity is too vaguely defined. In fact, giving a general definition of equity is not practical since it is usually interpreted according to the contexts in which it is used, and one of these contexts is health. Therefore "Health equity" is defined as the absence of any unfair and avoidable or remediable differences in health among population groups defined socially, economically, demographically, or geographically (WHO, 2020)." This definition highlights the role of social determinants (education, sex, income level, etc.) in health and equity. To be more precise, by influencing income, access to medical care, and employment, the pandemic has both widened the existing health equity gaps and created new ones (2). The consequences could be irreversible, and the key to avoiding them is paying extra attention to health equity from different aspects i.e., accessibility, utilization, financial protection and health outcomes (3).

Even though promising studies are conducted, most of which have insufficient sample sizes were conducted in the short term or were mostly regional, not appropriate for general conclusions. The lack of knowledge in some aspects such as impoverishment, health expenditure, catastrophic costs, and access to medicine that were brought forth by the pandemic, is alarming. It has been proven that COVID-19 has affected vulnerable populations disproportionately across the world (4). This is why the globe is facing an urgent need for solid social and scientific evidence to tackle health inequity and the secondary impacts of the current COVID-19 pandemic (5).

Based on what was stated above, we need to monitor the trend of health equity studies during this pandemic through a comprehensive lens and expand their scope. To achieve the objectives of health equity, it is critical to detect the current state-of-art and well-documented studies, plans, and synthesized knowledge about the impact of COVID-19 on health equity. Nevertheless, comprehensive reviews with consistent evidence on health equity status during the pandemic are still scant in this regard. This study aims to examine the current gap in conducting health equity studies during COVID-19 through a comprehensive review approach. The results of which will provide synthesizing evidence for health policymakers to realize which dimensions of health equity need more scholarly attention and then redirect the research policy agenda to these dimensions so that we may lessen the impact of this pandemic on the population, especially the vulnerable groups.

Methods

This study is a systematic review of the literature about the impact of COVID-19 infections on health inequity from 12/01/2019 (the beginning of the COVID-19 pandemic) to 01/15/2021. We used the PRISMA flow diagram and a narrative approach for synthesizing the evidence. The international English databases, including PubMed/MedLine, Social Sciences Database, and Google Scholar, were searched. We found the MeSH terms for various terms and expressions as described in Table 1.

Inclusion and exclusion criteria

We included studies that were published in English with high quality (based on their references and the journals in which they were published). We also included studies on various aspects of health inequities: accessibility, utilization, financial protection, poverty, racism, and social health- for all age and sex groups. Studies at local, national and international levels using various designs (longitudinal, cross-sectional, cohort, etc.) were taken into account. As far as equity was concerned, all studies that assessed the impact of COVID-19 on various aspects of

Table 1. Keywords & search details of the study

Search Number	Query	Search Details	Results	Time
5	((#1 and #2) or (#1 and 3) or (#1 and 4))		1.173	1:59:50
4	#social determinant of health*		215.602	1:58:40
3	#Equality*	"equality*"[All Fields]	9.125	1:58:08
2	#equity*	"equity*"[All Fields]	34.521	1:57:44
1	# COVID-19	"severe acute respiratory syndrome coronavirus 2"[Supplementary Concept] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "ncov"[All Fields] OR "2019 ncov"[All Fields] OR "covid 19"[All Fields] OR "sars cov 2"[All Fields] OR (("coronavirus"[All Fields] OR "cov"[All Fields]) AND 2019/11/01:3000/12/31[Date - Publication])	78.920	1:57:15

[DOI: 10.47176/mjiri.36.179]

socioeconomic inequalities through descriptive analysis, calculation of regression coefficient for different inequality indicators, as well as guidance reports were incorporated. The protocol studies were excluded during the final phase. Finally, we had access to the reports prepared by some designated individuals and legal entities.

