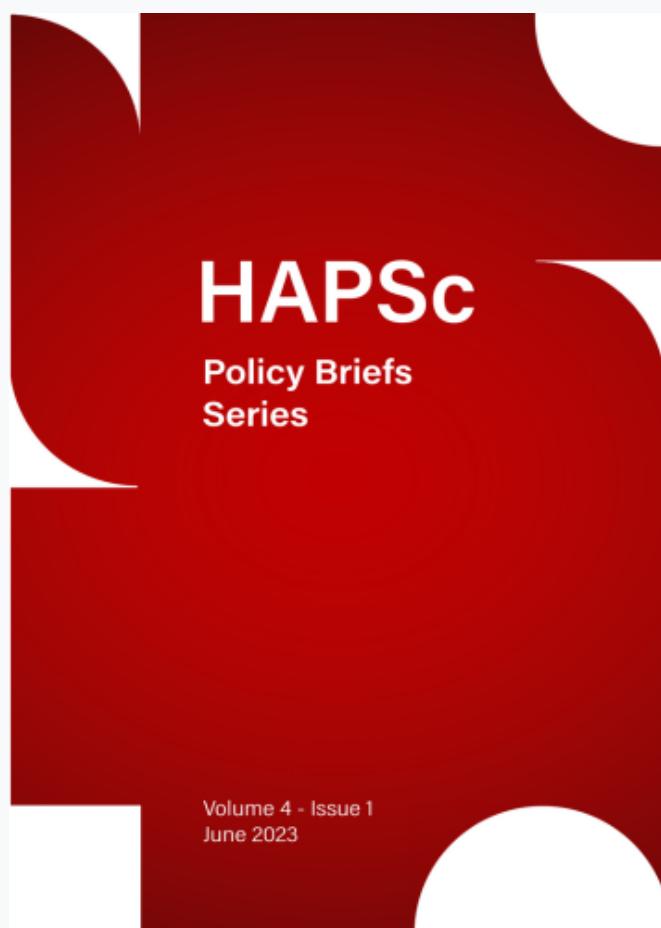


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COVID-19 and the Exacerbation of Existing Inequalities: Why the Lower Socioeconomic Strata Were Influenced the Most¹

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Abstract

Since the outburst of the COVID-19 virus many changes have taken place that concern most aspects of human life. A group that seemed to be affected most by the pandemic was that of the lower socio-economic strata. This paper aims to demonstrate how individuals were most influenced. Firstly, their health was severely affected mainly due to the higher prevalence of social determinants that make them more vulnerable to COVID-19 and as they were more likely to delay seeking the necessary care for the virus. They also had to deal with a greater financial burden throughout the pandemic. Individuals of lower socio-economic strata were much more likely to lose their jobs, to have their earnings reduce and to have to work while sick or in unsafe conditions. The last areas that have been negatively affected by the pandemic is digital, educational and health accessibility, as poorer individuals appear having reduce to technical means.

Keywords: COVID-19; Health Inequalities; Digital Inequalities; Educational Inequalities; Financial Inequalities; Lower Socioeconomic Strata

Introduction

The COVID-19 pandemic deeply influenced the lives of individuals across the world. It didn't only cause millions of deaths but also led to the deterioration of already existing inequalities. The individuals that were affected the most are those of the lower socioeconomic strata. This paper focuses on examining how health inequalities, financial inequalities, digital inequalities and educational inequalities were aggravated, bringing on life altering side-effects to the lives of poorer individuals. Specific data for Greece, concerning how its economy was affected and the exacerbation of its digital inequalities, will also be demonstrated.

The Exacerbation of Health Inequalities

In 1630 the plague in Northern Italy killed 35% of the population. An after-effect of this tremendous demographic change was the slowdown of the rising inequalities of the country. As many workers

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and potential property-buyers had died, wages increased and houses became less expensive. Unfortunately, this glimpse of positivity can't be found in the COVID-19 world. A total of 6.86 million deaths didn't only cause worldwide panic and the grief of many, but it also led to the strengthening of inequalities throughout the sphere. (Marmot and Allen, 2020; Our World in Data, 2023)

A very typical example of an inequality that widened in the years of the pandemic is that of health inequalities, as that disadvantaged socioeconomic groups suffer from higher levels of mortality and morbidity, after being affected by COVID-19 (McGowan and Bambra, 2022). Health inequalities existed long before COVID-19; in England, three different worrying trends have been documented, ever since 2010. A slower increase of life-expectancy, a widening gap of life expectancy between richer and poorer areas of England and a deterioration of the life expectancy of the women living in the most deprived areas indicate steady steps towards a dystopia of inequality (Marmot and Allen, 2020).

