Case Study on COVID-19 policies: Comparing Mask Policy Implementation in G8 Countries

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COVID-19 Mask Policy in G8 Countries

WHAT IS THE KTA PROBLEM?

The world has been struggling to control and limit the spread of SARS-CoV-2 since the virus emerged in Wuhan, South China in late 2019. A very non-specific, blunt public health instrument of lock-down (or ‘quarantine in place’) was used in different variations across the globe. Various countries, including members of the Group of Eight (G8) endured several economic, health and social sequelae from lockdown. In addition to lockdown, promotion of hand and respiratory hygiene as well as physical distancing were used to help limit the spread of the virus. One of the most controversial policies to come into play within the G8 countries and beyond was the use of a cloth face masks to reduce the spread of COVID-19. Given this controversy, we sought to investigate the facemask policies of the G8 countries and examine the effectiveness of these policies in limiting the spread of COVID-19.

WHO DOES IT AFFECT?

Every corner of the world is coping with the COVID-19 pandemic in their own way. The issue of mandatory face mask wearing has been a controversial but a central topic of discussion around the world. Part of the controversy has been the perception that these mandatory mask-wearing policies (when social distancing is not possible) are violations of the rights and freedom of individuals. Due to the global nature of this problem and the solutions to address it, it is hard to determine who is NOT affected by mask wearing policies. Given the diversity of contexts around the globe, our discussion focuses on the G8 countries, which while diverse in culture, language and history, share a similar economic reality.

HOW DOES IT AFFECT THEM?

The consequences of mask-wearing policies are extensive and varied. For example, burdening shopkeepers and business owners to police mask-wearing has economic and financial consequences. While for many, the wearing of a mask seems like a tremendously simple, and effortless way to contribute to the fight against COVID-19, as with any policy, there are often equity and power considerations to be wary of. Again, given the huge variety of ways these policies affect people around the world, we have focused our discussion on the G8 countries, given their similar economic context and the availability of data.
WHAT DO WE KNOW ABOUT IT?

As of July 2020, all G8 countries, apart from Japan, had policies in place to mandate face coverings. These were largely decentralized and non-uniform. While some jurisdictions had no requirement, others mandated masks to different extents. A policy common to many regions was the requirement for face masks to be worn on public transit. Others required masks to be worn in shops specifically, indoor public spaces generally, or anywhere that physical distancing was not possible, including outdoors. Regional mandates were introduced as early as April in Italy and the United States and are continuing to be changed or introduced across G8 countries as of August 2020. Additionally, Italy, France and the UK introduced uniform, nationwide mandates 3-5 months following their first reported cases.

Other variations in policy included the minimum age at which masks were required, usually ranging from 2 to 12 years, and the level of policy enforcement. Some regions had announced a fine for not wearing a mask where it was required, and at least one US state identified imprisonment as a possible consequence. Across many other jurisdictions and nations however, enforcement was not clearly defined. A strength among some regions was taking into account equitable access and widely distributing masks, free of charge. Japan was notable because mask use was not formally mandated, yet a high percentage of the population use masks. The Japanese culture contrasts with that of other G8 countries in their wide acceptance and regular use of masks during respiratory illness, even prior to COVID-19. Culture, in relation to government policy, and uniformity of policy, are key factors in translating knowledge to action.

WHAT DO WE THINK WE DON’T KNOW?

Mask Policy Adherence

Although there is widespread implementation of mandatory mask policies in at least part of all the G8 countries, the level of adherence to these policies is relatively unknown. This not only includes whether individuals have been using masks but also if they have been worn properly and if there is less than optimal adherence, why that may be. Studies should be conducted to investigate levels of adherence and where they are lacking to be able to adjust policies. Along the same lines, surveys should be conducted to investigate the change in public knowledge and perception of masks, especially as most of the G8 countries previously did not have a culture of mask wearing. Potential inequalities in masks adherence along factors such as socioeconomic status, race and geography should also be investigated.

Mask Policy Implementation

Implementation of mask policies within the G8 countries vary greatly based on the jurisdiction -- often within the same country as well (e.g. the United States). Knowledge should be produced regarding the most effective ways in which public health authorities can implement a general masking policy. This includes where policies should be put in place, who exemptions should be made for, and how to create the highest levels of compliance. One of the largest areas of variance is in regards to age exemptions. For example, in Canada, Quebec allows for exemptions for any child under the age of 12 whereas for Ontario this decreases to the age of 2. Little is known about the spread of the virus through children and how they affect community spread. Research should be done to address this knowledge gap. Furthermore, discourse with public health officials and representatives from the community including those who do not agree with masking policy and those who can not wear masks for medical reasons can allow for effective regional implementation.
PROMISING PRACTICES

RECOMMENDATIONS

After thorough investigation of the various ways mask policies were enacted among the G8 countries, as well as the study of individual case studies within countries, several key points stand out as promising practises regarding mask policies. First off, that current evidence suggests public health efficacy of masks and that the goal of governing bodies should be to promote the widespread use of face masks to reduce the spread of COVID-19. Individual case studies in Germany, Italy and the US find associations between face mask mandates and slowed growth rates in COVID-19 infection. Epidemiological modeling in New York and Washington suggest that use of face masks could reduce deaths by at least 2-9%. Japan is unique among the G8 countries in that wearing masks to control the spread of respiratory illnesses was widely accepted and commonly practiced in Japanese culture before the COVID-19 pandemic. As a result, the Japanese government did not need to implement policy to enforce widespread mask wearing. Instead the government focused its efforts on mask accessibility, distributing masks to each household.

