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Critical Analysis of COVID-19 Containment Policy in the United Kingdom

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Abstract*:* United Kingdom (UK) is among the top ten countries that were highly affected by COVID-19 pandemic. The government implemented the COVID-19 containment policy with stringent measures including lockdown, quarantine of all travelers from out of the UK and isolation of all COVID-19 positive cases. The number of debates raised on how these measures exacerbated the existing health inequalities. Another discussion raised on how the UK dealt with the pandemic by prompting the change of policy at the speed which was only seen during the war time as attempting to contain the spread of the virus and attempting to attain the heard immunity. Two approaches were defined in the COVID-19 containment policy documents: "mitigation" and "suppression". Suppression was aiming to suppress and minimize COVID-19 virus in the population by implementation of public health interventions. Mitigation was aiming to prevent overburdening of healthcare systems by flattening the pandemic curve and achieve the herd immunity. The public health measures were focusing on protection of vulnerable and high-risk people while allowing transmission in less vulnerable people. Interpretive approach was used in addressing the UK COVID-19 containment policy problem. The author searched the policy documents, debates, government statements and press news from the government officers and peer reviewed articles to critically analyze the COVID-19 policy issues. The author used Bacchi (WPR) framework in this analysis. The study established that UK government promptly tried the best to protect the public health. However, the COVID-19 containment policy in UK exacerbated the existing health inequalities and rose to the fore other socio-economic inequalities that were probably less of a concern prior to the outbreak of COVID-19 and failed to prevent the impacts of the subsequent waves. In preparation of any containment policy in the future, this study calls for the use of mixed health need assessment approaches including epidemiological, corporate and comparative and impact assessment that involve the society as the key stakeholder who is mostly affected by the policy measures of the top-down approaches.

Keywords: COVID-19 policy, Bacchi framework, Inequalities, Mitigation, Suppression; Policy analysis

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Introduction

COVID-19 erupted in December 2019 in China and in March 2020 it started spreading throughout the United Kingdom. The eruption of COVID 19 resulted in the prompt change of health policies at a tremendous pace and speed only seen during the Second World War (Cairney, 2021).The UK government claimed that the COVID-19 containment policies were implemented based on the competence and evidence to make the best decision on time (Calnan,2020). Yet some scholars criticized the government for overlooking the facts and evidence basing on the UK context and reacting very late (Paton, 2020). As a result, the mitigation and suppression policy increased the impact of health inequalities (Wu et al., 2021).

The UK government described the COVID-19 problem as follows: There is a pandemic, then this

problem will eventually become endemic (maybe similar to regular flu); apparently, no effective vaccines. The only way to generate 'herd immunity' is for most people to get infection and recover; ""In the absence of vaccine we need to have several ways to protect the most vulnerable population throughout its spread; the pandemic may just seem real to individuals when people begin to die; the government will set the containment strategies such as lockdown and quarantine and other several interventions that may lead to unexpected consequences" (Cairney, 2021; Allwood and Bell, 2020). The aim of these strategies were, first to contain the viruses to ensure that they spread at the appropriate rate and that healthcare capacity is not overburdened (Cairney, 2021; Fergurson et al., 2020). The second aim was to encourage individuals to modify their habits and take care of themselves (e.g., by washing their hands) and to put their own preferences aside for the benefit of the public safety (e.g. by ensuring at least two meters' distance from one person to another, self-isolation, staying home and wearing face masks (Calnan,2020; Paton,2020).After the COVID-19 outbreak in the UK, several scientists suggested the use of mitigation approach, especially generating the herd immunity. For example, the UK pandemic adviser, Graham Medleys said, "We are going to generate what we call herd immunity," which would require "a nice big epidemic." However, the World Health Organization gave warning to nations who would depend on herd immunity in the control of COVID-19 (Jones and Helmreich, 2020).

