



## THE IMPACT OF CORONA DISEASE OUTBREAK ON THE EXISTENCE OF PERSONAL PROTECTIVE EQUIPMENT SURGICAL MASKS IN THE MOJOKERTO REGENCY AND CITY EAST JAVA

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### Abstract

This study focuses on the existence of personal protective equipment surgical masks in the community of Mojokerto Regency and City. The problem is the difficulty of finding Personal Protective Equipment Surgical masks that meet the health standards which are needed by the community but are very difficult to find and buy. The purpose of study is to find out the cause of people's difficulty finding personal protective equipment in the form of surgical masks, as well as to know there is a relation between covid 19 news and the loss of protective equipment in the form of surgical masks, to know what is the cause of the loss of personal protective equipment surgical masks on the market. The results showed that difficult to find the personal protective equipment surgical masks or out of stock that have been sold in pharmacies, pharmacies do not get supplies from supplier. According to the manufacturer that in April 2020 the production of surgical masks for national needs has been excessive and can be exported as well and according to the head of the pharmacist association in Indonesia in East Java Province, that the stock needs masks at the district and city level in East Java is enough. But the reality until the end of this study on May 12, 2020, researchers repeated to the pharmacy turns out that in pharmacies researchers have not found a surgical mask. There are people who sell surgical masks but not pharmacies but in the market that is not clear how to buy them through order to someone with prices up 335% to 340% of the price before the covid-19 pandemic.

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## Introduction

The world has been inundated with corona pandemics that hit the whole world even the warm news delivered by the electronic media the most severe country is Italy, because the country is rumored to be thousands of people died from the outbreak of diseases derived from the coronavirus.

The first outbreak of the corana virus, now known as Covid-19, was in Wuhan City, which the Chinese authorities said that the first known case of corona virus on December 31, 2019, when the infection, whose symptoms were similar to the peneumonia, and believed that the virus came from markets, animals, and sea fish in Wuhan, Hubai Province, China (BBC word servicen, 21 February 2020)

Mi Feng, a spokesman for China's National Health Commission, said the decline of new infections in cities other than Wuhan indicated the situation on the mainland had stabilized,"The rapid increase in new infections in Wuhan has been successfully solved. Outbreaks in other Hubei cities are also under control, and the situation in other provinces is becoming more positive," Mi said. More than 80,000 people have been infected in China since the epidemic began in December 2019. As the emergency steps to help limit the spread of the virus, Wuhan on Monday closed one of 16 emergency hospitals built to cope with the crisis after its last 34 patients recovered and were discharged. (South China Morning Post,Reuters)

Because the rate of new infections appears to be slowing in China, the infection has spread to every continent except Antarctica -67 countries- with more than 9,750 cases and at least 150 deaths elsewhere. Copied from Reuters, the European Union's infectious disease control agency raised the risk level of Covid-19 from "moderate" to "medium-high," with the death toll from the disease now reaching 38 on the continent. But the EU wants to get people moving across borders in Europe. (South China Morning Post, Reuters).

The spread of the covid 19 virus pandemic has spread throughout the world including hot climate countries including in the east which caused closures and delays for umrah pilgrims in Makkah because access to Saudi Arabia was closed including those from Indonesia. Whereas at that time there was no statement from the Indonesian government if in Indonesia has been affected by the disease caused covid 19. The government has just announced on Monday, March 2, 2020 there are two people from Indonesia who are positively infected with coronavirus. Two Indonesian citizens who were infected to the coronavirus were 64-year-old mother and 31-year-old child live in Depok, West Java (KOMPAS.com, 02/03/2020, 13:18 WIB).

After it was announced, the mouth and nose masks are sought after by many people because it is considered the most potential to prevent the entry of virus into the human body. Now, many people complain because of the difficulty to buy masks, not because they do not have money but the goods are out of stocks. Therefore, in this study the researchers want to analyze the existence of masks in places that usually exist in pharmacies or supermarkets in the regency and city mojokerto East Java Province.