Secondly, governments should do their part in educating their population on the efficacy of masks and the proper ways in which to use masks. The Canadian government is an example of this recommended policy. Thirdly, in any public policy, the implementation of healthy policy must go hand in hand with equitable access. Japan, certain regions of Italy, and many businesses across the G8 countries made it part of their COVID-19 containment measures to distribute masks free of charge to the general population or specifically to employees working in close proximity to others. Universal mask-use can potentially reduce transmission by apparently healthy but potentially infected individuals during the lifting of nation-wide quarantines and economic shutdown.

ADAPTATION FOR LOW-RESOURCE SETTINGS

Many low-income countries face a crisis due to lockdown measures in response to COVID-19. Sudden closures of industries, decreasing remittances flow and closure in overall economic activity are affecting populations that are marginalized or of lower socioeconomic status most severely. In the context of face masks, an important consideration to take is accessibility and affordability. In fact, a step taken by jurisdictions in several G8 countries was the distribution of face masks free of charge, which could be emulated. Another idea is to support small businesses or individuals who are able to make re-usable cloth masks at home for wider distribution. This is more sustainable environmentally as well as economically for at least some small businesses who may have otherwise suffered significantly due to the economic pause during lockdown. Given that masks are mandatory in some places, it is important that enforcement is applied equitably. Low resource settings and marginalized individuals may have barriers to non-use of face masks, and it is critical to study the context and limitations of their circumstances as opposed to employing punitive policies. Applying an equity lens is essential.
Attitudes towards the use of face masks have varied throughout the pandemic, as have mask-related public health policies. This case study specifically reviews the mask policies of the Group of 8 (G8) countries due to their extensive global influence. The purpose of this case study is to provide insights on the various mask policy strategies enacted in the first few months of the pandemic (January 2020-August 2020). We review the empirical literature as well as media and government reports and include both quantitative and qualitative aspects of mask-relevant knowledge. In addition, this case study aims to approach the implementation of mask policies from an equity lens and provides recommendations on how to apply the knowledge gained from our analysis.

The World Health Organization (WHO) published guidance on April 6, 2020 cautioning policy makers about mask use due to insufficient evidence that it could be used to prevent the spread of the virus. Initially, they did not encourage the purchasing of surgical and medical masks for fear of improper use, and disregard for other public health measures (e.g. physical distancing, hand hygiene) due to a false sense of security. Additionally, due to panic buying and diminishing stocks of medical grade masks, there was a fear of insufficient personal protective equipment (PPE) supplies for frontline workers who were at greatest risk. Accordingly, in most G8 countries, there were no mask-related public health policies initially implemented in response to COVID-19. However, emerging evidence of pre- and asymptomatic transmission as well as case-study evidence provide support for universal mask use to limit community spread of the virus, especially as many countries began lifting nation-wide quarantines. On June 5th, 2020, the WHO revised their statement and began to recommend that public policy promote face coverings, in combination with hand hygiene, physical distancing, and other guidelines outlined at the community level.

The G8 countries all took different approaches with regard to implementation of mask policy. Apart from Japan, all other countries took self-determined decisions to mandate face coverings or not to. France, Italy and the United Kingdom introduced a national mandate, following the regional mandates originally implemented, whilst the other G8 countries took a primarily decentralized approach with every jurisdiction responsible for their own policies. As of late August 2020, France, Italy, Germany and the UK have mask policies mandated for the entire country whereas, Canada, Russia and the US have mask laws in at least one regional jurisdiction. The timing of mask law implementation varied drastically between countries. On March 31st, regions in Germany became one of the first areas within the G8 countries to implement a mask policy. This was followed shortly by Italy’s Lombardy region in early April. On the other hand, regions in Canada and the US began mandating masks in August (e.g. Chatham-Kent, ON, Canada; August 14th). Timing within countries also varied as well. This can be seen in the US where New Hampshire implemented its first policy on August 11, whereas New Jersey had done so by April 8 of 2020.

