

Iran physical distancing policies and epidemiology from January - September 2020: A case report

Policy Frameworks and Epidemiology of COVID-19
Working Group

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Policy Frameworks and Epidemiology of COVID-19: Iran Case Report

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Conflicts of Interest

No conflicts of interest were reported.

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Links to supplementary materials

[Study proposal](#)

[Informed consent](#)

[Interview guide](#)

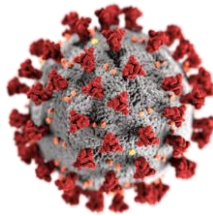
COVID-19 [Country characteristics database](#)



I. Introduction and project description

A new disease that spread around the world

On December 31, 2019, the World Health Organization (WHO) was notified of a cluster of individuals with pneumonia of unknown cause in Wuhan, China (1). On January 12, 2020, China shared the genetic sequence of the novel coronavirus with other countries to help develop diagnostic tests (1). Thailand reported the first known case of the novel coronavirus outside of China on January 13, 2020. WHO declared the novel coronavirus (2019-nCoV) outbreak a Public Health Emergency of International Concern on January 30, 2020 with 7,711 confirmed cases, 12,167 suspected cases, and 170 deaths in China and 83 cases in 18 countries outside of China (1,2). The disease was later named COVID-19 for coronavirus disease 2019 and the virus referred to as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (1). WHO declared COVID-19 a pandemic on March 11, 2020 (1).



Physical distancing policies and knowledge gaps

As an emerging infectious disease, there were originally no effective vaccines or preventive treatments for SARS-CoV-2. Therefore, governments have had to rely on the use of public policies to combat the spread of the virus (1-4). Creating policies has been difficult due to the large amount of information and ongoing uncertainty around the characteristics of the virus and who it affects (4). One of the most commonly used policies to mitigate (slow) the spread of the virus that causes COVID-19 centres on physical or social distancing, which relies on separating people to reduce the transmission of the virus (5). However, it is still unclear when is the best time to institute such policies and what happens when distancing policies are eased. There are many aspects of distancing, such as recommendations for maintaining a physical distance in public, banning group gatherings, or complete lockdowns, that complicate their assessment (5). There are also many factors that have been attributed to people acquiring or having a worse outcome from COVID-19 (6-11). However, there is no harmonized database available with all the policies, epidemiology and contextual information that is needed in order to perform comparative analyses useful to informing policy making.

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About this project

The Policy Frameworks and Epidemiology of COVID-19 Working Group was developed after a “CONVERGE Virtual Forum: COVID-19 Working Groups for Public Health and Social Sciences Research.” A group of international researchers convened to explore what social distancing policies countries implemented and their effects on the epidemiology of COVID-19. The Working Group was further supported through an award from CONVERGE and the Social Science Extreme Events Research (SSEER) Network. CONVERGE is a [National Science Foundation](#)-funded initiative headquartered at the [Natural Hazards Center](#) at the [University of Colorado Boulder](#).

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In collaboration with:



Policy Frameworks and Epidemiology of COVID-19: Iran Case Report

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II. Methods

Research design

A qualitative embedded multiple case study research design was used to compare countries (or subnational jurisdictions, such as provinces, states or territories). The suite of public policies and resulting changes in the epidemiology of COVID-19 are examined within their specific country setting. Our cases start in January 2020 and end in or around August 2020. (Please see full [study proposal](#)). Research ethics approval was obtained by the Hamilton Integrated Research Ethics Board (HIREB) (Project # 11243).

Data collection

For each country, the setting, such as health systems, political systems and demographics were described to help with interpretation of findings and potential transferability, or the degree to which findings are applicable to other sites or future research.

Publicly available data was first collected on the jurisdiction following a standardized data collection form. Epidemiological data was drawn from publicly available data. WHO, World Bank, Central Intelligence Agency and other publicly available sources were used for timelines and country characteristics, where possible. Other sources of information included governmental and non-governmental websites, news articles, government reports, and peer-reviewed journals.

Next, key informant interviews were conducted to fill in gaps, verify information found through the documentary searches, and identify further participants and documentary sources of relevant information. (See [informed consent](#) and [interview guide](#)) Key informant interviews were conducted with policymakers, health workers, researchers and other stakeholders as appropriate to fill in knowledge gaps.

