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**Brief Report** 

# How Was People's Income Affected by the Early Phase of the COVID-19 Pandemic in Iran?

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## Abstract

Today, a new disease, called coronavirus disease 2019 (COVID-19), has affected the entire world, especially in the economic aspect. This disease has severely disrupted the global economy. Therefore, in this study, we aimed to investigate how people's income was affected by the early phase of the COVID-19 pandemic in Iran. We used an online questionnaire in the Persian language, which was available from April 18 to April 28, 2020. The survey asked the participants about their job and income during the COVID-19 pandemic as compared to the pre-COVID period. Fifty-seven percepts of participants were unemployed or experienced a drop in their income during the COVID-19 outbreak. Therefore, the global economy should be supportive of people during epidemics.

Keywords: COVID-19, Iran, Pandemic, Economics, Income

#### 1. Background

Today, the entire world has been affected by a new disease, called coronavirus disease 2019 (COVID-19). The new coronavirus, which was first identified in Wuhan, Hubei Province, China, in December 2019, has spread across 216 countries so far. Until today (May 30, 2020), almost 5,704,736 cases of infection have been recognized worldwide, and more than 357,736 people have died. Due to this pandemic, nearly all countries mandated quarantine and traffic restrictions. As a result of these restrictions, financial activities have been significantly limited, and businesses of all sizes have been negatively affected. Many industries, such as tourism, manufacturing, export, oil, and transportation, have faced severe problems during the COVID-19 crisis. Many businesses have gone bankrupt, unemployment rates have increased substantially, and many families have lost their income. Therefore, besides increased medical expenses, economic problems have emerged in families.

The COVID-19 pandemic has severely disrupted the global economic activities, and according to a previous study, the number of people living in poverty could in-

crease by 420 to 580 million as compared to the latest reports for 2018 (1). Also, a survey of the impact of COVID-19 on manufacturing businesses in the United Kingdom showed that more than 80% of respondents predicted a decrease in turnover over the next six months, and 98% were concerned about the negative impacts of the new coronavirus on their business activities (2). Moreover, evidence shows that COVID-19-related restrictions have significantly reduced the production of goods by factories in China (3).

#### 2. Objectives

In this study, we aimed to investigate how people's income was affected by the COVID-19 pandemic in Iran.

## 3. Methods

We designed an online survey to study how people's income has been affected by COVID-19 in Iran. We used an online questionnaire in Persian language, which was available from April 18 to April 28, 2020. The survey asked the participants about their job and income during the

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COVID-19 pandemic as compared to the pre-COVID-19 period. Due to quarantine restrictions in Iran, we disseminated the questionnaires through popular social networks in Iran (e.g., WhatsApp and Instagram) among Iranians, who were selected via snowball sampling. Finally, a total of 1,498 participants were included in the survey, and all people who had accessed the questionnaire were included in the study.

# 4. Results and Discussion

In this survey, 464 (31%) individuals reported that they were unemployed before and after the COVID-19 epidemic (34.4% and 19.4% of female and male participants, respectively). About 26% of the participants (n = 389) claimed that the COVID-19 outbreak had interfered with their job and income (24.9% and 29.7% of females and males, respectively). However, most of the participants (n = 616, 41%) reported no change in their income (39.5% and 46.8% of females and males, respectively). Finally, 29 participants (2%) stated that the COVID-19 outbreak increased their revenue and had a positive impact on their job (1.3% of females and 4.1% of males) (Table 1).

The present study showed that 31% of the participants are unemployed, while formal reports reported this rate around 11% (4). Generally, the unemployment rate is calculated in active populations that can work, while others who are not eligible for having a job (e.g., students) are excluded. Besides, studies showed a gender gap in the income of the Iranian population (5). Therefore while most of the participants in this study were female, the difference in the unemployment rate between our research and formal reports could be justifiable. Therefore, by considering the limitations of online surveys and snowball sampling method, we can conclude that the results are in line with the available evidence.

One of the interesting findings of the present study is that 41% of the participants reported no drop in their income, which is contrary to reports from other countries. This rate is justifiable, as Iran's economy is highly managed by the government, and a significant percentage of the population is working for governmental agencies (6). Therefore, the economy must be supportive of people during epidemics. On the other hand, about one-fourth of the respondents reported the adverse economic impact of the COVID-19 outbreak, and only 2% claimed that they had a better job and income status. It can be concluded that a minor group of the population were able to make changes in their job to adapt to the COVID-19 crisis. Therefore, governmental policies should focus on increasing the number of these people, and entrepreneurs should be encouraged to choose jobs that are not affected by epidemics (7).

In brief, the government should address the gender gap in unemployment. Besides, economic policies should be directed toward increasing the economic resilience during disease outbreaks and other threatening situations. Also, appropriate economic policies can improve the families' economic status and help prevent the outbreak of diseases.

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#### Footnotes

Authors' Contribution: All authors made substantial contributions to the conception and design of this study and approved the final manuscript. FK and SD. Drafted the article and coordinated the revision phases. ZK and ZK. Participated in the design of the methodology. All authors contributed to drafting and preparing the manuscript and approved the final version of this manuscript.

**Conflict of Interests:** The authors declare that there is no conflict of interest.

**Ethical Approval:** The present study was approved by the Ethics Committee of Shiraz University of Medical Sciences, Shiraz, Iran (IR.SUMS.REC.1399.062).

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**Informed Consent:** We complied with research ethics standards by providing information on the project and requesting consent for participation in the study from all subjects.

Variables	Income Status					- P-Value
	Unemployed	Drop in Income	Without Change	Increase in Income	Total	1-value
Gender						0.000 <sup>b</sup>
Male	66 (19.4)	101 (29.7)	159 (46.8)	14 (4.1)	340 (100)	
Female	398 (34.4)	288 (24.9)	457 (39.5)	15 (1.3)	1158 (100)	
Marital status						0.000 <sup>b</sup>
Single	240 (35.6)	161 (23.9)	254 (37.6)	20 (3.0)	675 (100)	
Married	224 (27.2)	228 (27.7)	362 (44.0)	9 (1.1)	823 (100)	
lace of residence						0.000 <sup>b</sup>
Urban	397 (29)	357 (26.1)	587(42.9)	27 (2.0)	1368 (100)	
Rural	67 (51.5)	32 (24.6)	29 (22.3)	2 (1.5)	130 (100)	
Economic status score	$5.61 \pm 2.060$	$5.04 \pm 1.857$	$6.17 \pm 1.734$	7.00 $\pm$ 1.964	$5.72 \pm 1.936$	0.000 <sup>c</sup>
Total	464 (31.0)	389 (26.0)	616 (41.1)	29 (1.9)	1498 (100)	

<sup>a</sup>Values are expressed as No. (%) or mean  $\pm$  SD.

<sup>b</sup>Chi-square test.

<sup>c</sup>ANOVA test.

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