Results

Our search retrieved 1173 studies from Google Scholar (756 studies), PubMed (296 studies), and Cochrane Library (148 studies). After removing 363 duplicates, 810 studies remained, of which 511 were removed during the first screening step after reading their title. Articles were also removed in this phase if they did not deal with the correlation between COVID-19 and health inequalities, were classified as unreliable reports, or were concerned with other aspects of inequalities than health, i.e., income, gender, ethnicity, and education. We then read the fulltext of the 299 remaining articles and excluded 259 studies at this stage. Therefore, 40 studies were finally included in the review. Diagram 1 summarizes the flowchart of our literature review and the data extraction process based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol (Fig. 1).

We categorized the included studies based on three characteristics: study design, outcome variables, and level of study, as described in Table 2. Most studies were editorials or guidelines (reports and plans about how to manage different aspects of health inequalities during COVID-19), and most of them had considered accessibility to health care during this pandemic (39 out of 40 studies). Based on our content analysis of the studies, we presented our findings on the basis of five outcome variables: Accessibility, Utilization, Financial protection, Poverty, and Racism.

1- Accessibility: Investigating the factors that affect access to health care was the main focus of 39 articles (95%) (Table 3). These studies measured the distribution of health facilities (bed and human resources, etc.) and access to healthcare services, which may help improve the policies of healthcare resource distribution among territories. Based on the findings, the overloaded clinical capacity, although supplemented with thousands of health workers, could not meet the demand for COVID-19 screening and treatment at the initial stage of the epidemic. Achieving equity in Intensive Care Unit (ICU) triage was also reported as problematic.

Rural areas suffer from a number of fundamental inequities that have become challenges in responding to COVID-19. Rural communities can struggle to have access to healthcare even when there is no pandemic, and there are long-standing inequities between rural and urban medicine which can be exacerbated in a pandemic. The older average age of rural populations, less infrastructure and fewer healthcare options make rural communities more at risk from coronavirus than urban communities internationally (6-8).

2- Utilization: Investigating the factors that affect the utilization of health care during COVID-19 was the main focus of 27 articles (65.8%) (Table 3). We found that the pandemic is also an immediate threat to health care utilization. After the breakout of a viral infection, a health system can no longer safely provide and deliver care. High-risk groups like the elderly, children and pregnant women could no longer utilize the health care – for rea-