Data analysis and presentation

Our [COVID-19 policies](#) and epidemiology databases harmonize data on setting characteristics, policies, demographic characteristics and epidemiological risk factors and outcome metrics. These will further be described in single country or jurisdiction case reports. Comparisons will be selected based on both literal and theoretical replication. Countries that have similarities in either policies or epidemiological trends can be considered literal comparisons, whereas countries that differ will be used as theoretical comparisons. These comparisons will be submitted to peer-reviewed journals for publication.



III. Findings

A. Setting characteristics

Geographic, environmental, social and economic contextual factors

Iran is in the WHO Eastern Mediterranean Region (12). Iran has a population of 82,913,906 and a population density of 50.22 people per km² (13,14). However, the population is concentrated in the north, northwest, and west, reflecting the position of the Zagros and Elburz Mountains; the vast dry areas in the center and eastern parts of the country, around the deserts of the Dasht-e Kavir and Dasht-e Lut, have a much lower population density.

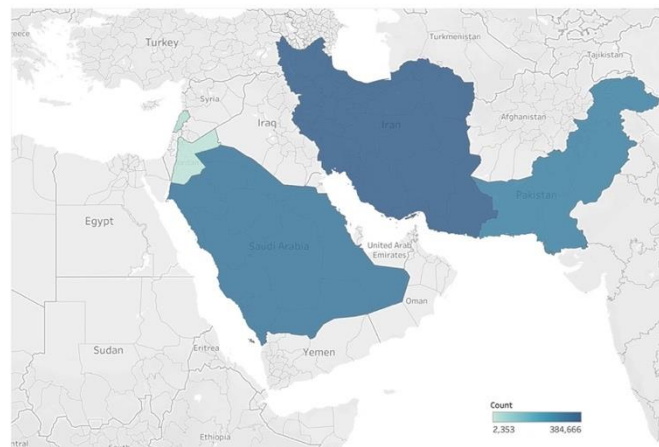


Figure 1: Map of COVID-19 cases in Iran and surrounding countries – September 1, 2020 (15)

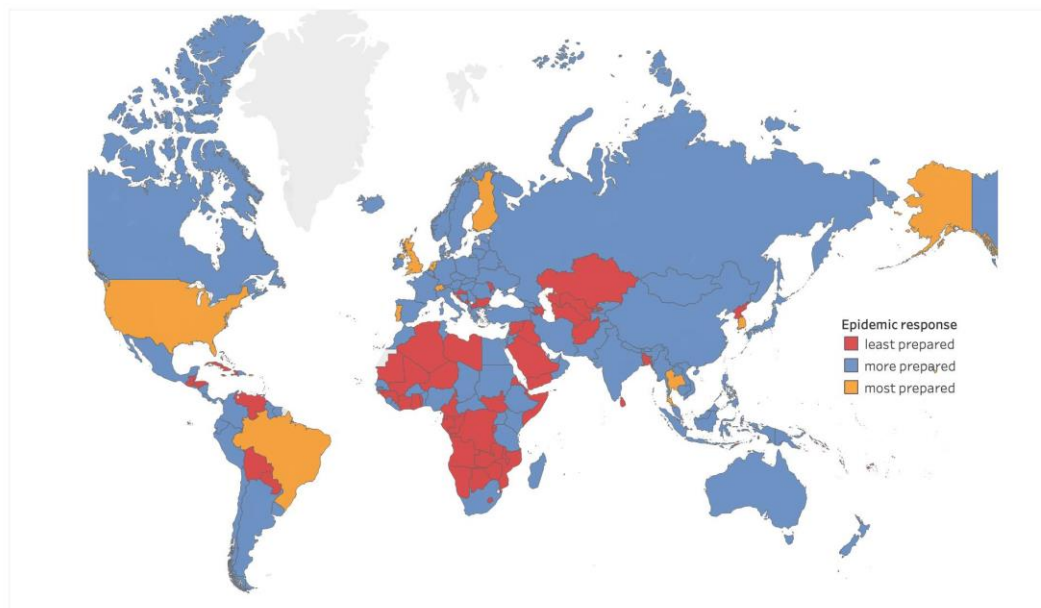


Figure 2. Global Health Security Index Epidemic Preparedness Rank Category (16)