### **Focus of Study**

To clarify and sharpen the focus of this research study, the focus of research is prepared as follows:

1. Why people have difficulty finding personal protective equipment in the form of surgical masks?
2. Is there a relation between the covid pandemic 19 and the loss of personal protective equipment surgical masks on the market ?
3. What is the cause of surgical masks loss in the market?

### **Purpose of Study**

This research aims to :

1. Know why people have difficulty finding personal protective equipment in the form of surgical masks
2. Know the relation between the covid pandemic 19 and the loss of personal protective equipment surgical masks on the market
3. Know the cause of surgical masks loss in the market

### **Benefit of Study**

This research is expected to provide benefits for :

1. As a basic idea for community and government, it is difficult to find personal protective equipment in the form of surgical masks.
2. As feedback for other researchers who want to conduct further research related to medical tools.
3. The development of science and technology especially in the field of medical tools marketing.

## **LIBRARY REVIEW**

### **Theory of Corona Virus Pandemic**

Merry Dame Cristy Pane (2020) said that Coronavirus or Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) is a virus that attacks the respiratory system. The disease due to this viral infection is called COVID-19. Corona virus can cause respiratory system disorders, acute pneumonia until death. The virus infection called COVID-19 and was first discovered in Wuhan city, China, in the last December 2019. The virus is spreading rapidly and has spread to other regions of China and to several countries, including Indonesia.

Coronavirus is a collection of viruses that can infect the respiratory system. In many cases, the virus causes only mild respiratory infections, such as flu. However, the virus can also cause severe respiratory infections, such as lung infections (pneumonia), *Middle-East Respiratory Syndrome* (MERS), dan *Severe Acute Respiratory Syndrome* (SARS). Tagar (2020) said about the

definition of corona and covid-19.

### **1. Corona (Coronavirus)**

WHO explains coronavirus to be part of a large family of viruses that cause diseases that occur in animals or humans. People infected with the virus will show signs of respiratory infections ranging from flu to more serious, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Coronavirus is a new type of human discovered since it appeared in Wuhan, China in December 2019, and called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-COV2). So the disease called Coronavirus Disease-2019 (Covid-19).

### **2. Covid-19**

WHO announces Covid-19 to be the official name of the disease caused by coronavirus from Wuhan, China. The name given by Director general of WHO, Tedros Adhanom Ghebreyesus in Jenewa, Swiss on Tuesday, 11 Februari 2020. The abbreviation Covid-19 also has details, such as "co" means corona, "vi" refers to virus, "d" for diseases, and 19 is the year of the disease outbreak first identified on December 31, 2019. Tedros explained the name was chosen to avoid stigmatization, as was the WHO's naming guidelines for the virus in 2015. The name of the virus or disease will not refer to the geographical location, animals, individuals, or groups of people. Previously, WHO gave a temporary name for the Corona virus as 2019-nCoV. Meanwhile, China's National Health Commission temporarily mentions Novel Coronavirus Pneumonia (NCP).

### **The world condition with coronavirus or covid-19**

#### **Indonesian Condition in facing coronavirus or covid-19**

Tagar (2020) said while in Indonesia, on Tuesday afternoon, March 17, 2020, the cases of Coronavirus or Covid-19 has reached 172 people, whom 9 people were declared cured and 5 people died. The definition of masks according to KBBI (Dictionary of Indonesian Language) masker/*mas-ker*/ *n* 1 tool to cover the face; the mask; 2 cloth covering the mouth and nose (as worn by doctors, nurses in hospitals); mask: -- which closes its mouth roped to the ears; Based on the Regulation of the Minister of Health No. 8 2020, the use of APD is indeed the main procedure in health service activities. The goal is to anticipate occupational safety and health risks of officers, especially for biological hazards. The mask selection for Coronavirus Many kinds of mask. Some of them are only useful to ward off pollution but can not ward off the transmission of coronavirus.