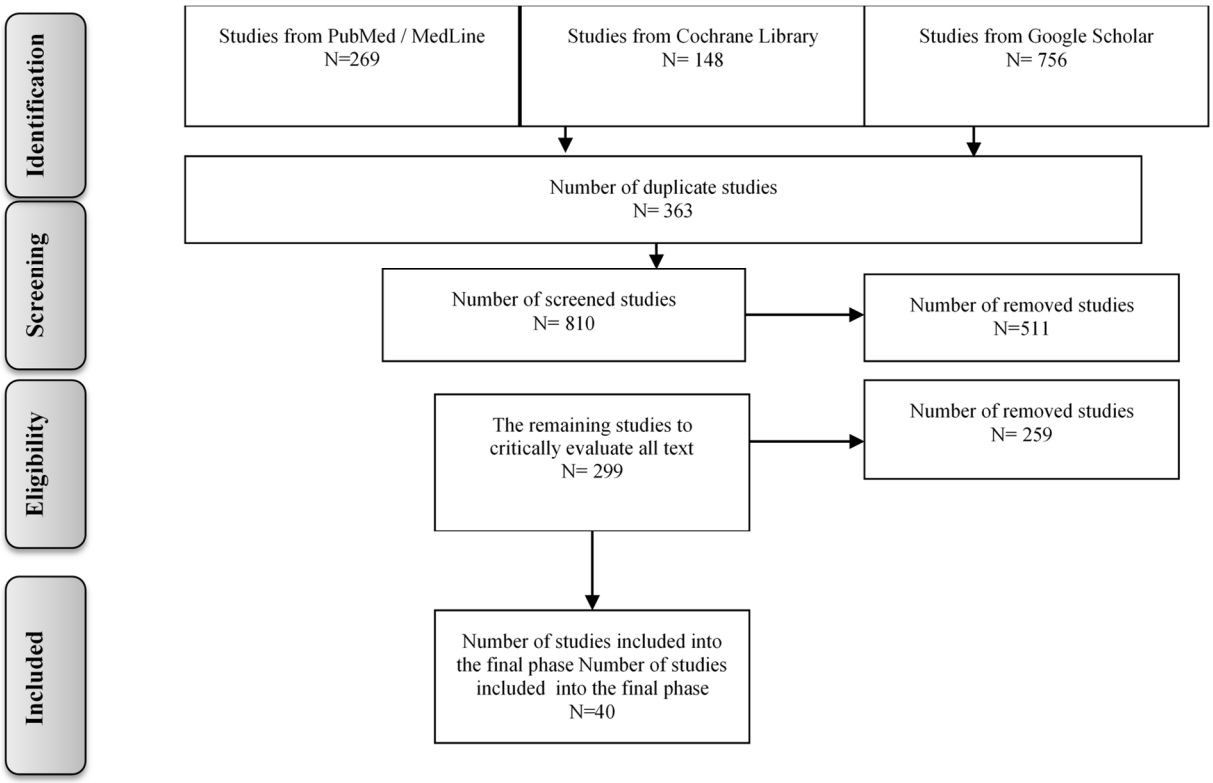

Fig. 1. Data extraction process

[DOI: 10.47176/mjiri.36.179]

Table 3. Descriptive characteristics of the 40 selected articles

Characteristics		Number	Proportion (%)
Study design	Cohort	3	7.3
	Cross-sectional study	2	4.8
	Review	7	17
	Analytical	3	7.3
	Commentary	5	12.1
	Editorial	8	19.5
	Survey	2	4.8
	Guideline	8	19.5
	Time series	1	2.4
	Scenario analysis	1	2.4
Outcome variables	Accessibility	39	95
	Utilization	27	65.8
	Financial protection	15	36.5
	Poverty	13	31.7
	Racism	9	21.9
Study Level	Local	2	4.8
	National	18	43.9
	International	21	51.2

sons such as mandatory quarantine, difficult transportation, etc.—or their required care was no longer provided – hospitals needed to extend their capacity for COVID-19 patients, so they shrank the size of other departments and halted procedures that were of less priority. The consequences of this pause in care provision and their refusal and inability to meet the demand for the needed care may stay with them for many years to come. Existing inequities in healthcare utilization will be increased when the system is put under pressure (6, 9, 10).

3- Financial protection: 15 (36.5%) studies addressed the impact of COVID-19 on equity in health financing (Table 3). The major concern about equitable health financing is inequalities between the poor and the rich. Three main focus areas of equity in health financing are: Out-Of-Pocket (OOP) payments, catastrophic payments, and impoverishing payments. At the outset of the COVID-19 epidemic in the US, out-of-pocket expenditure imposed a substantial financial burden upon the poor populations with severe symptoms, even on those under the coverage of social health insurance scheme (5,16,18).

4- Poverty: 13 (31.7%) out of 40 studies (Table 3)

Table 2. Summary of studies focusing on the impact of COVID-19 on health inequalities