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Table 1. COVID-19 relevant contextual factors for Iran

Global Health Security, 2019 (Overall Index Score out of 100 and category) (16)	37.7 - More prepared
Global Health Security, 2019 (Epidemic Preparedness Index Score out of 100 and category) (16)	33.7 - More prepared
Particulate matter (PM2.5) air pollution, mean annual exposure, 2017 (micrograms per cubic meter) (17)	38.98
PM2.5 air pollution, population exposed to levels exceeding WHO guideline value, 2017 (% of total) (18)	100
International migrant stock, 2015 (% of population) (19)	3.45
Trust in national government, 2018 (% of population) (20)	66.51
Mobile cellular subscriptions, 2019 (per 100 people) (21)	142.39
Individuals using the internet, 2018 (% of population) (22)	70
Index of economic freedom, 2020 (Rank and category) (23)	49.2 - repressed
World Bank classification, 2020 (24)	Upper middle
Gini Index, 2017 (25)	40.8
GDP per capita, PPP, 2019 (Current international \$) (26)	-
GNI per capita, PPP, 2019 (Current international \$) (27)	-
Current health expenditure, 2017 (%) (28)	8.7
Vulnerable employment, total, 2020 (% of total employment) (29)	41.28
Vulnerable employment, female, 2020 (% of female employment) (30)	41.88
Vulnerable employment, male, 2020 (% of male employment) (31)	41.14
Homelessness, 2016 (%) (32)	-
Adult literacy rate, 2016 (%) (33)	85.54
Literacy rate, adult female, 2016 (% of females 15 and above) (34)	80.79
Literacy rate, adult male, 2016 (% of males 15 and above) (35)	90.35
Primary school enrolment, 2017 (% net) (36)	99.7

GDP - gross domestic product; **GNI** - gross national income; **PPP** - purchasing power parity



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Population health characteristics

Life expectancy at birth in Iran is 76.48 years (2018) (37). For males, life expectancy at birth is 75.41 years, and for females it is 77.67 years (38,39). Non-communicable diseases are believed to play a role in who develops severe symptoms of COVID-19. In Iran, the proportional mortality from cardiovascular diseases was 43%, cancers 16%, chronic respiratory diseases 4%, and diabetes 4% (40). (See Figure 3.) The probability of dying between ages 30-70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease was 14.8% for all adults, and 16% and 13.7% for males and females, respectively (41).

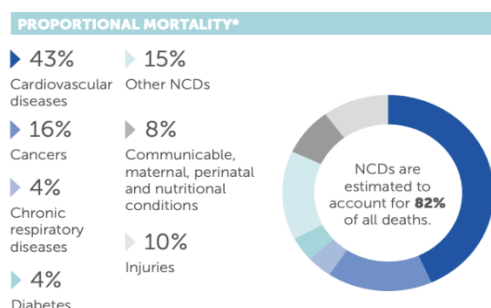


Figure 3. Proportional mortality from non-communicable diseases (NCDs) - Iran, 2016 (40)

Table 2. Age and health characteristics for Iran

	Male	Female	Total
Population ages 0-14, total, 2019 (% of total population) (42-45)	10,492,394 (12.65)	9,949,802 (12.00)	20,442,140 (24.65)
Population ages 15-64 (% of total population) (46-49)	28,685,738 (34.60)	28,513,865 (34.39)	57,199,667 (68.99)
Population ages 65 and above, total (% of total population) (50-53)	2,711,765 (3.27)	2,560,341 (3.09)	5,272,099 (6.36)
Current tobacco use prevalence, total, 2018 (%) (54)	24.6	3.5	14
Raised blood pressure (Systolic blood pressure \geq 140 or Diastolic Blood Pressure \geq 90), ages 18+, 2015 (%) (55)	18.1	16.1	17.1
Raised fasting blood glucose (>7.0mmol/L or on medication), ages 18+, 2014 (%) (56)	9.6	11.1	10.3
Prevalence of obesity among adults (Body Mass Index \geq 30), 2016 (%) (57)	19.1	31.8	25.5
Prevalence of Human Immunodeficiency Virus (HIV), 2019 (% of population ages 15-49) (58)			0.1
Bacillus Calmette-Guérin (BCG) Immunization coverage estimates (%) (59)			99
Prevalence of undernourishment, 2018 (% of population) (60)			4.7