The lesson learned from the COVID-19 containment responses should have a significant benefit to the public, but only if they are grounded on critical analysis of policies. Conversely, it has been well recognized that there is limited documented analysis in the public health field (Buse et al., 2012). Therefore, there is a need to analyze policy in order to understand how and why certain policies come to be developed in particular contexts, by who, for whom, based on what assumptions and with what effect. COVID-19 containment policy in UK has been selected due to the impacts that rose from individual level, population and political aspects during the implementation of the COVID-19 Policy.

Policy analysis assists the public to understand how and why the UK COVID-19 Containment Policy raised critical debates among social groups. Additionally, this policy analysis is useful for scholars and policy makers to better understand how research evidences are used in policymaking and to gain a better understanding of the values, interests and political circumstances that support policy decisions. This may enable more effective advocacy for policies that can lead to improvement of public health and reduction of health inequalities during the time of future pandemics.

Table 1: Selected COVID-19 Containment policy documents in the United Kingdom

Policy document	Author /Publisher	Representation of COVID-19 Containment	Solution
Coronavirus: Lockdown law	Barber et al (2021)	COVID-19 is a problem; COVID-19 is a complex social and political problem; COVID-19 is caused by virus and spread by poor follow up of social distancing, hand hygiene and wearing of face masks.	Stay at home to reduce spread of virus; avoid overcrowded environment; Wear face masks and maintain social distancing
Health Protection England (Coronavirus restrictions)	(HPE, 2021a).	COVID-19 morbidity and mortality are problematized	Implement strict measures of lockdown
Health Protection England (International travel and Operator liabilities)	(HPE, 2021b)	Unmonitored international travel is a threat to the rise of COVID-19	Implement fourteen days quarantine to all travelers from outside the UK

Methodology

There are three main methodological approaches to policy analysis (Browne, Coffey, Cook,

Meiklejohn & Palermo, 2019). While Traditional Approaches aim to identify the 'best' solution through undertaking objective analyses of possible solutions, Mainstream Approaches focus on the interaction of policy actors in policymaking. Interpretive Approaches, on the other hand, examine the framing and representation of problems and how policies reflect the social construction of problems (Browne et al., 2019).

This study utilized the Interpretive Approach by conducting a thorough online search of discussion materials available in English on newspapers, government websites, government official statements, NHS reports, peer reviewed journal articles, Advisory Committee and Public Health specialists' opinions on the COVID-19 Containment Policy in UK to determine the country policy perspective. The author identified the COVID-19 policy documents (Table 1, p. 111), analyzed the strategies used by the UK government and reviewed the principles that underpinned the containment methods.

Critical Analysis of the COVID-19 Containment Policy in UK by using Bacchi framework

The problem's representation and framing are at the heart of policy analysis (Browne et al., 2019). Bacchi (2009) defined policy analysis depending on the author's ways to deal with policy problems, whereby is focused on the epistemological assumptions underpinning the management of policy problem. Bacchi's (WPR approach) was used for this policy analysis and the following questions were adopted as a guide (Bacchi, 2009).

1. What is the problem represented to be?
2. What presuppositions or assumptions underlie the representation of the problem?
3. How has this representation of the problem come about?
4. What is left unproblematic in this problem representation?
5. What effects are produced by the representation of the problem?

What is the problem represented to be?

For better addressing this enquiry, the author used Guy Peter's framework to identify the policy problem. According to Peter (2005), policy problems may be described in terms of seven attributes. Understanding of policy problems through those attributes can improve the quality of policy analysis and design. The seven attributes of Peters' framework are solubility, complexity, scale, divisibility, monetarization, scope and interdependence (Peter, 2005). Four attributes which define the UK COVID-19 policy problem have been selected to represent a problem in in this policy analysis.