Row	Title	Method	Scale/Level	Subject	Reference
1	"COVID-19: we must not forget about Indigenous health and equity."	Commentary	National	Social inclusion and non-discrimination Accessibility	(4)
2	Inequity and the Disproportionate Impact of COVID-19 on Communities of Color in the United States: The Need for a Trauma-Informed Social Justice Response	Review	National	Accessibility Financial protection Utilization Poverty	(5)
3	Racial and Ethnic Disparities in Population-Level Covid-19 Mortality	Cross-sectional study	National	Race Accessibility	(11)
4	COVID-19 exacerbating inequalities in the US	Guideline	National	Poverty Financial protection Race Accessibility	(12)
5	The disproportionate impact of COVID-19 on racial and ethnic minorities in the United States	Guideline	National	Race Accessibility	(13)
6	Ethics and equity in the time of Coronavirus	Editorial	National	Accessibility Financial protection Utilization Poverty	(14)
7	Poverty, inequality and COVID-19: the forgotten vulnerable	Editorial	National	Poverty Financial protection Accessibility Utilization	(15)
8	Four COVID-19 Lessons for Achieving Health Equity	Analytical	National	Financial protection Accessibility Utilization	(16)
9	Ensuring global access to COVID-19 vaccines	Commentary	International	Accessibility Financial protection	(17)
10	Legal agreements: barriers and enablers to global equitable COVID-19 vaccine access	Commentary	International	Accessibility Financial protection	(18)
11	Combating COVID-19: health equity matters	Commentary	International	Accessibility Financial protection	(3)
12	Revisiting the equity debate in COVID-19: ICU is no panacea	Editorial	International	Accessibility Utilization	(19)
13	Social vulnerability and equity: The disproportionate impact of COVID-19. Public administration review	Editorial	National	Accessibility Utilization Poverty Race	(20)
14	Addressing inequities in COVID-19 morbidity and mortality: research and policy recommendations	Commentary	National	Accessibility Utilization Poverty Race	(21)
15	Social determinants of health and inequalities in COVID-19	Editorial	International	Accessibility Poverty Financial protection	(2)

[DOI: 10.47176/mjiri.36.179]

Table 3. Continued

Row	Title	Method	Scale/Level	Subject	Reference
16	Primary Health Care on the Road to Universal Health Coverage2019 MONITORING REPORT	Guideline	International	Financial protection Utilization	(22)
17	Iran's Central Bank Stru gles to Regulate Markets	Guideline	National	Financial protection Poverty	(23)
18	Utilization of non-Ebola health care services during Ebola outbreaks: a systematic review and meta-analysis	Review	International	Accessibility Utilization	(24)
19	The health impact of the 2014–15 Ebola outbreak	Review	International	Accessibility Utilization	(25)
20	COVID-19 and maternal and child food and nutrition insecurity: a complex syndemic	Guideline	International	Accessibility Utilization poverty	(26)
21	Managing health systems on a seesaw: Balancing the delivery of essential health services while responding to covid-19	Guideline	International	Accessibility Utilization	(27)
22	Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modeling study	Analytical	International	Poverty Financial protection Utilization	(28)
23	Routine childhood immunization during the COVID-19 pandemic in Africa: a benefit-risk analysis of health benefits versus excess risk of SARS-CoV-2 infection	Scenario analysis	National	Poverty Accessibility Utilization	(29)
24	Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020	Survey/report	International	Financial protection Accessibility Utilization	(30)
25	Rapid assessment of service delivery for non-communicable diseases (NCDs) during the covid-19 pandemic	Survey/report	International	Poverty Financial protection Accessibility Utilization	(31)
26	The impact of COVID-19 on mental, neurological and substance use services: results of a rapid assessment	Guideline	International	Accessibility Utilization	(32)
27	Maintaining essential health services: operational guidance for the COVID-19 context	Guideline	International	Financial protection Accessibility	(33)
28	Access to primary healthcare during lockdown measures for COVID-19 in rural South Africa: an interrupted time series analysis	interrupted time series analysis	National	Accessibility Utilization	(34)
29	Framing a Needed Discourse on Health Disparities and Social Inequities: Drawing Lessons from a Pandemic	Review	National	Accessibility	(35)
30	COVID-19: Vulnerability and the power of privilege in a pandemic	Editorial	International	Accessibility Utilization	(36)
31	COVID-19 and the other pandemic: populations made vulnerable by systemic inequity	Review	National	Accessibility Utilization	(7)
32	Call for Action to Address Equity and Justice Divide During COVID-19	Review	International	Accessibility Utilization	(37)
33	Socioeconomic disparity and the risk of contracting COVID-19 in South Korea: an NHIS-COVID-19 database cohort study	Cohort study	National	Accessibility Utilization Race	(6)
34	Discrimination and Medical Mistrust in a Racially and Ethnically Diverse Sample of California Adults	Cross-sectional study	International	Accessibility Utilization	(38)
35	Socioeconomic determinants of COVID-19 in Asian countries: An empirical analysis	Analytical	International	Accessibility Utilization	(10)
36	Deterioration in Mental Health Under Repeated COVID-19 Outbreaks Greatest in the Less Educated: A Cohort Study of Japanese Employees	Cohort study	Local	Accessibility Utilization	(39)
37	Association Between State-Level Income Inequality and COVID-19 Cases and Mortality in the USA	Review	National	Accessibility Utilization	(40)
38	The deterioration of mental health among healthcare workers during the COVID-19 outbreak: A population-based cohort study of workers in Japan	Cohort study	Local	Accessibility Utilization	(41)
39	Social determinants of health: the role of effective communication in the COVID-19 pandemic in developing countries	Editorial	International	Accessibility Utilization Poverty	(9)
40	Community Health Workers and Covid-19 — Addressing Social Determinants of Health in Times of Crisis and Beyond	Editorial	National	Access	(8)
					(8)

