

Commentary

COVID-19 Lockdown: Not a One-Size-Fits-All Solution

Yasmina Geber, Priscilla Matthews

Schulich School of Medicine & Dentistry – Western University, London, Canada

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Corresponding author: ygaber@uwo.ca

Introduction

The rapid spread of the novel coronavirus (COVID-19) has caused many health bodies to implement policies in an attempt to curb viral transmission (1). Due to a lack of vaccines and pharmacological treatments for COVID-19 early in the pandemic, governments were compelled to utilize strategies to mitigate spread such as social distancing and lockdowns (1).

The term "lockdown" has no precise definition in the literature, however we will use it below to refer to government measures implemented to decrease community mobilisation in order to reduce the spread of COVID-19. A recent review of observational data from 27 countries demonstrated that the growth rate of daily case counts declined after 15 days of lockdown (1). This deceleration in disease transmission demonstrated a success of lockdown measures, however the growth rate continued to be positive with no decline in the absolute number of new daily cases. Given that the number of daily cases continued to grow, albeit at a slower rate, these results appear to indicate that lockdowns alone were not sufficient to halt the pandemic (1). The concern this raises is that although lockdowns appear to have some impact on disease transmission, they also have the potential to have unintended negative impacts on the social and mental health of global communities (1). In certain circumstances, the costs of lockdown may be considered too high for specific communities to bear, risking long-term, detrimental impacts (1).

This paper will explore the potential drawbacks of lockdown measures implemented in the global North and South on social and mental wellbeing. Countries from each continent that had sufficient data for analysis at the time of writing were selected for further analysis. The countries chosen were the United States of America (USA) and the United Kingdom (UK) from the global North, and India and Kenya from the global South.

Impacts on food insecurity and income

Implementing lockdown measures had a number of unintended impacts on local populations in terms of worsening existing disparities and disproportionately affecting vulnerable populations. A particularly concerning issue has been the inability of individuals to fulfill food security needs in certain regions (2-5). Prior to the onset of the pandemic, a considerable portion of the population in the UK (7.6%) and US (11%) were already experiencing food insecurity (5,6). Food insecurity is defined as limited, irregular access to sufficient, nutritious foods to lead an active, healthy lifestyle (6). Food insecurity induces feelings of anxiety due to the uncertainty of securing one's next meal, fear of food running out, or inability to maintain a balanced diet due to financial constraints (7). Since the introduction of COVID-19-related lockdowns, the prevalence of food-insecure households has increased in both the UK (16.2%) and USA (38%) (7). This rise is greater than what was seen in the USA during the Great Depression and has fostered increasing concerns about the unintended consequences of lockdowns (5).

The announcement of border shutdowns and quarantine enforcements in the USA and UK sparked fear of an impending economic crisis, driving people to panic and overstock on supplies

and resulting in shortages in food stores (2,5,6). As seen in the 2007-2008 economic recession, food shortages led to price crises, with imported foods becoming more expensive (7). Therefore, the implementation of lockdown measures and panic purchasing may have further contributed to the challenges facing vulnerable populations and food-insecure households (6).

It is worth noting that the pandemic has exacerbated food insecurity disproportionately in communities of colour (2). In addition, among low-income populations in the USA, individuals who were already experiencing food-insecurity had higher rates of job loss or reductions of work hours when compared to low-income individuals who were not experiencing food insecurity, further exacerbating existing disparities (5,6). These findings are concerning as they demonstrate that COVID-19 lockdown measures have the potential to widen existing racial and socio-economic disparities in many global North settings.

The impact on food insecurity has been even greater in the global South. One study reported that 95% of Kenyan participants had experienced reduced income as a result of the lockdown (8). Consequently, 88% of participants were unable to purchase sufficient food for their households. Kenyan health practitioners also highlighted the challenges faced by local populations in abiding by physical distancing measures. A specific challenge stemmed from small, overcrowded and shared spaces within the slums that act as a transmission ground for the virus (8). With 56% of Nairobi's population living in slums, Kenya's capital quickly became the country's COVID-19 epicenter (8).

Circumstances in India have been similar. The Indian government was praised by the World Health Organization (WHO) for their timely and quick response to the pandemic; however, India's response has put vulnerable populations at a major disadvantage (9). For instance, India has high intranational migration, but their food ration cards are not portable; migrants from one state cannot utilize their ration cards in another (10). Recent data pointed towards an imminent starvation crisis, with 72% of migrants reporting that their existing food stores were running out (9,10). Furthermore, recent reports have suggested that the government's efforts to remedy food insecurity would not be sufficient (9). According to estimates by Sumner et al., COVID-19 may be undoing three decades of global efforts to decrease international poverty levels, potentially translating into an increase of 420 to 580 million people living in poverty (7).

Impacts on mental health and domestic violence

In addition to the socioeconomic impacts, lockdown measures have been associated with a wide range of psychological consequences in the global North and South. Previous studies have shown that feelings of depression, anxiety, and uncertainty about the future heighten with social isolation (11). Isolation may also lead to physical and mental health consequences such as poor sleep quality, increased thoughts of suicide, increased substance abuse, and decreased lifespan (11). Results from the Kaiser Family Foundation (KFF) Tracking Poll show that Americans sheltering in place during the COVID-19 pandemic were more likely to report negative mental health impacts compared to those who were not sheltering in place (11). Similarly in the UK, a survey by the

Office of National Statistics indicated that as the lockdown started, around 50% of the British population experienced high levels of anxiety (12). Additionally, psychiatrists in the UK have observed an increased number of patients with suicidal or self-harm ideations (13). Projections have estimated that social isolation could partially contribute to excess mortality from suicide and alcohol abuse in the near future (11).