**Meva Nareza (2020)** said that there are 2 kinds of masks for coronavirus which was recommended for the community:

## 1. Surgical masks

The surgical mask is a type of disposable masks that are easy to find and often used by medical personnel while on duty. Surgical masks can be used as an option to prevent the spread of corona virus because it has a layer that is able to repel saliva splashes. Even so, this mask is more effective when worn by people who are sick to prevent the transmission of germs to others, than by healthy people to protect themselves from diseaseS. The most surgical masks consist of 3 layers that have different functions, namely:

- a. Outer layer, waterproof
- b. Middle layer, which serves as a germ filter
- c. Inner layer, which is useful to absorb the liquid coming out of the mouth.

It is not recommended to use a mask without these three functions because it is not effective in preventing infectious diseases, such as Corona virus infection. Surgical masks can be obtained at a low price. In addition, this mask is also commonly used for daily use, both adults and children. However, this mask is slightly loose when used, thus allowing small particles or air to enter through the edges of the mask.

## 2. Masks N95

Masks N95 also recommended for preventing the transmission of Coronavirus. Masks that tend to be more expensive than surgical masks are not only able to repel saliva splashes, but also small particles in the air that may contain viruses. Compared to surgical masks, the N95 mask feels tighter on the face because it has been perfectly designed to cover an adult's nose and mouth. In children, the use of this mask is not recommended because the size of the mask can be too large so it cannot provide enough protection. Although the protection is better, N95 masks are not recommended for daily use. This is due to its design which makes people who wear it can be difficult to breathe, sultry, and not comfort to wear it for a long period of time (Meva Nareza).

## **The Environmental Externality**

### **Production for Medical Devices Masks**

According to Gandi Sulistiyanto in TEMPO.CO, Jakarta, Tuesday, March 31, 2020 - Sinar Mas Group through PT Asia Pulp and Paper plans to produce masks domestically starting next April to meet the needs of medical personnel and patients affected by the Corona virus. Previously, the company still imported masks from China. "Maybe April can already be a factory in Indonesia," said Managing Director of Sinar Mas Group Gandi Sulistiyanto, Tuesday, March 24, 2020. But even though it is already producing domestically, the company is still preparing to import masks to be provided as assistance for the handling of the Corona virus.

Gandi explained that the provision of masks and other medical devices such as rapid test kits, personal protective equipment (PPE), and ventilators, is carried out collaboratively

with a number of other conglomerate companies in Indonesia. The combined conglomerate that calls itself The Entrepreneur Cares for the Republic of Indonesia is raising Rp 500 billion for the provision of assistance.

### **The Marketing Techniques**

The opinion of Henry Faizal Noor (2009), Marketing is the key to the success of a business or a company will grow if the marketing is successful. To reach the success is required a variety of activities such as:

1. Knowing the consumer needs and wants because the consumer are the parties provide income for the company.
2. Knowing the way of consumer's satisfaction because only satisfied consumer will be loyal to the company.

In philep opinion kontler & Kevin Line Keller (2009) Demand is a desire for certain products supported by the ability to pay. A lot of people want their Mercedes, but only a few want to and can afford it. Companies must measure not only how many people buy their products, but also how many people want and can afford them. According to Abdul Rahem Chairman of IAI Jatim (Wednesday (4/3/2020) claimed, the stock of masks in pharmacies in the district / city is still available safely. The price did go up, but it was normal. "Until now no one has stated limited. I'm still ordinary, really. Still order and get. Yes, it's normal," he said, actually pharmacies sell masks only for routine needs, which is not too much. Not for sale anymore, let alone to stockpile.