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Governance and health systems

Iran is an example of a theocratic country with power for health delegated to the Ministry of Healthcare and Medical Education (61). The current Principlist (right wing/conservative) government has been in place since Feb 11, 1979 (62, 63). In Iran, there are 30 provinces, which are responsible for implementing provincial policy but also developing local policies on public health issues (64, 65). Public health and healthcare in Iran have different governance, funding and delivery structures. The funding of health financing is a mix of both public and private. There are 336 health districts, which are responsible for coordinating hospital and physician services (66).

Table 3. Political and health system indicators for Iran

Fragile States Index score, 2020 (maximum 120, higher is worse) (67)	83.4
Fragile States Index rank, 2020 (out of 178 countries, higher is better) (67)	44
Global Freedom score and status, 2020 (68)	17- not free
Internet Freedom score and status, 2020 (69)	15- not free
World press freedom index, 2020, global score (0-100, lower is better) and rank (out of 180 countries, lower is better) (70)	64.41 – 173/180
Physician density, 2018 (physician/1,000 pop) (71)	1.58
Hospital bed density, 2014 (beds/1,000 pop) (72)	1.5



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Pandemic experience and preparedness

MERS-CoV:

The most recent previous experience of Iran with an epidemic was on May 8th 2015, reporting a case of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV). This case referred to a 61 year old male returning from Umrah with the history of contact with two individuals experiencing flu like symptoms (73). The WHO advised people with diabetes, renal failure, and chronic lung disease to avoid close contact with animals particularly camels and to avoid drinking raw camel milk or eating uncooked meat (73).

H1N1:

In 2009, Iran had 3672 cases of Influenza A (H1N1) and 140 deaths most of which had no underlying health conditions (74). The reports indicate that 66% of the patients received antiviral therapy however, the timing was not clearly stated. In order for the antiviral treatment to be effective, it should be administered within the first 48 hours. There is not enough information about the H1N1 pandemic preparedness for Iran (74).



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B. Policies and epidemiology

Cases and social distancing policies

Iran's first case of COVID-19 was recorded on February 19 and had reached 100 cases by February 26, 2020 (75). A state of emergency was declared on March 9, 2020; at that time, there were 7161 cases and 237 deaths (76). Figure 4 shows the number of daily cases and deaths in Iran and dates for each of the included policies from January to September 1, 2020.