reported the impact of COVID-19 on poverty. Poverty has a proven negative effect on health. The poorer the individual, the more ignored or unmet their health needs. Poverty is a known risk factor for death from coronavirus infection, with people having lower incomes being less able to be physically isolated. Low-wage jobs (such as rubbish

[DOI: 10.47176/mjiri.36.179]

collection, bus driving and cleaning) brought about high levels of exposure to COVID-19. Economically disadvantaged people are more likely to live in overcrowded accommodations, which is a risk factor for lower respiratory tract infections. Also, people of low socio-economic status seek healthcare services at a more advanced stage of illness, resulting in poorer health outcomes. A clear association could be seen between race, poverty, and infectivity and the mortality rates of COVID-19 (14-15, 20).

5- Racism: Identifying how racism could be affected by COVID-19 was the main focus in 9 (21.9%) studies (Table 3). Non-White racial groups are characterized by poorer underlying health conditions, housing, and occupation among minority groups, and inequitable distribution of health resources and persistent gaps in insurance coverage can be observed among them (4). In the US, in April 2020, the Centers for Disease Control and Prevention (CDC) reported national data on confirmed coronavirus cases by race and ethnicity. The available data suggest that the virus is having disproportionate effects on communities of color, with Black Americans accounting for 34% of confirmed cases even though they account for only 13% of the total U.S. population. Latinos and Hispanics have had similar statistics nationwide, with Latinos constituting 20–25% of COVID-19-related hospitalizations and 80% of intensive care unit admissions in the same month (5, 11).

Discussion

More than 19% of the finally included studies had editorial or guideline design using a quantitative approach. Our systematic review showed that analyzing health inequality during COVID-19 and its various dimensions is of major research concern in the world. The included studies were mostly descriptive, assessing the distribution of resources using macro data.

The pandemic has brought forth challenges from different perspectives for countries and their healthcare systems, from care provision and delivery to payment and coverage. As the WHO Director-General has recently stated: "all countries must strike a fine balance between protecting health, preventing economic and social disruption, and respecting human rights (36)."

Based on our findings, some questions might arise: Can this pandemic have positive long-term effects on health, health costs, and health expenditure? How will health and equity indicators change in the short and long terms? If the virus stays with us, would the spread pattern change? What if an expensive drug is found effective, but not all of the population can afford to use it? Would this lead to inequity and inevitably damage society? If the pandemic widens the income gap that already exists between and within countries, what are the consequences? Would health equity be directly or indirectly affected accordingly (10, 13, 17, 21).

Some findings suggest that in terms of the provision of healthcare and help, all possibilities were exhausted: there were no more goods to be distributed (global shortages in food, medical supplies, and drugs), services were no longer available in medical centers, or their quality was compromised (8, 18). Others suggest a break in the demand side of the chain. That is, people who needed care could no longer receive it because they were in quarantine or had no means of transportation, or simply because they lived in deprived areas (13, 39). Either way, the outcome was the same: individuals in need of service did NOT receive it. This complicates things, given the fact that many of these individuals are among the high-risk or vulnerable population. According to our findings, the aftermaths of the pandemic are mostly going to be related to this break in supply chains, access, and utilization, not the virus itself. We found a disruption in the continuity of care for many services including NCDs --many of which need constant monitoring and health interventions. The reviewed studies agreed on the fact that the most vulnerable and the low–income groups in every country were hit the hardest, and some of the underlying reasons for this are the use of public transportation, lack of adequate Personal Protective Equipment (PPE), or inability to understand instructions on how to use them properly (2). These negative impacts are hard to deal with --since they were mostly the existing problems rooted in social and economic inequities worsened by the situation the pandemic had created.