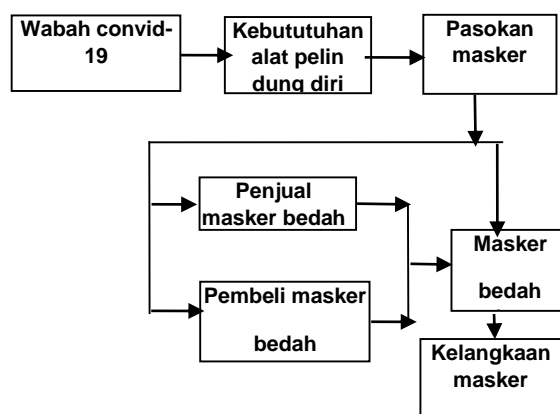
### **The Previous Research**

According to Dian Putri Maharani & Anik Setyo Wahyuningsih (2017) In his research based on the results of statistical tests that have been done, it can be concluded that there is a relationship between knowledge, attitude, and policy with compliance using personal protective equipment. According to The Research Results devi Nurmalia & Sarah Ulliya (2019) The most commonly used personal protective equipment are gloves, masks, and also aprons. The results showed that as many as 54.39% of actions taken by nurses were not appropriate in the use of gloves. The use of masks and aprons among nurses is almost correct, only found one mis-wearing of the mask.

## **THE CONCEPTUAL FRAMEWORK OF RESEARCH**

### **1. The conceptual Famework of Research**

According to the research problem, purpose, goals, benefits, and library review that explained before, this section will be presented the conceptual framework of research and hypotheses as follows:



Picture 1: The research conceptual framework

### The Impact of Covid-19 Outbreak on Need to Purchase Personal Protective Equipment for Surgical Masks

Masks are personal protective medical devices that are highly needed by keeping the nose and mouth from bacteria and viruses especially disease is covid-19. In society with the outbreak of covid-19 around the world, many people are afraid of their health, so many try to find health protective equipment in the form of masks, especially there are recommendations from the central government to the community in every activity should use masks. This time people are difficult to buy personal protective equipment in the form of surgical masks because the places that can be a place to sell surgical masks such as pharmacies, convenience stores do not sell many masks. Why many people tend to look for this surgical mask because it is comfortable to wear.

### The Impact of Covid-19 Outbreak on Loss of Personal Protective Equipment Surgical Masks on the Market.

Personal Protective Equipment Surgical Mask is a very liked by the public because this tool has the characteristics of a soft fabric shape, practical design, easy to carry and store. Besides, surgical masks are easy to find in all pharmacies must sell this mask and the price is quite cheap. After the outbreak of covid-19 in all pharmacies in Mojokerto district and city, this surgical mask is no longer in pharmacies throughout Mojokerto regency and city.

## THE RESEARCH METHOD

### Approach

Generally, this study is to describe and analyze the outbreak of covid-19, against the prevalent of surgical mask health protective equipment in Mojokerto Regency and City. This study, researchers use qualitative research approach.

## THE RESEARCH DESIGN

Moleong (2008) said, the research design is divided 3 steps, including:

1. Pre-field step
2. Practice
3. Analysis and validity test

### Data Source

To complete this data, researchers obtained two forms of data, namely primary data and secondary data. Primary data includes interviews with informants and field observations including records, voice recordings of interview.

- a. Informant
- b. Document
- c. Accumulating data: interview, observation, analyzing document.

### Triangulation Steps

#### The Analysis data

The data that has been obtained is analyzed critically and logically according to local social conditions. Systematic interpretation in accordance with quantitative research. Data obtained in the field as narrative and quantitative arguments will be well detailed in order to take the conclusion can be drawn appropriately.

#### The data validity

The validity of data in this study uses four standard criteria that are considered to be able to guarantee the validity of qualitative research results. **The Research Location**

The place or location of the research is Mojokerto regency and city. This location was chosen because Mojokerto Regency and City is because is a buffer of Metropolitan Surabaya, and Mojokerto Regency is an industri area centered in Ngoro District.

#### The Research Time

The research will start on 16 February 2020 until 12 May 2020. Because at the time people very difficult to find the surgical masks.

## RESULT AND DISCUSSION

### Research Result

In this chapter is presented about the results of field research which is an objective condition found in the field and a description of the existence of covid-19 outbreak in the



community of Mojokerto Regency and City which is so worrying because many people are afraid to be infected to the covid-19 virus that considers this virus very deadly because there has not been found a vaccine that can eliminate the virus.