Iran COVID-19 case & death counts and physical distancing policies

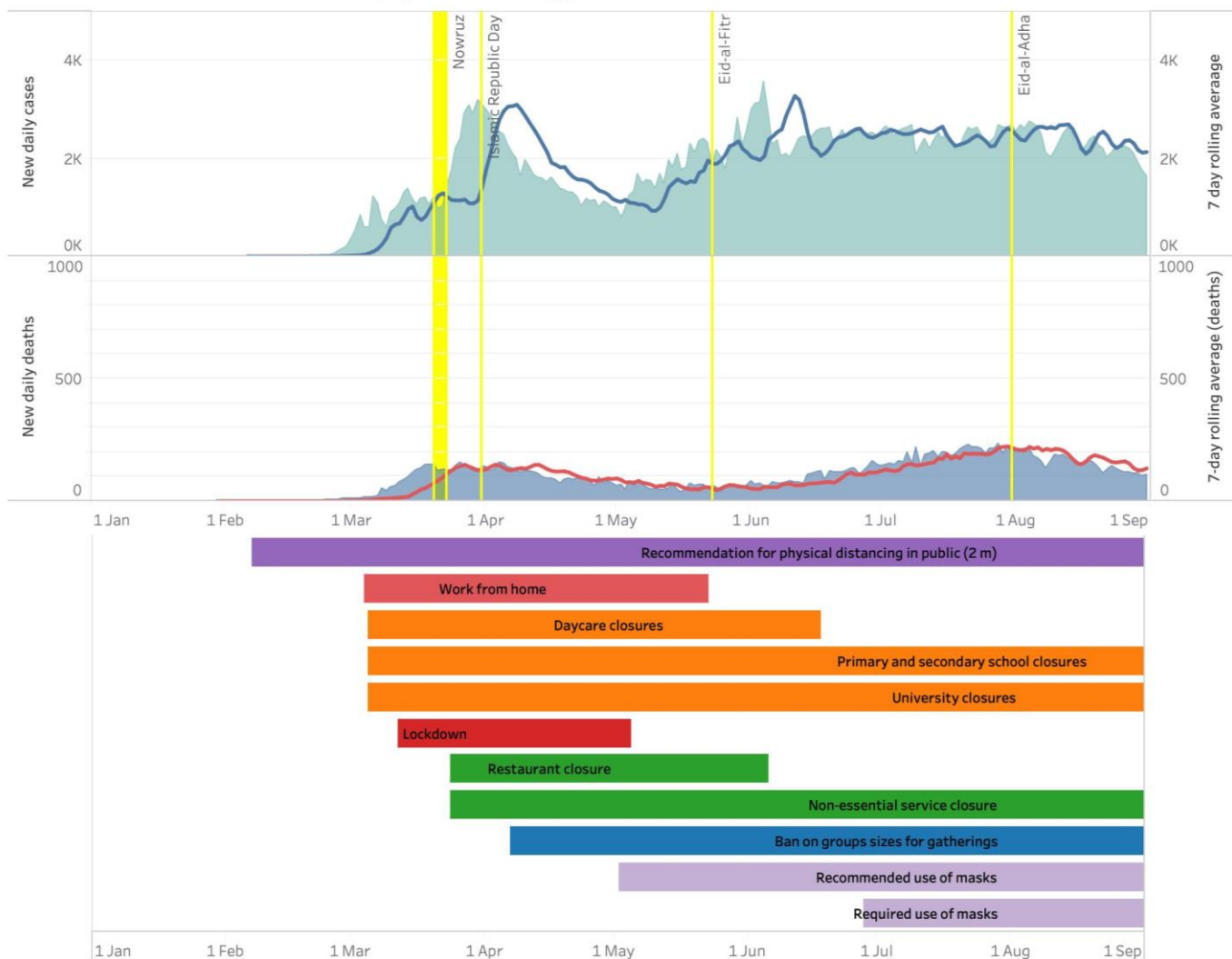


Figure 4. Number of reported COVID-19 cases and deaths in Iran with select policies from January to September 1, 2020



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Description of events in Iran

The main spokesperson for Iran's COVID-19 response has been Dr Sima Sadat Lari (77). At the federal level, President Rouhani has provided messages about the policy actions, and at the provincial level, each premier has been responsible for the guidance on COVID-19 measures in their specific province. In the capital city, Tehran, Dr. Alireza Zali is the main person responsible for operations regarding COVID-19 policies in the National Taskforce on Combatting COVID-19 (78).

Iran was one of the first countries to deal with the coronavirus outbreak after its emergence from China, which was mistakenly considered to be the "seasonal flu" (79). The first city in which the earlier cases of the virus was announced was Qom. Due to the presence of large religious schools in this city, the infection had a rapid rate of transmission. Despite the increase in the number of cases, the government did not quarantine Qom due to the lack of awareness about the nature of this disease (80).

Iran had its official first death case of COVID-19 on February 19, 2020. The government established the National Taskforce on Combatting COVID-19 with the purpose of controlling the coronavirus in collaboration with the Ministry of Health and Medical Education of Iran and chaired by the President (81). The organization requested medical supplies from the federal government on February 27 (76). They also created the committee for the health of workers in prevention and controlling the virus. On February 28, they requested their suggested policies to the premier of Tehran. This included, requesting the cancellation of the Friday Prayer event as well as delaying legal and criminal cases, forensic medical records, and medical legal cases (76). On February 29, 56 assessment centres were working 16 and 24 hours a day in the capital city (82). On March 2nd, they started contact tracing of the infected patients using an Iranian-made mobile app called AC19; the use of the app was voluntary (83). They requested the medications Favipiravir and Remdisivir to be distributed to the health sectors on March 3 (76). On March 5, they requested volunteer nurses from the Ministry of Defense and requested postponing the training of conscripts. On the same day, the government ordered all educational institutions to be closed and postponed all religious and artistic events (84). All elective medical procedures were postponed to 4th of April. They recommended the elderly to isolate themselves and avoid interactions with other family members as much as possible (76).