Cases of domestic violence have also unfortunately increased as lockdowns began (14). As families isolate within themselves, it becomes increasingly challenging for victims to avoid abuse. Rises in domestic violence have been evidenced by significant increases in the number of people seeking help. For example, 549 people in Chicago called domestic violence hotlines the week after the lockdown began in April 2020, which was a substantial increase from the 383 people who used the hotlines during the first week of March 2020 (14). Likewise in the UK, calls to the National Domestic Abuse helpline rose by 25% and 49% in the second and third weeks respectively after lockdown began (15). In contrast, in some cities across the USA, police have observed a drop in calls, which authorities believe may be attributed to the victims' proximity to their abusers and inability to make calls without detection (14).

Although the number of studies is limited, similar psychological trends have been observed in the global South. The loss of jobs and businesses brought on by the lockdown, combined with limited access to mental health resources, has resulted in a 20% spike in mental health cases in India (16). The Indian Psychiatry Society reported that distress calls and suicidal tendencies were alarmingly high as a result of regional lockdowns (16). In Kenya, the mental health climate has also become worrisome. The lockdown has changed social relationships, triggering fear, loneliness, and stress from both financial loss and a lack of resources to meet basic needs (17). Furthering the negative mental health impacts are intensive media, which creates feelings of helplessness and anxiety (17). Indian and Kenyan leaders must work to address the worsening mental health impacts in their respective countries in sustainable, innovative ways that acknowledge the resource limitations in these settings.

Reports of domestic violence have also increased in India and Kenya. Due to lockdown protocols, many Indian women and girls are stuck at home with an abusive partner, resulting in a steep rise of 94% in domestic violence cases (18). Similarly, children's helplines in India have received increasing numbers of calls (18). To make matters worse, there is a loss of support from the outside world. Victims of abuse are unable to escape or congregate with friends or relatives in different homes due to physical distancing protocols. In Kenya, there was a 34% rise in domestic violence calls within the first three weeks of lockdown; this increased violence can result in psychological harm and unplanned pregnancies (19). This tragic surge of domestic violence during COVID-19 has been referred to as the "shadow pandemic," begging for immediate, comprehensive action.

Impacts on society and education

Social structures have been impacted by the pandemic, with worsening inequities across the global North and South. Education is one of the main pillars that drives social mobility, however COVID-19-related lockdown measures and school closures have limited educational opportunities, with negative impacts estimated to affect about 900 million learners (2). Furthermore, given that food insecurity has been shown to have a detrimental effect on children's academic performance, the growing prevalence of food insecurity from ongoing lockdown measures is likely to worsen this crisis (20). Previous studies have shown that children from low socioeconomic backgrounds lose about a month of academic achievement during summer vacation, an observation that was not apparent in their higher socioeconomic counterparts (20). With school closures during COVID-19, negative impacts of even greater magnitude may be observed (20). Moreover, the complete shift to digital educational platforms at home has amplified existing barriers for low-income children, such as turbulent family structures and limited internet access. All together, it is clear that pre-existing conditions of poverty combined with changes during the pandemic have impeded children's wellbeing and could worsen existing disparities in learning outcomes (20).

School closures brought about by the 2009 H1N1 outbreak restricted 27% of Taiwanese individuals from going to work due to parental duties, resulting in job losses for 18% of those families (2). Similarly, school closures have resulted in a reduction of healthcare workers' hours by 6-19% (2). The similarity of policies and outcomes implemented during both the H1N1 and COVID-19 outbreaks illustrates that lessons on mitigating negative consequences were not learned from the past. When faced with a potential outbreak in the future, it is critical to use past learnings to shape future guidelines.

From a societal lens, COVID-19 also introduced struggles for power, with police brutality and corruption rates rising in the global South. In Kenya, obedience to lockdown measures is demanded with force, and sometimes resulting in unlawful killings (21). Unfortunately, this produces counterintuitive results as people are forced into crowded cells, further catalyzing the spread of the virus (21). Unfortunately, documentation of similar situations has been surfacing for other countries, including Chile, Lebanon, and Hong Kong (3).

Conclusion

Overall, although lockdown measures have been taken to curb the spread of COVID-19 in the global North and South, concerns about the unintended consequences of such measures on physical, mental and social inequities remains worrying. Implementing lockdowns was one of the few evidence-based approaches that leaders could lean on at the beginning of the pandemic; however, global infrastructures may not have been sufficiently prepared for such measures (1). It is evident that although such strategies are intended to protect people from COVID-19, they may also yield unintended harms in other ways. In fact, there is a fear that if lockdowns are prolonged,

affected populations may suffer more from the social and economic consequences as opposed to the virus itself (3,12,20). If future lockdowns are imposed, better supports and preparedness must be developed to ensure that people can comply in ways that preserve their physical, mental, and social well-being.

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