Poorer individuals are more likely to suffer from a health condition that makes them more vulnerable to COVID-19. Someone who is in the bottom three deciles of the income distribution is about 50 per cent more likely than someone in the top two deciles to have such a condition (Blundell et al., 2020). For those with underlying chronic conditions such as cardiovascular diseases, lung diseases, diabetes and cancer, COVID-19 is way more dangerous. The frequency of these conditions is inversely associated with economic status (Bigdelou et al., 2022; Batra et al., 2022).

Societal factors that directly influence the volume of the effects of COVID-19 are also the higher prevalence of smoking and obesity observed in the poorer social strata. These two constituents are known to further aggravate the disease (Casetta et al., 2017; Mayor, 2017; Centers for Disease Control and Prevention, 2021; National Heart, Lung, and Blood Institute, 2022). As the habits and behaviours of individuals influence the possible risk of COVID-19 on them, according to Van Dorn et al. (2020) poor white communities who were at the time suffering an opioid crisis and more frequent health conditions, were more likely to be hit hard by the pandemic.

Furthermore, after being affected by COVID-19, disadvantaged socioeconomic groups are more likely to delay seeking the necessary care, which could potentially result in their more severe disease and possibly their death. That is because health literacy isn't as prevalent in those groups and because it's not as easy for them to access healthcare, given that they can't afford their user fees and their medicine (Burström and Tao, 2020; Blundell et al., 2020).

Another reason why the lower socioeconomic strata are more influenced by COVID-19 is because mental health illnesses are way more prevalent among them. About 13% of individuals in the bottom decile report suffering from a long-standing mental health illness, and just 3% in the top decile. This factor leads to two different pandemic-related side-effects. Firstly, the former were also more vulnerable to increased social isolation during the pandemic (Blundell et al., 2020). Also, COVID-19 was even riskier for them, as mentally ill people are proven to be less resilient to this disease. Sadly, in Greece not much has been done by the government to help poorer individuals deal with their bad mental health state and its side-effects (Theodoraki, 2020).

On a positive note, the implementation of Artificial Intelligence (AI) is poised to bring about a transformative impact on the field of medicine, fundamentally altering the manner in which healthcare services are provided. Artificial intelligence (AI) is expected to facilitate advancements in healthcare quality, patient engagement, and accessibility to healthcare services. The implementation of this initiative is expected to enhance the efficiency and efficacy of healthcare services, while also enabling healthcare facilities to expand their capacity for providing comprehensive treatment and management to a larger patient population. By leveraging real-time data collection, artificial intelligence has the potential to offer current information that aids in the prevention of diseases. In subsequent times, this will emerge as a significant instrument for combating additional epidemics and pandemics. This intervention will offer a preventive measure and address numerous other diseases. Artificial intelligence (AI) is poised to assume a crucial role in the future of healthcare by facilitating the provision of predictive and preventive measures (Efthymiou et al., 2020).

The Exacerbation of Financial Inequalities

The pandemic also brought on an overall downfall of the economic development that preceded it, which resulted in the tragic impoverishment of ten million people around the world. Just like a century ago, during the Spanish flu, the economic crisis resulting from the many economic upheavals of the pandemic lead to the deterioration of the already existing social and economic inequalities. Many studies on the subject report that the economic crisis caused by COVID-19 is identical to the Great Depression of the 20th century and worse than all the previous similar crises caused by viruses. Since the beginning of the pandemic in late 2019, the percentage of people living in extreme poverty has skyrocketed. Reduced wages, cutbacks, shortages of basic goods and the impoverishment of millions of people are some of the harshest side-effects of the virus (Theodoraki, 2020).