### **Overview of Personal Protective Equipment Surgical Masks Needs**

Based on statistical data released by the Central Agency of Statistics Mojokerto population census results in 2014 - 2019, the population of Mojokerto Regency is 1,150,135 people and the number of Mojokerto City Residents based on the results of the population census conducted Mojokerto city statistics central agency in 2014 - 2019 amounting to 138,000 people. If calculated all residents of Mojokerto Regency and City is 1,288,135 people that do not all need masks because they are still in infant age (0-4 years) then it is possible to need masks less than 1,288,135 masks.

### **Overview of The Supply for Personal Protective Equipment Surgical Masks in Mojokerto Regency and City**

The supply of Personal Protective Equipment Surgical Masks within 2 months starting from February 16, 2020 to May 12, 2020, there was obstacles even in every pharmacy throughout the district and Mojokerto city do not get supply from suppliers, even though the supply of masks in pharmacies is no longer there.

### **Overview of Surgical Mask Sales in Mojokerto Regency and City**

In the late of supply from the supplier surgical masks to the Pharmacy, it directly impacted the condition of selling masks in pharmacies, pharmacies ran out of goods long enough that pharmacies could not sell surgical masks.

### **Buyer's Overview of Surgical Masks in Mojokerto Regency and City**

The existence of surgical masks in the district and Mojokerto city becomes a hunt for everyone who has a desire to buy surgical masks, but this mask every buyer to the pharmacy is always running out. This makes panic in the community especially the issue of the widespread transmission of the covid-19 virus to several edges of the metropolitan city including to Gresik Regency and Sidoarjo Regency which is also a Buffer Regency of Metropolitan Surabaya.

### **The limited existence of surgical masks**

Before the outbreak of covid-19, the existence of surgical masks was easy to find and in every pharmacy was always ready but after the rise of continuous news on social media both print and electronic media, the existence of surgical masks have disappeared from circulation in the market, but there are some people who use surgical masks found in the community.

### **The rarity of surgical masks**

The existence of Personal Protective Equipment Surgical Masks after researchers searched from several pharmacies in Mojokerto City completely sold out, after which researchers tried to buy into several supermakets and some convenience stores also did not exist, all the shopkeepers said the masks did not exist.

### **The Result Implementation**

#### **Covid-19 Pandemic in the Community of Mojokerto Regency and City**

In Mojokerto regency and city the existence of Covid-19 virus has infected the residents, residents infected by this virus in Mojokerto Regency there are 5 people and Mojokerto city area there are 3 people. According to Public Relations Task Force for the Acceleration of Handling Covid-19 Mojokerto Regency, dr Langit Kresna Janitra(2020) said, Covid-19 positive patients in Mojokerto Regency there are 5 people. "Most recently news last night, there were 3 people. 2 people from Jetis Subdistrict, their travel history from Jakarta," he said, Saturday (4/25/2020).

Mojokerto City Covid-19 Task Force Spokesman Gaguk Tri Prasetyo explained that swab test results were declared positive for Covid-19, on Wednesday (6/5/2020), so the confirmed positive case of Covid-19 in Mojokerto City increased from one person now to three people.

#### **The Pharmacies in the Mojokerto Regency and City**

The pharmacies in Mojokerto area which always sell Surgical Masks are 52 pharmacies. The researcher visited all pharmacies and all staffs said the surgical masks are sold out. He asked, "why?". "No supply from supplier," they answered.