The government allocated free sanitizers and masks to the provinces more affected by the virus on March 4 and 5. The Islamic Revolutionary Guards Corps (IRGC) provided and distributed the medical supplies to different parts of the country in the beginning of the outbreak (85). Due to the shortage of medical supplies including hospital beds, ventilators, personal protective equipment (PPE), and test kits, other countries like China and the UK started supporting Iran (86,87). On March 10, the public and private businesses were closed and on the 11th, the government stopped all film production projects. They started checking the temperature of the passengers in the interprovincial terminals on March 12. They also increased the working hours of the pharmacies to 24 hours (76). On March 16, they started disinfecting pedestrian walks and public places and created a plan for large-scale testing (76).



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However, some cities had already started doing so in early March. In addition, the federal government asked the military force, fire department, and special police sectors to contribute to the responses (88).

The outbreak coincided with the Persian New Year (Nowruz), the time when most people crowd the streets and organize large gatherings. The Organization also requested the Iranian media services to show advertisement informing people to stop them from crowding the public settings (76). Prior to the Nowruz Holidays, working hours of the supermarkets and convenience stores were increased. On 25th of March, after the Nowruz holidays, they closed all non-essential businesses and banned intercity travels on March 26 (76). Restaurants were also closed in the same day but reopened in 6 of June with respect to the safety protocols (89).

On March 27th, public transportation continued with limited capacity and only in following with the safety protocols (90). On May 2nd, they recommended the mask use in public transportation but in 28 of June, they required everyone to have face covering as they will face fines if they don't wear a face mask in public (91). On May 2nd, they ordered COVID-19 testing for the passengers arriving from designated countries (92).

Iran offered financial support to the citizens and the businesses. As of March 26, 2020, they started economic relief programs for families impacted by COVID-19. As such 200K Toman was offered to singles, 300K Toman was offered for couples, 400K Toman for three people in a household, 500K Toman for four and 600K Toman for six people in a household. As for businesses, 75K billion Toman loans for businesses, with interest rates at 12% to be paid back in 2 years (93).

According to Mehr News, the prices for basic necessities keep increasing. It was also reported that hoarding was a rising issue (94). As for telehealth, people could use the Snapp Doctor platform to consult doctors from different specialties. In-home Coronavirus testing was also available for people who resided in Tehran and Karaj (95). There were multiple online websites offering medication delivery. The website worked by people sending pictures of their prescriptions and showing the physical copy at the time of delivery (96).



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Some recommendations presented include (97):

-Even though there was a state of emergency, and for some cities like Tehran and Ghazvin hospitals reached capacity and did not have available beds for COVID-19 patients, people still did not understand the situation and the need to practice social distancing

-Several news platforms warned people and informed them of the rising number of cases but people were getting used to hearing the news and not paying much attention

-Even though protocols were placed for a reason in all the public sectors, there was not really much enforcement of them. You could see some people being really careful of the rules, but you could also see anti-maskers who would even argue with others about the importance of wearing a mask

-Policies meant to prevent people from travelling to the red zone provinces did not stop people from doing that. There were some documents that you could request from the government which gave you the pass for moving between provinces and they were not very strict about issuing them.

-Public transportation as still the same as before, the subway was still filled with people. People would still need to go to work, there were not many opportunities for working from home.

-Businesses were supposed to be closed, but in reality, everywhere was open. You could even dine in restaurants and coffee shops.

-It is important not just to issue policies, but to also consider how people see and react to these policies. We have to find out why groups of people do not follow the suggested policies and continue with their actions.



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Disproportionately affected populations

There are certain groups that have been affected disproportionately in Iran.

