



KERMAN UNIVERSITY

OF MEDICAL SCIENCES

Faculty of Management and Medical Information

In Partial Fulfillment of the Requirements for the Degree (MSc)

Title

**Estimating The Willingness to Pay for Covid19 Vaccination for The General
Public of Kerman**

By

Saman Najafi

Supervisor

Reza Goudarzi (PhD)

Advisors

Vahid Yazdi Feyzabadi (PhD), Shirin Nosratnejad (PhD)

Thesis NO: ()

Date: (..., 2022)

Abstract:

Introduction And Objectives: Since 2019, with the emergence of the corona virus, the lives of people all over the world have been affected from the economic and social aspects. This disease is an infectious disease that is known and common among people all over the world with its rapid transmission, high mortality rate, and its complications. has been in such a way that when this virus entered all countries and turned it into a pandemic, it disrupted all aspects of people's lives and their social and economic relations. Disruption of social relations, including restrictions on people's daily communication, closure of cities, quarantine of cities, social distancing and disruption of economic activity, such as closure of businesses and closing of borders, reduction of exports and imports, and finally reduction found the gross output. Due to the negative effects created on the global economy and countries, creating a solution to prevent this pandemic is important, vital and among the main priorities of the whole world. Due to the mentioned reasons, the best solution available so far to deal with this disease is the use of vaccination. Considering that vaccination of the people has been done for free by the government and there is no market to determine the monetary value of this intervention from the people's point of view, so that its real value is known from the people's point of view. Therefore, the present study has been conducted with the general aim of estimating the willingness to pay for the vaccination of COVID-19 for the general populi of Kerman.

Methods: The current study is a survey that is applied in terms of purpose and descriptive-analytical in terms of method. The target community is the urban population of Kerman city. The number of samples was determined based on Cochran's formula and using multi-stage sampling in proportion to the total population among people who have injected one of the types of Covid-19 vaccines. The

model of this study is multiple linear regression model (for open ended) and interval regression model (for double bounded dichotomous choice) with willingness to pay for vaccination as a dependent variable and individual's attitude, number of doses, living area, age, sex, education, history of corona disease, household monthly income, household monthly expenses and education are considered as explanatory variables. The tool used in this study consisted of a three-part questionnaire, the first part of the questionnaire was about the willingness to pay for the use of covid-19 vaccination, the second part included the respondent's knowledge and awareness variable (person's attitude), and the third part included the demographic status of the people. In this study, after the samples were identified, interviews were conducted with people over 18 years old who have the most information about the household, and data were collected and analyzed according to the scenarios designed in the study protocol. and were analyzed. In the open question method, GLS regression was used to estimate the model parameters due to variance heterogeneity, and in double bounded dichotomous choice, the interval regression method was used, all analyzes were performed using Stata 14 software.

Results: The results showed that the residents of Kerman were willing to pay more for the AstraZeneca vaccine than other vaccines, and for this reason, the average willingness to pay for the AstraZeneca vaccine was higher than other vaccines. Also, the variables of attitude, education, income, cost, and region in two open-ended and two-dimensional question methods had a significant difference in the average variable and a significant relationship with the willingness to pay for the covid-19 vaccination, and in the open-ended question method, the average willingness to pay was higher than the average. Willingness to pay was double bounded dichotomous choice method. In

this study, the gender variable did not have a significant relationship with the willingness to pay and it was not in line with the results of other studies, but other variables such as income, cost, attitude, region and education had a significant relationship with the willingness to pay and it was in line with the results of other studies. The proposed scenarios that can be proposed for vaccination are that the government should first provide AstraZeneca vaccine, and then Sinopharm and Sputnik vaccines, and finally domestic vaccine production.

Discussion and conclusion: In this study, according to people's preferences and their valuation of domestic and foreign vaccines, it showed that people are more interested in foreign vaccines than domestic vaccine production. According to the average willingness to pay for each vaccine, people have expressed their willingness towards AstraZeneca, Sinopharm, Domestic and Sputnik vaccines respectively, and it is expected that the government will take steps in the direction of people's desires and optimize policies in the field of health.

Keywords: Willingness to pay, Vaccination, Covid-19, Kerman City