The pharmacies in Mojokerto Regency and City are:

Amanda

Jl. Jayanegara No. 7 A Kec. Puri  
Mojokerto, Jawa Timur, Indonesia

Amel

Jl. Gajah Mada No. 98 B  
Mojokerto, Jawa Timur, Indonesia

Amin Putra

Jl. Gajah Mada 68 E  
Mojokerto, Jawa Timur, Indonesia

Amanda

Jl. KH. Ahmad Dahlan 35  
Mojokerto, Jawa Timur, Indonesia

An Nur Farma

Dsn Pandan Arum RT 01/RW 02 pacet

Mojokerto, Jawa Timur, Indonesia  
Anugerah  
Jl. Masjid 22 Mojosari  
Mojokerto, Jawa Timur, Indonesia  
Anugerah 2  
Jl. Raya Pacet 107 Dlanggu-Mjkto  
Mojokerto, Jawa Timur, Indonesia  
Apotek K-24 Mojokerto  
Ruko Jl. Pahlawan No. 10C  
Mojokerto, Jawa Timur, Indonesia  
Arofah Medika  
Jl. Gajah Mada No. 1 Mojosari Kab Mjkto  
Mojokerto, Jawa Timur, Indonesia  
Ateja  
Jl. RA Kartini No. 141 Kupang-Mjkto  
Mojokerto, Jawa Timur, Indonesia

All pharmacies in Mojokerto  
Bethania  
Jl. Mojopahit No. 234 Kota Mojtko  
Mojokerto, Jawa Timur, Indonesia  
Brangkal  
Jl. Bhayangkara No. 19 Kec Sooko  
Mojokerto, Jawa Timur, Indonesia  
Buah Hati  
Jl. HOS Cokroaminoto 10 Magersari  
Mojokerto, Jawa Timur, Indonesia  
Dian Husada  
Jl. Gajah Mada 115 A  
Mojokerto, Jawa Timur, Indonesia  
Eldo  
Jl. Gajah Mada 72  
Mojokerto, Jawa Timur, Indonesia  
Emma  
Jl. Raya Ijen 67  
Mojokerto, Jawa Timur, Indonesia  
Empunala  
Jl. Empunala No. 219 Kota Mjkto  
Mojokerto, Jawa Timur, Indonesia  
Faiq Farma