The pandemic's impact on the economy is the second concern of every nation. Because of the preventive measures and the decreased demand of economic encounters, many businesses failed to get adjusted to the new norms and had to close down, resulting in millions of individuals losing their jobs and their only source of income –and in some cases, their insurance. Having no income and simultaneously being faced with financial burdens (like healthcare costs) is a dangerous combination that leads individuals to poverty (6). This means that apart from the virus, their health is threatened by other factors such as malnutrition, AIDS, and other poverty-associated diseases. These have a longer-lasting effect than the pandemic itself, so establishing a financial protection system (for both living costs and healthcare costs of poor families) is the next step toward ending the pandemic. In the reviewed studies, methods of protection such as direct payments and subsidies, delayed due dates, pardoned debts, and expanded coverage was evaluated, some of which were found to be very successful (for the short term at least). We found that most countries had chosen to either use direct payments or delay due dates to reduce the financial burdens on people and businesses (36).

Countries' infrastructure played the biggest role during this pandemic. When the virus struck different countries, they were faced with new and strange challenges (which they had never handled before) and thus could not have a proper initial response. However, not long after, they started to get adapted to the new situation, and this adaptation was faster among countries with strong social, economic, and health infrastructures. To handle a health crisis, firstly, a strong health system is needed. In the initial stages of a pandemic, handling the situation mostly depends on the health system's capacity (handling the maximum number of patients in the least amount of time), but as time goes by the system will need strengthening and support. Governments must provide this support in the

[DOI: 10.47176/mjiri.36.179]

forms of medical supplies (like PPE, test kits, ventilators, medicine, etc.), financial aids, resource allocations, etc. (15, 42).

In a pandemic, the essential assets are medical drugs and supplies. Without drugs, there can be no hope of curing the patients or easing their pain; without medical supplements, healthcare workers are at risk, and care delivery will not be safe and sufficient. During this pandemic, we saw how governments struggled to supply their healthcare systems with proper equipment. Demands for drugs grew steadily (especially the ones that were considered effective against the virus). If a country had no technology to manufacture the medications, it had to spend a large number of its resources on purchasing and importing drugs from other countries (provided that it could spare the amount requested). This could potentially lead to an inflation of service costs, and low-income families could no longer afford to pay, and thus they might be held back from demanding and utilizing services even though they need them (19, 38).

The vaccine is a highly controversial topic as far as COVID-19 is concerned. Firstly, people might not trust its effectiveness and safety and therefore withdraw or reject vaccination. Secondly, if a vaccine is proven and accepted to be safe and effective, how is it going to be equally distributed throughout the world and within nations? Who is to decide which country can buy how many dozes and who is going to receive them? These decisions are certainly not easy to make. Well-off countries will secure a great number of vaccines for their population while middle- and low-income countries must await assistance and contributions of international organizations, such as WHO, to be able to supply their population with the vaccine. This is a clear example of inequity. Even though COVAX is trying to implement a secure supply chain and has promised to supply at least 20% of every country's population, nothing has been mentioned yet about whether they have managed to do this or not (WHO, 2020). High-income countries are already ordering great numbers of doses and have received millions of them while low-income countries still await their promised batches. This inequity in vaccine distribution must be acknowledged and properly addressed (42).