Complexity

Multiple components of a policy challenges are referred to as programmatic complexity. Its technical aspect is one example (Hoornbeek and Peter, 2017). Level of difficulty in building consensus amongst some of the concerned parties is referred to as political complexity. COVID-19 containment approach is at the 'medium 'complex level. COVID-19 containment strategies like lockdown and quarantine mostly affected poor people, ethnic minority groups and NHS healthcare workers (Cairney, 2020; Blundell, Costa Dias, Joyce & Xu, 2020). This variability brings a complex set of interests politically in dealing with COVID 19.

Scale of the Problem

This refers to the magnitude of the situation and the extent of consequences it has. To put it in another way, can the problem be broken down into smaller manageable components, or it necessitates a general solution or not? (Peter, 2005). COVID-19 containment has been addressed incrementally through other means including requirements for establishment of task force, development of vaccines, targeted programmes to ensure availability of treatment, free COVID-19 testing and case tracking.

Problem Divisibility

This refers to the requirements to ''solve'' the problem (cost and benefit analysis) (Peter, 2005). Policy measures used to deal with COVID-19 affected directly the organizations, groups and individuals' life (Blundell et al., 2020). Different stakeholders such as economists, healthcare and politicians struggled to combat COVID-19 impacts which resulted from lockdown and quarantine. In this case, the rate of divisibility of COVID-19 containment measures is high.

Monetarization

This is intended to encompass the notion of if the policy problem under consideration is expressed in terms of monetary or not, or if money is required in order to solve the problem or at least

to alleviate the identified problems (Peters, 2005). COVID-19 is a highly 'monetized' due to the fact that it is a new disease and it needs a lot of research, manufacturing of vaccines, equipment and funding the organizations and individuals who lost their employments due to containment approaches like lockdown (Mueller, McNamara & Sinclair, 2020; Blundell et al., 2020).

These views construct a general picture of the UK government's problem definition and lead us to understand what is the UK COVID-19 policy problem is exactly. Suppression and mitigation measures are insufficient which could result to more effects in the subsequent waves of COVID-19. Any policy action, whether positive or negative, has severely unequal impacts on the social groups.

What presuppositions or assumptions underlie the representation of the problem?

The UK government used two major categories in containment of COVID-19: mitigation and suppression (Ferguson et al, 2020). The goal of the suppression approach is to reduce the proportion of infected individuals or eliminating transmission of infections between one person to another by lowering the basic reproduction number (R0) to 1 (Chaves et al., 2020; Kayi and Sakarya, 2020). The second strategy (mitigation approach) sought to create herd immunity by allowing people to get infected in a regulated manner (Cairney, 2021). The goal of this strategy was not to reduce reproduction number but to reduce the outbreak's harmful impacts (Ferguson et al., 2020). This strategy was used previously in the control of various disease outbreaks such as plague and typhoid (Jones and Helmreich, 2020). Likewise, during the 2009 influenza outbreak, high-risk populations were vaccinated in the first phase of outbreak (Shim,2011) while other groups who were not categorised as risk people were encouraged to use non-pharmaceutical measures in preventing the transmission (Kayi and Sakarya,2020).

There are two common interventions in disease outbreak circumstances where there is no vaccination or appropriate treatment. The first intervention is at the personal level, which includes diagnosing, providing supportive care and isolating patients as well as prevention of complicated comorbidities (Shim, 2011). The second is at the community or population level based on the prevention of spread of infections among the healthy people (Samuel, 2000; Jones and Helmreich, 2020). In the lack of effective treatment, use of strict measures includes patient isolation in order to reduce person-to-person spread of the disease (Kayi and Sakarya, 2020).

The goal of implementing this strategy (mitigation) is to control the pandemic by allowing monitored spread of the infection among the low-risk people because they have a relatively low risk of complications and death rates, and providing protection to the high-risk group (people with chronic illness and the elderly people) with the aim of avoiding deaths. The ultimate goal is to acquire herd immunity for preventing the rise of future waves of the pandemic as well as to avoid the social and economic consequences of the outbreak, which is arguably the most widely voiced argument for not using suppression technique (Jones and Helmreich, 2020).

How has this representation of the problem come about?