In 2020, a survey conducted by Adams-Prassl et al. found that individuals of lower socio-economic strata were much more likely than the higher-income individuals to lose their jobs and to have

their earnings redacted, due to the pandemic. The younger workers and those with lower levels of education were also more vulnerable to those side-effects of COVID-19, but not as vulnerable as the self-employed and those on zero-hours contracts, who had their hours of work redacted the most. To this day, thousands experienced cuts in their monthly income. Sadly, as mentioned before, the ones who were more in need of a salary were the ones that were affected the most (Blundell et al., 2020).

People with lower paying jobs didn't only have to deal with their incomes being cut and the possibility of losing their jobs, but they were also much more likely to work in dangerous conditions. Exposure to COVID-19 increased for occupations that demand physical presence and proximity or direct contact with other people. Subsequently, people with low-income jobs in service-sectors such as health or social care, transportation, cleaning and hospitality dealt with much riskier conditions in their work-environment. The risk was even worse if they had to use public transport to get to work or if they lacked personal protective equipment and the appropriate knowledge on how to use it (Burström and Tao, 2020). As the lower a person's income, the less likely it was that they were in jobs were working from home is possible, poorer individuals often were obliged to leave their houses even during the lockdown. ONS reported that before lockdown only a 10% of employees in accommodation and food were able to "telework" and only a 53% of employees in communication and information (Marmot and Allen, 2020).

Precarious working environments and a lack of social insurance could be the reasons behind employees working while sick with COVID-19, during the pandemic. This situation put them in even more dangerous conditions not only as their illness would worsen if they weren't provided with the necessary care, but as they would often have to work around other sick employees too (Tilchin et al., 2021).

A relevant trend of a significant increase in its unemployment and an equivalent drop of its GDP was observed in Greece. The country's unemployment rate, after having reached very high levels (28% in the summer of 2013), had started to decrease. After the pandemic and the subsequent restrictions to the labour market in the first months of 2021, however, it began to rise. According to ELSTAT statistics the unemployment rate for the month of January 2020 reached the percentage of 16.4%, which means an increase of 2.1 points compared to January 2019. ELSTAT data (2021) also indicate a drop of the country's GDP in the third quarter of 2020 compared to the third quarter of 2019 by 11.7%. The OECD (2020) records a large drop of its GDP in the second period of the pandemic to 3.8% and in 2021 a drop of 1.8%. ELSTAT reports that businesses in the accommodation and catering services sector in the 4th quarter of 2020 saw a reduction in job positions by approximately 43

thousand compared to the corresponding quarter of 2019 (Andreola, 2022). To counter these effects, social protection expenditure should increase, as it's positively correlated with employment rates and the GDP per capita in the European Union (Emmanouil-Kalos & Prokakis, 2021).

High rates of unemployment are known to lead to prevalence of psychological difficulties, depression and suicidal tendencies on populations under consideration (The Health Foundation, 2021). Unemployment doesn't only cause mental health problems but increased alcohol and substance abuse and family violence too (Llop-Gironés et al., 2021) Given that all these side-effects of economic crisis' further implicate peoples' health, it is to be addressed that poorer peoples' health is further burdened due to this factor too.

The Exacerbation of Digital Inequalities

Lower socio-economic strata were also negatively affected by the pandemic because of the digital inequalities that prevailed because of it. Four proximal factors impacted whether individuals could use technologies efficiently and effectively, during COVID-19, all of which are affected by the socio-economic situation of those under consideration (Beaunoyer et al., 2020).

The first factor is the technical means individuals could access. Richer households had the ability to upgrade their equipment when it was necessary for telework, learning or entertainment. Households with lower incomes, on the other hand, couldn't always upgrade their technical means and they often were not able to afford the best connection both in terms of speed and data usage, without sacrificing essential spendings. As home confinement was obligatory many times throughout the pandemic an unprecedented internet traffic load was created, which affected poorer households with not as great internet packages more (Beaunoyer et al., 2020).

The second factor that impacted whether individuals could use technologies efficiently and effectively, during COVID-19, is the autonomy of use of their technological devices. The third factor is their ability to get assistance from other experienced users and the last factor is the experience they had of technology and their general abilities in utilising it. (Beaunoyer et al., 2020).