Enforcement of mask-policies also varied across G8 countries. In addition, the presence and amount of fines varied drastically between all the countries with some US and German states imposing imprisonment for non-compliance. In most regions however, no formal means of enforcement was identified, and in many areas such as certain Canadian municipalities, priorities were more for education than enforcement. Furthermore, many countries have also prioritized mask accessibility with most countries providing free masks for their citizens in at least some capacity. Countries have provided other initiatives as well, including some Northern Territories in Canada which provide incentives for local businesses creating masks.
Each country and even jurisdictions within each country also had their own recommendations or requirements with respect to the locations where masks are required and to which age group masks mandates applied. For most states and regions that required face masks, the policy was applied to public transport and shops, or even enclosed spaces overall. In outdoor spaces, masks are more often recommended, and required only where physical distancing is not possible, if at all. Generally, face coverings are required or recommended in any public space where a safe distance, as defined by the country’s public health officials, cannot be maintained. Some US states required anyone 6 years and older to wear a mask, while other states set the minimum age at 2 years. In France, the mandate applies to children over 11, and in Canada the recommendation is for children over 10. Furthermore, those with certain medical or physical challenges are exempt.

Japan is a unique example, since wearing masks to control the spread of respiratory infections is widely accepted in Japanese culture. The Japanese government did ensure the distribution of masks to every household, even without mandating the policy. As early as March, mask wearing was common among the Japanese people. In Canada and the US, it is not common to wear masks and recommendations to cover up the nose and mouth were confusing or even opposed.

Through this analysis, it is clear that there is a general consensus by all countries to promote the use of masks to limit the spread of SARS-CoV-2. The methods in which to enforce this however, varies greatly between the G8 countries. However, three key takeaways that have been observed through this analysis are:

1. The best available evidence suggests the public health efficacy of using masks to limit community spread of the virus
2. Governments should do their part to educate the population on the scientific reasoning, proper use and benefits of mask wearing in limiting the effects of COVID-19
3. Governments should ensure equitable access to face masks.

As we learn of the significant impact that government messaging can have on public behaviour, it is essential that public health policy and announcements are evidence-informed and accessible.
Knowledge to Action

Putting evidence-informed policies on the political agenda

- In order to enact evidence-based policies, researchers have a responsibility to relay the evidence to policymakers in an effective and consumable manner. Researchers should use the proper language to translate their knowledge to policymakers, taking into consideration what they are most concerned with. Conversely, policymakers need to be actively listening to what evidence suggests, understand the ever-changing nature of science, and relay their needs in terms of evidence to researchers.
  - This is especially important with mask policies as the evidence towards the efficacy of proper usage of masks may still change as more research is conducted. Policymakers and researchers should be ready to accommodate recommendations and mask policies accordingly.
- Dominant paradigms and popular opinion have tremendous influence on policies and policymakers. Researchers should promote education through the provision of clear resources of what current evidence states. This may include the use of various forms of media (e.g. news, social media).
  - International organizations such as the WHO need to take special care in their messaging due to their global influence and impact on dominant paradigms.
  - We can see this through the paradigm shift in mask wearing throughout the first few months of the pandemic.
- Competing research priorities require prudent funding allocation, balancing the need for evidence on therapeutics, vaccine development and mask use. These decisions should be made by multidisciplinary teams.

Considerations in implementation

Equity

- People in low income areas or of low socioeconomic status are disproportionately affected by COVID-19. Masks may be inaccessible or expensive to obtain. As a result, these individuals may be more likely to be infected and to be burdened with expensive fines for failing to wear masks.
- It is essential that there is equitable access to masks. Some strategies to improve accessibility:
  - Provide protective supplies such as masks to rural/northern areas as well as to areas with highest infection rates.
  - Make masks available free of charge in closed public spaces.
  - Offer ideas on alternatives to surgical masks that cover mouth and nose, such as cloth masks that can be made at home or purchased locally.
  - Provide incentives for local businesses to create face coverings that are affordable and sustainable.
**Culture**
- During the COVID-19 pandemic, many differences were found among different cultures in the reactions to combat the outbreak. Usage of masks as a protective measure has varieties of acceptance in different countries.
- Long before the current pandemic started, mask use was common and accepted in most of the Asian countries (collectivist worldview). In some Asian countries, masks are widely used for safety from dust or pollutants as well as during illness to protect others. In many Western countries on the other hand, there is more discomfort with mask use or even opposition (worldview placing more value on individual freedoms).
- Culture and perceptions play vital roles in influencing policy makers, such as in the decision to mandate mask wearing.
- During this particular outbreak, more emphasis can be placed on education about proper mask use and the possible positive impact of masks.

**Stakeholders**
- As SARS CoV-2 is a virus that can infect everyone, compulsory mask policies within a region will almost certainly apply to everyone as well. As such, we need to ensure that the voices of all sub-groups within a population are heard and have a seat at the table to discuss their needs, to understand how best to implement mask policies, and how to maximize efficacy and compliance of the policy. These sub-groups include:
  - Healthcare workers and essential workers who should be prioritized for masks
    - How do we ensure that there is a sufficient supply of medical and surgical masks for frontline workers?
  - Those with medical conditions preventing them from wearing masks
    - How do we properly accommodate this population? How could they identify themselves?
  - Face mask manufacturers
    - How do we ensure that manufacturers have enough supply? Should the government provide funds and materials to manufacturers?
  - Those who do not agree with the use of face masks
    - How do we considerately take in their views? How do we address the issues they are concerned with?
- A collaborative, participatory approach that prioritizes health, safety, and social justice is essential.
REFERENCES


REFERENCES