The COVID-19 containment approach by establishing herd immunity is determined by the infectious agent's basic reproduction number. For instance, the proportion of immunization needed for prevention of measles eruption is 93.3% while COVID-19 requires only 66.6% (Kayi and Sakarya, 2020). This lower threshold value, despite the disease's high transmission and fatality rate, is the possible reason why the possibility of herd immunity raised to the forefront of the COVID-19 management agenda.

One of the key principles of mitigation strategy suggest that, due to the fact that there is no effective vaccination or effective pharmacological interventions, social measures are the most important techniques for containing the pandemic (Bruxvoort, et al., 2020; De Ceukelair & Bodini, 2020). The challenge of the social precautions when are loose or abandoned, the outbreak can come back in the form of other waves. In those circumstances, the suppression strategy should be reintroduced because herd immunity would not yet have been attained and vulnerable people in community would still exist (Ferguson et al, 2020; McBryde, Meehan & Trauer, 2020).

The containment of COVID-19 depends not only on the strong healthcare system, but also on the socioeconomic policy proposed by the country in

terms of how these interventions are combined and executed. For example, successful contact tracing necessitates a solid primary healthcare system. UK is one of the countries where contact tracking for COVID-19 pandemic was not highly successful. This demonstrated the weakness of the UK primary health care system. During the second wave of the outbreak, contact tracing appeared to be extremely difficult due to overburdened health care system in the previous wave. Primary healthcare is essential in any outbreak although in COVID-19 pandemic, the primary healthcare system is heavily reliant on secondary or tertiary healthcare which is also overburdened by patients and inadequate health care workers (De Ceukelaire & Bodini, 2020).

The healthcare system capacity is a key factor in reduction of COVID-19 morbidities and mortalities. The adequate number of healthcare providers including doctors, nurses, laboratory technicians, pharmacists and community health workers strengthens the capacity of health-care services. Taking decision to recruit more health care workers during the COVID-19 prevents the overburdening of the healthcare system (McBryde et al., 2020) and ensures that patients receive the care they need. When the enormous needs for healthcare service can't be fulfilled, clinicians are forced to choose between their clients or their health, as seen in recent headlines from other countries.

What is left unproblematic in this problem representation?

The United Kingdom adopted both approaches (mitigation and suppression) in the fight against the COVID-19. The assumption of suppression approach is prevention of increasing number of COVID-19's deaths (Ferguson et al, 2020). However, one of the most difficult aspects of a suppression strategy is maintaining non-pharmaceutical measures until highly effective vaccine is developed (Kayi and Sakarya, 2020. This process was predicted to take several years in the case of COVID-19 (Bruxvoort et al,, 2021). Furthermore, there is no guarantee that the current vaccine will be effective to other variants of COVID-19, and if the outbreak recurs, the suppression techniques may have to be repeated (Bruxvoort et al., 2021).

Unlike previous pandemics, data science is a more widely used tool for predicting the spread of COVID-19 (Zhang et al., 2022). Various studies supported the use of data base to monitor the progress of COVID-19 testing, vaccination and morbidities (Alsunaid, et al., 2021; Zhang et al, 2022). These studies recommended the use of data to guide policy makers to monitor the impact and guide them in planning interventions program, resource management (allocations of resources) according to social determinants of health including age, gender and employment status since the beginning of COVID-19 pandemic (Alsunaid, et al., 2021). The good data management was recommended as model to monitor suppression and mitigation strategies, contact tracing and their impacts in the country (Alan Turing Institute, 2021).

Currie, et al., (2020) reported that the issue of health inequality in COVID-19 mitigation policy increased transmission of infection especially among the asymptomatic or undiagnosed who did not want to expose their status due to fear of isolation which could affect the living especially among the people with low pay jobs and those who depend on daily works in order to feed themselves and their families. However, De Ceukelaire and Bodini (2020) recommended mitigation strategy as way to protect people with chronic diseases and elder people who were categorized as risk groups.