In Greece access to technology was a significant problem throughout the pandemic, especially in the context of distance education. According to a relevant study only 62.7% of parents stated that they had sufficient digital equipment in their home. A significant percentage of parents (37.3%) stated that the digital equipment they had at their disposal was not sufficient to achieve distance learning and they had to buy a new digital device (40.8%). An equally important issue that emerged throughout

this period was that of bad internet access faced by families during distance education. According to the results of another relevant study a significantly large percentage of participants stated that they encountered problems with their internet connection often, at a rate of 44.4%, and they had to upgrade their internet connection (31%) during the pandemic. The last finding implies an increased financial burden on households, potentially significant for lower income families (Strofylla, 2022).

Regarding the second factor, the autonomy of use of technological devices, it is true that throughout the quarantines internet and digital equipment use at home became further restricted. The fact that family members had to share technological equipment raised many issues surrounding carrying out desired online activities. As public spaces such as schools, libraries and coffee shops were also not accessible to individuals throughout the pandemic a significant barrier of teleworking was created. Poorer individuals that had less ease of access to technologies, sadly became even more vulnerable to the economic impacts of the virus (Beaunoyer et al., 2020).

The ability to use technological equipment efficiently, however, doesn't only impact individuals' socio-economic status, but it impacts their health too. Being digitally excluded signifies a partial exclusion from health determinants such as education, work, social networks, resources and information. Especially during COVID, digital spaces have been a centre of spreading information for governments and official agencies. Subsequently, accessing and understanding information on health measures was a problem for those dealing with digital literacy inequalities. Overall, it is evident that during COVID, the poorer socio-economic strata had to deal with the effects of the exacerbation of both health and financial inequalities. As limited digital access can lead to health inequalities, which in return can broaden digital inequalities, a "digital vicious cycle" is created that tormented poorer individuals greatly throughout the pandemic (Beaunoyer et al., 2020).

The Exacerbation of Educational Inequalities

The lack of the necessary digital equipment, which was a characteristic of the lower socio-economic strata that deeply influenced them throughout the pandemic, also had negative repercussions in regards to their education. As the less privileged students were less likely to have access to digital media, educational inequalities faced a rapid increase throughout COVID-19 (Bekova et al., 2021). Parents' lack of familiarity with digital educational media could also be thought of as one of the most significant factors of this observed inequality (Goudeau et al., 2021).

In other cases, educational inequalities widened as financial difficulties led to many students picking up jobs themselves to financially support their families, leaving their education behind as a result. It

has been noticed that a higher pressure is put on the students of lower-income backgrounds to support their family. A typical example is that of the poor Argentinian young women that had to focus a lot on family health during COVID-19 and therefore didn't have the ability to prioritise their education (Global Development Commons, 2020).

Unfortunately, the factors that led to widening educational inequalities during the pandemic aren't limited to the aforementioned. As many students coming from poorer families had to pay tuition for their studies and they dealt with an increased financial pressure, due to the pandemic, their academic results were affected and they even had to drop out. Even if they didn't have to let go of their studies, however, it is likely that the education they were offered wasn't as good as that of the richer students. Wealthier schools had the ability to provide better technology and more resources to their students. According to UNICEF, in fact, there was a risk of "widening of performance gaps between low and high-income individuals" and this risk was "consistent on a local level, national level, and international level" (Global Development Commons, 2020).

Another issue that tormented lower-income families throughout the pandemic was the loss of school meals, but also of other services that help improve the quality of life of students. The suspension of school units created a lot of uncertainty and concern among families about the free school meals that were offered in schools. According to research, school meals are significantly related to improving the academic performance of students, while not providing school meals is associated with low school performance and increased risk for students' physical and mental well-being. 6.6% of families from the European Union, 5.5% from the United Kingdom and 14% from the USA cannot provide their children with meals that include all the nutritional elements necessary for their development. Subsequently, it is evident that the pandemic affected the educational system in ways that hurt the physical wellbeing of students as well (Strofylla, 2022).