This study ace with some limitations. Analyzing the data gathered so far, and comparing them against the data from previous outbreaks, we were able to study the impact COVID-19 has left so far on health and equity. However, it is too soon to form any solid judgments since we're facing a substantial dearth of data in multiple areas regarding the pandemic. On the same ground, many impacts of the pandemic are yet to be realized, and many of its long-term effects will only be fully understood after some years have passed. Yet, it is only through studying the current impacts and modeling and estimating the future patterns that we can handle the present challenges and get prepared for future ones. Studies that have focused on such issues are few yet of paramount Importance. Future studies must analyze the role played by inequities and SDHs during this pandemic since it is only then that the complete impact of the COVID-19 pandemic on all aspects of life can be understood, and future similar outbreaks could be prevented or handled more sufficiently.

The practical benefits and implications of this study could be mentioned below:

- The risk of severe disease and death in COVID-19 is increased among individuals with poor general health and nutritional status and among those with underlying chronic conditions such as cardiovascular diseases, lung diseases, diabetes, and cancer.
- As health-seeking behaviors relate to health literacy and access to health care and are influenced by user fees, persons in disadvantaged socioeconomic groups may delay seeking care for COVID-19, potentially resulting in more severe disease and death (5).
- Existing inequities in healthcare access may lead to differences in COVID-19 diagnosis, and potential inequities in access to testing could lead to a higher risk of undetected cases.
- Poverty is a known risk factor for death from coronavirus infection, and people with lower incomes are less able to be physically isolated.
- The COVID-19 pandemic has made it very clear that for households in underserved communities and for those least connected to health resources, it is critical to take services to people rather than always expecting people to travel to obtain them.

Conclusion

COVID-19 is an unprecedented phenomenon of our era. It spread throughout the world, changed our lifestyles, took away our loved ones, left nations in states of emergency, shrank economies, and overwhelmed health systems, and until this day, it has not ceased to do so. The way we respond to it and its impacts on human societies will be the topic of several studies for years to come, and no more than an estimation can be given for its aftermath. The silver lining, however, is that the pandemic shone a light on a couple of frequently neglected topics: equity and social determinants of health. During this roller coaster-like health crisis, we directly saw how people of low social status suffered from the disproportionate care provided to them. Their suffrage, in fact, had little to do with their health status but mostly with their social status. This group of the population has sustained years of neglected demands and unmet needs which led to various complications. When the pandemic hit human, the world failed to face the challenges caused by the disease leading to countless infection cases and mortality reports. After this is all over, the importance of social determinants and inequities in health should not be taken for granted anymore. If so many inequities had not been imposed on people of lower social status, if they had been protected, and if they had been cared for, the pandemic's casualties could have been greatly reduced. To prevent such tragedies from happening again, we must act now. "Health Inequity" is what gives way to social differences and thus, poorer health outcomes among the less advantaged in every nation. If we want to deal with this issue fundamentally, we should focus on abolishing the inequity that has been built up over the years. It is only then that every individual can

[DOI: 10.47176/mjiri.36.179]

aspire to reach their full potential in life and health.

This pandemic has been the most important phenomenon of this year and, indeed, the past seven decades after World War II. Its impacts are still being studied and it is too soon to reach any conclusions, but one thing should be kept in mind: some suffered the consequences of the pandemic and its impact more than others. It is the government's obligation to lessen the impact of the pandemic and its consequences on the whole nation while paying special attention to the most vulnerable groups. Prioritizing populations with social conditions is necessary for more effective control of the epidemic in its next phase and should become the standard in the planning for, prevention and mitigation of all health conditions.

Acknowledgments

The authors would like to thank the colleagues of the Health Equity Research Center (HERC) of TUMS for their valuable comments on this manuscript.

Authors' contributions

AR. O was involved in the conception and designing the study. E.M. and F.Y performed the literature review, data analysis and interpretation. AH. T and AR. O wrote the manuscript and acted as the corresponding author. E.M. and F.Y supervised the development of the work, and MM.K helped in data interpretation and manuscript evaluation. B.L. helped to evaluate and add comments to revise the manuscript.

Conflict of Interests

The authors declare that they have no competing interests.

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[DOI: 10.47176/mjiri.36.179]

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[DOI: 10.47176/mjiri.36.179]