For many years, vaccines are trusted as the first approach in attaining herd immunity as measure of controlling infectious diseases (John and Samuel, 2000). It is worth noting that the calculations of the herd immunity effect depend on the fact that the society structure is homogeneity and that people encounter by chance (John and Samuel, 2000). Dr. William Hanage, epidemiologist at Harvard University, authored an article about the United Kingdom approach to herd immunity, claiming that creating immune by allowing people to be infected in a controlled manner, is not the same as achieving immunity through vaccination. He stated that individuals would fall ill as a result of this action. In other words, the criticisms are predicated on the fact that the concepts of herd immunity depend on "vaccine-induced immunity" (Hanege, 2020). For the situation of COVID-19, the goal is to make sure people are achieving immunity via vaccination than the transmission of Corona virus. Even if the virus were limited to the low-risk group, Dr. Hanage believed that during the peak

of the pandemic, the number of people in need of critical care would be higher than the number of beds available. Another critique directed at the herd immunity strategy in relation to the COVID-19 pandemic is the fact that there was anticipation of another wave due to new COVID 19 variants which could not be controlled by the available vaccine (Hanege, 2020).

COVID-19 is contagious in the asymptomatic phase (Wei et al, 2020), making protection of the high-risk people to be very difficult. It is also one of the factors that make the mitigation approach to achieve the herd immunity strategy be challenging (Fergurson, et al., 2020). Finally, even though the death rate was projected to be minimal, many individuals died due to the high proportion of hospitalized patients (Challen, et al., 2020). Furthermore, given the fact that such hospitalized patients undoubtedly overloaded the healthcare system, the damage was likely to be extensive than anticipated (Miller, Becker, Grenfell &Metcalf, 2020).

Other topic of the COVID-19 containment policy in the UK is the balance of tension between freedom of marketing (economic) and public health, as reflected by the laissez-faire slogan. The reduction of obstacles that inhibit entrepreneurs and investors from doing business is one of the underlying truths that liberal and non-liberal policy have been based on since the 19th century (Boas & Gans-Morse, 2009). The legislation targeting people who do not engage in any economic activities or those with poor income, quietly highlights the hidden fears of economic crisis occurring as a result of strict preventive measures in containing COVID-19 (Blundell et al.,2020). Although the concept of community protection through lockdown appears to be reasonable, UK high mortality rate resulted the government leaders to differ in opinion among those with public health and economic interests.

What effects are produced by the representation of the problem?

The effects of suppression measures such as lockdown, isolation and quarantine produced unfair effect among the social groups (Rust et al., 2009). Prioritizing the life of Corona patients leads to the deaths of others, since individuals avoid going to the hospital in order to protect others or fear of being fined, and the lockdown aggravated morbidities and mortalities linked to other problems like poverty, mental illness, domestic violence and unemployment (Allwood and Bell, 2020).The lockdown emphasises distributional options, as the effect of educational inequalities is more pronounced in public schools than in private schools, and job loss is more likely among low-wage workers. Furthermore, the furlough programme caused more women than males to leave their jobs to care for their children (Layard et al, 2020). UK could learn from Sweden and South Korea and Tanzania where the COVID-19 containment policy abandoned the lockdown approach and realized the good results including undocumented low economic impacts and stability of healthcare system compared to United Kingdom (Born, Dietrich & Müller, 2021).

Social determinants of health inequalities as linked to the COVID-19 policy problem

According to McCartney, Popham, McMaster & Cumbers, (2019) “Health inequalities are the preventable, unfair and unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental and economic conditions within societies, which determine the risk of people getting ill, their ability to prevent sickness or opportunities to take action and access treatment when ill health occurs.” The COVID-19 containment policy is linked to the aspects of health inequalities. World Health Organization (WHO) defines social determinants of health as “unfair and avoidable inequalities in health accessibility influenced by the allocation of income, power, and resources and the circumstances in which people are born, grow, living, working, and age” (WHO, 2020).