Conclusion

The precedent pandemic didn't limit its repercussions at the health side-effects it caused and the millions of deaths it brought. It was also the reason behind the exacerbation of other great societal problems. In this paper it was proven that the lower socioeconomic strata were the ones that had to deal with the bigger burden of the virus. Health, financial, digital and educational inequalities significantly worsened throughout these years, all at their expense. Health inequalities were exacerbated, as among poorer individuals there seemed to be a prevalence of smoking, obesity, of mental illnesses and of other health conditions, that made them more vulnerable to COVID-19 and as they delayed seeking the necessary care for the virus. Also, in a general state of a heightened

extreme poverty, individuals of lower socio-economic status were also much more likely to lose their jobs, to have their earnings redacted and to have to work while sick or in dangerous conditions. Last, they didn't have the same access to technical means as the other classes. They weren't lucky enough to have autonomy of use of their technological devices, experience on utilising it or ability to get assistance from other experienced users. This information, however, should act as a disappointment determinant for our view of society, but rather as a source of motivation. As it has been highlighted, lower socio-economic strata have been treated as the outcasts of society, left helpless when chaos arrived. However, this doesn't have to be our truth. A stronger social welfare state must and can be at their disposal, at any upcoming crisis.

References

Andreola, M. (2022). *The expected economic impact of the covid-19 pandemic at global and national level based on current data*. Bachelor's thesis [online]. Messolonghi: University of Patras. Available at: <http://repository.library.teiwest.gr/xmlui/bitstream/handle/123456789/10408/LOG-%20%ce%9c%ce%91%ce%a1%ce%99%ce%95%ce%a4%ce%91%20%ce%91%ce%9d%ce%a1%ce%95%ce%9f%ce%9b%ce%91.pdf?sequence=1&isAllowed=y> [Accessed 10 February 2023]

Batra, A., Swaby, J., Raval, P., Zhu, H., Weintraub, N.L., Terris, M., Karim, N.A., Keruakous, A., Guterman, D., Beyer, K., Stolley, M., Brown, S-A. and Guha, A. (2022). Effect of Community and Socio-Economic Factors on Cardiovascular, Cancer and Cardio-Oncology Patients with COVID-19. *COVID*, 2(3). <https://doi.org/10.3390/covid2030024>

Beaunoyer, E., Dupéré, S. and Guitton, M.J. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior*, [e-journal] 111(106424). <https://doi.org/10.1016/j.chb.2020.106424>

Bekova, S., Terentev, E. and Maloshonok, N., 2021. Educational Inequality and COVID-19 Pandemic: Relationship between the Family Socio-Economic Status and Student Experience of Remote Learning. *Voprosy obrazovaniya / Educational Studies Moscow*, 1, 74-92.

Bigdelou, B., Sepand, M. R., Najafikhoshnou, S., Negrete, J. A. T., Sharaf, M., Ho, J. Q., Sullivan, I., Chauhan, P., Etter, M., Shekarian, T., Liang, O., Hutter, G., Esfandiarpour, R. and Zanganeh, S. (2022). COVID-19 and Preexisting Comorbidities: Risks, Synergies, and Clinical Outcomes. *Frontiers in immunology*, 13(890517). <https://doi.org/10.3389/fimmu.2022.890517>

Blundell, R., Dias, M. C., Joyce, R. and Xu, X. (2020). COVID-19 and Inequalities. *Fiscal Studies*, 41(2). <https://doi.org/10.1111/1475-5890.12232>

Burström, B. and Tao, W. (2020). Social determinants of health and inequalities in COVID-19. *European Journal of Public Health*, 30(4). <https://doi.org/10.1093/eurpub/ckaa095>

Casetta, B., Videla, A.J., Bardach, A., Morello, P., Soto, N., Lee, K., Camacho, P.A., Moquillaza, R.V.H. and Ciapponi, A. (2017). Association Between Cigarette Smoking Prevalence and Income Level: A Systematic Review and Meta-Analysis. *Nicotine & Tobacco Research*, 19(12). <https://www.jstor.org/stable/26771473>

Centers for Disease Control and Prevention (2021). *Obesity, Race/Ethnicity, and COVID-19*. [online] Available at: <<https://www.cdc.gov/obesity/data/obesity-and-covid-19.html>> [Accessed 20 May 2023]

Efthymiou, I. P., Sidiropoulos, S., Kritas, D., Rapti, P., Vozikis, A., Souliotis, K. (2020). AI transforming Healthcare Management during Covid-19 pandemic. *HAPSc Policy Briefs Series*, 1(1), 130-138. <https://doi.org/10.12681/hapspbs.24958>