Afghan Refugees

Iran is among the ten countries with the highest number of refugees (98). Due to the many similarities in culture, language and religion, there are around 2 million Afghan immigrants living in Iran with only 40% of them having asylum cards (99). The majority of this population faces problems for accessing healthcare especially during the COVID-19 pandemic. In a matter of medical emergency, the lack of insurance would result in not being referred to medical centres and the prohibition on hospitalizations. In addition, the government closures have also impacted the income of these refugees considering that most Afghans are day labourers with an average monthly income of 150 USD. It is worth to mention that, due to the gap in education and knowledge of these refugees, they would hesitate to refer to hospitals in case of an illness. The other issue concerning the Afghan immigrants is that they live in large groups in different parts of the city, which makes it difficult to control the outbreak of coronavirus (100).



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Comparisons with other jurisdictional responses

There are many concerns in trying to compare countries' responses to COVID-19. This is shaped by limitations of the data itself and differences in contextual factors. A separate paper by this working group describes limitations of COVID-19 data. (Submitted) Table 4 presents a list of countries and their use of different social distancing policies.

Table 4. Comparative national-level responses to COVID-19 by country – updated August 21, 2020 (filled in means policy was implemented)

Category	Policy	AUS	BGD	BRA	CAN	CHN	CUB	DNK	DJI	EGY	ENG	FRA	GHA	IND	IRN	IRE	KAZ	NLD	NZL	NIR	PAK	RUS	SCL	SLE	SGP	KOR	SRI	UAE	VN	WLS	
Government	State of emergency																														
Case Management	Recommended self-isolation after travel																														
	Recommended self-isolation for cases																														
	Recommended self-isolation for symptoms																														
	Recommended self-isolation for contacts																														
	Separation of cases or suspected cases within institutions																														
Closure	Non-essential service closure																														
	Closing restaurants																														
	Suspended elective medical/dental procedures																														
Detection	Surveillance systems																														
	Contact tracing																														
	Assessment centres																														
	Drive through testing centres																														
	Mass fever screening in public transportation																														
	Economics	Economic relief policies for individuals/families																													
Economic relief policies for businesses																															
Housing economic relief																															
Anti-hording																															
Anti-price gouging																															
Education	School closure - daycare																														
	School closure - elementary school																														
	School closure - high school																														
	University closure																														
Health Workforce	Health workers allowed to only work at one site																														
	LTC Health workers allowed to only work at one site																														
Healthcare Resources	Audio/video telehealth																														
	Telehealth access to prescription medication																														
Physical Distancing	Physical distancing recommendation																														
	Ban on group size																														
	Quarantine orders after travel																														
	Quarantine orders for cases																														
	Quarantine orders for contacts																														
	Isolation for vulnerable populations																														
	Work from home/remote work																														
	Recommended use of masks/PPE for public																														
	Required use of masks/PPE for public																														
	Quarantine for "at risk" or priority neighbourhoods																														
	Lockdown																														
	Public Decontamination	Public decontamination transit																													
Public decontamination streets																															
Travel bans	International bans for non-essential travel																														
	Screening at airports/borders																														
	Closing public transportation																														

AUS–Australia, **BGD**–Bangladesh, **BRA**–Brazil, **CAN**–Canada, **CUB**–Cuba, **DNK**–Denmark, **DJI**–Djibouti, **EGY**–Egypt, **ENG**–England, **FRA**–France, **GHA**–Ghana, **IND**–India, **IRN** – Iran, **IRE**–Ireland, **KAZ**–Kazakhstan, **NLD**–Netherlands, **NZL** – New Zealand, **NIR**–Northern Ireland, **PAK**–Pakistan, **RUS**–Russia, **SCL**–Scotland, **SLE**–Sierra Leone, **SGP**–Singapore, **KOR**–South Korea, **SRI**–Sri Lanka, **UAE**–United Arab Emirates, **VN**–Vietnam, **WLS**–Wales



IV. Discussion of main findings, limitations, and next steps

In the beginning of the outbreak in Iran, one of the approaches that impacted the rise in the number of cases was keeping the borders open and accepting all flights from China (101). Keeping the air travel open for international students arriving from Wuhan caught a spike in spreading the disease early on. The first official death case reported in Iran was on the 19th of February (102), which was a few days after the Independence Day (22 Bahman), one of the most important political events in Iran. As a result, the government held their usual ceremonies for this event and allowed large crowds with the purpose of celebrating 22 Bahman without protocols in place. It was due to the lack of awareness of this disease that led to the vast spread of the virus. The next event that triggered this spike was the parliament election held on February 21 despite the presence of COVID-19 cases among people in the public. The government had not announced any protocols or policies regarding prevention of the virus, therefore, large gatherings in the voting centres and events prior to the legislative election caused a drastic increase in the number of infected people (103). Qom was the first city with the COVID-19 infection, this was originally due to the international students from Wuhan studying in the religious schools spreading this virus among other students. A delay in school and university closures contributed to the infected students spreading the disease to their families and friends in different provinces. In the earlier stages, the inconsistent delivery of government policies resulted in the lack of attention of the public to this issue, worsening the pandemic (104).