People from marginalized populations are more vulnerable to COVID-19 in regard to the social determinants of health, even if they have no underlying health issues. Chronic stress from material and psychological deprivation is linked to immunosuppression (Segerstrom & Miller, 2004). Psychosocial sentiments of inferiority or servitude as a result of being at the bottom of the social hierarchy trigger physiological stress responses (e.g., elevated cortisol levels), which can have long-term negative repercussions for physical and mental health if they are persistent (chronic) (Bambra, Riordan, Ford & Matthews, 2020).

Whitehead and Dahlgren (2006) claim that “all systematic inequalities in health between various

socioeconomic classes within a society" are unfair and avoidable and that they are linked to environmental factors rather than the choice of individual. The following are social determinants of health linked to the COVID-19 policy.

Income and wealth: Some people can save food stuff and medical supplies, have their own houses for self-isolation and employment and have access to physical exercise facilities (Cairney, 2021). Other people have no adequate food and medical PPEs, have limited facilities for exercises and have no secure employments, so they have to risk their health while travelling in public transport in order to secure their jobs (Banks, Karjalainen, Propper, Stoye & Zaranko, 2020; Cairney, 2021). The economic crisis worsens poverty, leading to housing insecurity and long-term psychological health issues (Banks et al. 2020). Migrants have no access to public funding and are subjected to low salaries, hazardous working circumstances and a limited capacity to isolate themselves securely (Clark et al., 2020).

Gender: Women and girls are particularly prone to violence and are always responsible for caring the children and other family members who are less likely to find appropriate PPE (McDonald, 2020). Women who are sex workers are at risk of COVID-19 and abuse (BBC News 2020).

Ethnicity and Race: According to the Public Health England (PHE) report in 2021 COVID-19, related diseases and deaths are more common among Black, Asian and Minority Ethnic (BAME) people, especially among NHS workers. BAME communities are more likely to live in poor houses which are not favourable for isolation, to be using public transportation and to undertake work tasks without adequate protective equipment (Bambra et al., 2020)

Age: Elders are particularly prone to death linked to COVID-19 complications. They have less access to healthcare services and are isolated in care homes where people with dementia live (Mueller et al., 2020)

Disability There is evidence of exceptionally high proportion of people with disabilities who are vulnerable to COVID-19 and death due to lack of social care services (Tidball et al., 2020).

Mental Health: Mental illness is a key indicator of health inequality (Allwood and Bell, 2020; Cairney,2020). People who are mentally ill die at estimated 15-20 years earlier than those who are not mental ill (Liu et al, 2017). Lock down can aggravate mental health issues while limiting accessibility of healthcare services (Allwood & Bell, 2020; Cairney, 2020).

Conclusions and Recommendations

The mitigation and suppression approach are major strategies to combat COVID-19 as demonstrated in COVID-19 containment policy of the United Kingdom with the main aim of reducing the spread of infections and attaining the herd immunity. However, the UK government demonstrated this approach as an alternative option of decreasing the high spread of infections rather than eradicating the virus in its policy context. As a consequence, the temporary strict measures resulted to other long term effects such as loss of employments, overburdening of healthcare systems and exacerbated health inequalities.

The efforts undertaken by UK to protect the public health cannot be underestimated although the outcomes disproportionally impacted the social groups. However, with the view that COVID-19 is a new outbreak with little evidences on containment strategies, mixed approaches in a very short duration are recommended to the policy makers (trial and error) rather than implementing a long term measures like lockdown which eventually can result to other catastrophic effects.

It is clear that social groups in the country are heterogeneity; hence any change and implementation of policy should be evidence based and should consider the impact to the social groups e.g. the measures implemented in the metropolitan cities should not be the same to those in the deprived areas. The policy makers of the recovery policy should gather many evidences including the use of health need assessment (HNA) in order to reduce the health inequalities as highlighted in the UK COVID-19 containment policy.

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