Emmanouil-Kalos, A., & Prokakis, E. (2021). Social Protection after the Pandemic: Lessons Learned from the Eurozone Crisis. *HAPSc Policy Briefs Series*, 2(1), 70-78. <https://doi.org/10.12681/hapspbs.27660>

Global Development Commons (2020). *Investigating the Potential Impacts of COVID-19 on Existing Education Inequalities on a Global Scale*. [online] Available at: <<https://gdc.unicef.org/resource/investigating-potential-impacts-covid-19-existing-education-inequalities-global-scale>> [Accessed 15 February 2023]

Goudeau, S., Sanrey, C., Stanczak, A., Manstead, A. and Darnon, C. (2021). Why lockdown and distance learning during the COVID-19 pandemic are likely to increase the social class achievement gap. *nature human behaviour*, 1273(1281). <https://doi.org/10.1038/s41562-021-01212-7>

Llop-Gironés, A., Vračar, A., Llop-Gironés, G., Benach, J., Angeli-Silva, L., Jaimez, L., Thapa, P., Bhatta, R., Mahindrakar, S., Scavo, S.B., Devi, S.N., Barria, S., Alonso, S.M. and Julià, M. (2021). Employment and working conditions of nurses: where and how health inequalities have increased during the COVID-19 pandemic? *Human Resources for Health*, 19(112). <https://doi.org/10.1186/s12960-021-00651-7>

Marmot, M. and Allen, J. (2020). COVID-19: exposing and amplifying inequalities. *J Epidemiol Community Health*, 74. <http://dx.doi.org/10.1136/jech-2020-214720>

Mayor, S. (2017). Socioeconomic disadvantage is linked to obesity across generations, UK study finds. *BMJ*, 356(163).
<https://www.bmjjournals.org/content/356/bmj.j163#:~:text=Previous%20studies%20have%20found%20that,risk%20of%20obesity%20in%20adulthood>

McGowan, V. and Bambra, C. (2022). COVID-19 mortality and deprivation: pandemic, syndemic, and endemic health inequalities. *Lancet Public Health*, 7(11). [https://doi.org/10.1016/S2468-2667\(22\)00223-7](https://doi.org/10.1016/S2468-2667(22)00223-7)

National Heart, Lung, and Blood Institute (2022). *Smoking associated with increased risk of severe COVID-19 outcomes*. [online] Available at: <<https://www.nhlbi.nih.gov/news/2022/smoking-associated-increased-risk-severe-covid-19-outcomes>> [Accessed 20 May 2023]

Our World In Data (2023). *Daily new confirmed COVID-19 deaths per million people*. [online] Available at: <<https://ourworldindata.org/explorers/coronavirus-data-explorer>> [Accessed 5 February 2023]

Strofylla, G. (2022). *Education and Pandemic: Exploring the role of family factors in educational inequalities*. Corinth: University of Peloponnese. Available at: <https://amitos.library.uop.gr/xmlui/handle/123456789/6609> [Accessed 10 February 2023]

The Health Foundation (2021). *Unemployment and mental health; Why both require action for our COVID-19 recovery*. Available at: <http://allcatsrgrey.org.uk/wp/download/public_health/mental_health/2021-Unemployment-and-mental-health.pdf> [Accessed 15 May 2023]

Theodoraki, A. (2020). *The impact of COVID-19 on socially defines inequalities on Health*. Athens: University of West Attica. Available at: <https://polynoe.lib.uniwa.gr/xmlui/bitstream/handle/11400/2547/Theodoraki%2020020..pdf?sequence=1&isAllowed=y> [Accessed 5 February 2023]

Tilchin, C., Dayton, L., and Latkin, C.A. (2021). Socioeconomic Factors Associated With an Intention to Work While Sick From COVID-19. *Journal of occupational and environmental medicine*, 63(5). <https://doi.org/10.1097/JOM.0000000000002147>

Van Dorn, A., Cooney, R.E. and Sabin, M.L. (2020). COVID-19 exacerbating inequalities in the US. *The Lancet*, 395(10232). [https://doi.org/10.1016/S0140-6736\(20\)30893-X](https://doi.org/10.1016/S0140-6736(20)30893-X)