Media coverage on this matter was limited and the national TV announced this disease to be less harmful than the seasonal influenza in the beginning. This led to people not taking the issue seriously and continuing their social activities even after the infection was identified in some parts of Iran. People took the opportunity of the school and work closures to travel, especially to the northern areas, which then led to those areas being marked the “hotspots” or “red zones”. After a while, the national TV started to show public announcements made by the Ministry of Health informing people to stay home. They placed some cities in the emergency state and placed lockdown orders in those areas. In different countries, it would mean that businesses are closed, and people should remain home, but Iran’s experience with the lockdown was not very effective. As they closed down, people thought that they were on holidays; they travelled, went shopping, and gathered in large groups. The whole purpose of this was for them to reduce social contact and make them stay home but it would not give effective results as people would increase their social activities as a result of the lockdown. The next event causing a spike was the Persian New Year holiday (Nowruz), when people usually travel.

In terms of the economy, the international sanctions have participated greatly in the country’s ability to control of spread of this virus. Iran was not economically prepared for this outbreak; the lack of medical and pharmaceutical supplies, PPE, insufficient hospital beds, diagnostic tools and inadequate COVID test kits available made the situation chaotic. Since May 2019, Iran has been experiencing strict sanctions imposed by the US, which have impacted the health sectors (105). Although the government implemented a large- scale testing plan, the plan



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remained ineffective considering the lack of medical supplies (106). For Iran, the lack of supplies, fewer healthcare facilities and low density of healthcare workers, made the country unable to address people's needs due to relying on assistance from foreign countries (107). The country's priority should be ensuring the resources are enough for the public in case of a future pandemic (108).

One of the other important factors in controlling this disease was also assessing the attitudes and misconceptions of the Iranian people about COVID-19. A survey study conducted in Iran from January 25 to April 25 investigated public knowledge regarding this fatal disease as well as their attitudes towards social distancing practice and other measures in place. Their data suggests that about half (47%) of the participants said that they could protect themselves from the virus by washing their hands with saline and more than half (58%) of them believed that this disease was transmitted by wild animals (109). This indicated that there were still some gaps between the perceived transmission method of this virus and the reality. Therefore, raising awareness would be an essential way to inform the public about the transmission mechanism of the disease to prevent future outbreaks. Several studies have proven the effect of staying home and practicing social distancing as a matter of preventing the coronavirus outbreak (110). Despite the government regulations and warnings on interprovincial commute and prohibitions on large gatherings, some people did not follow these measures indicating the lack of effectiveness and enforcement on the rules. The country also should ensure that there is a clear communication between the policymakers and individuals in the community as well as enhancing public trust between them (111).

Limitations of this study include leak of data as declared by WHO, which suggested that the numbers are higher than what has been reported. An article published by BBC in August 2020 also reported data leak saying that the numbers are actually three times higher than what is published (112). This could be justified by the economic battle that Iran was facing for not being able to screen everyone with COVID-19 symptoms.

Conclusions

It is without a doubt that COVID-19 has been a historic and challenging phenomenon that the countries around the world had to battle. Iran was one of the first countries that encountered this virus and took actions earlier than many other jurisdictions. This report assessed how Iran's health and government systems came together to control this virus across the country as well as how effective their steps and actions were on decreasing the cases. The jurisdiction's primary denial lead to further restrictions on different provinces and social distancing measures. Although, the nation faced a tremendous situation, it is worth to mention the dedication and commitment of the frontline workers who worked hard and devoted their lives during this pandemic in Iran. Further studies need to be conducted to find out how these lessons can be translated into future pandemic preparedness.



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