Jl. Raya jarot Ds Pulorejo Dawarblandong ?Mjkto

Mojokerto, Jawa Timur, Indonesia

Gajah Mada

Jl. Gajah Mada 41

Mojokerto, Jawa Timur, Indonesia

Gedeg Farma

Jl. Raya Gedeg No. 17 Kec Gedeg Mojokerto, Jawa Timur, Indonesia

All pharmacies in Mojokerto

Graha Husada

Jl. Gajah Mada 138

Mojokerto, Jawa Timur, Indonesia

Ingsa Farma

Perum Wikarsa Blok E/19 Puri

Mojokerto, Jawa Timur, Indonesia

Isyvina

Jl. Sidomulyo 34 A Bangsal Kab

Mojokerto, Jawa Timur, Indonesia

Jaya Negara

Jl. Jaya Negara 209 B

Mojokerto, Jawa Timur, Indonesia

Kartini Mojosari

Jl. Airlangga 137 Mojosari -Mojokerto

Mojokerto, Jawa Timur, Indonesia

Kimia Farma

Jl. Pahlawan 40 B

Mojokerto, Jawa Timur, Indonesia

Kimia Farma No. 65

Jl. Gajah Mada No. 62

Mojokerto, Jawa Timur, Indonesia

Kranggan

Jl. Mojopahit 436

Mojokerto, Jawa Timur, Indonesia

Kresna

Jl. Bhayangkara 93

Mojokerto, Jawa Timur, Indonesia

Kusuma Husada

Jl. Hayam Wuruk 25 Mojosari-Mjkto

Mojokerto, Jawa Timur, Indonesia

All pharmacies in Mojokerto

Mega Farma

Jl. R. Wijaya 31  
Mojokerto, Jawa Timur, Indonesia  
Melania Farma  
Jl. Gajah Mada 100  
Mojokerto, Jawa Timur, Indonesia  
Memayu Jer Rahayu  
Jl. Raya Puloniti Bangsal -Mojokerto  
Mojokerto, Jawa Timur, Indonesia  
Merdeka  
Jl. Mojopahit 166  
Mojokerto, Jawa Timur, Indonesia  
Mojokerto  
Jl. A. Yani 17  
Mojokerto, Jawa Timur, Indonesia  
Mojosari  
Jl. Airlangga 33 Mojosari  
Mojokerto, Jawa Timur, Indonesia  
Neo Farma  
Jl. Pahlawan No. 38  
Mojokerto, Jawa Timur, Indonesia  
Niaga  
Jl. Niaga 123 Mojosari  
Mojokerto, Jawa Timur, Indonesia  
No. ma Medika  
Jl. Raya Tambak Agung No. 89 Kab Mojokerto  
Mojokerto, Jawa Timur, Indonesia  
Pangestu  
Jl. Gajah Mada 112  
Mojokerto, Jawa Timur, Indonesia

All pharmacies in Mojokerto  
Pangestu 2  
Jl. Raya Pasar Sawahan Km 10 Bangsal Kab Mojokerto  
Mojokerto, Jawa Timur, Indonesia  
Perning Farma  
Desa Perning RT 21/RW 02 Kec. Jetis Kab.Mojkto  
Mojokerto, Jawa Timur, Indonesia  
Pertiwi  
Jl. Komp Murlan 6 RT 01/RW 01 Ds Ketapanrame Trawas Kab Mojokerto  
Mojokerto, Jawa Timur, Indonesia

Prambon  
Jl. Raya Ngimbangan 125 Kec Mojosari Kab Mjkto  
Mojokerto, Jawa Timur, Indonesia  
Pramita  
Jl. Gajahmada 131 Mojosari  
Mojokerto, Jawa Timur, Indonesia  
Raditya Farma  
Jl. Raya Ngijingan ? Ngoro Kab Mojokerto  
Mojokerto, Jawa Timur, Indonesia  
Raharjo  
Jl. Hayam Wuruk 11 Mojosari  
Mojokerto, Jawa Timur, Indonesia  
Randegan Farma  
Ds Randegan No. 68 Kec dawarblandong  
Mojokerto, Jawa Timur, Indonesia  
RS. Gatoel  
Jl. R. Wijaya 86  
Mojokerto, Jawa Timur, Indonesia  
RS.K Sumberglagah  
Jl. Sumberglagah Pacet Kab.Mjkto  
Mojokerto, Jawa Timur, Indonesia

All pharmacies in Mojokerto  
Sari Mustika  
Jl. Mojopahit 289 Mojokerto  
Mojokerto, Jawa Timur, Indonesia  
Seger Waras  
Jl. Raya 65 Brangkal Kec Sooko 73  
Mojokerto, Jawa Timur, Indonesia  
Sehat  
Jl. Hayam Wuruk 18 Mojosari  
Mojokerto, Jawa Timur, Indonesia  
Srijaya  
Jl. Mojopahit 212  
Mojokerto, Jawa Timur, Indonesia  
Sumber Waras  
Jl. P. Sudirman 10 C  
Mojokerto, Jawa Timur, Indonesia  
Talenta  
Jl. Gajah Mada 97  
Mojokerto, Jawa Timur, Indonesia

Titis Farma  
 Jl. Airlangga No. 67 C Mojosari-Mjkto  
 Mojokerto, Jawa Timur, Indonesia  
 Trowulan Farma  
 Jl. raya trowulan No. 71 Trowulan  
 Mojokerto, Jawa Timur, Indonesia  
 Waluyo  
 Jl. Cokroaminoto 45  
 Mojokerto, Jawa Timur, Indonesia  
 Wijayakusuma  
 Jl. Residen Pamudji 30  
 Mojokerto, Jawa Timur, Indonesia

All pharmacies in Mojokerto  
 Yasan  
 Jl. Masjid No. 22 Mojosari-Mjkto  
 Mojokerto, Jawa Timur, Indonesia  
 Yulia Farma  
 Jl. Mojopahit 551  
 Mojokerto, Jawa Timur, Indonesia

**The Price of Surgical Masks before Covid-19 Pandemic**

Based on information from pharmacy servants researchers make informants Personal Protective Equipment Surgical Masks before the outbreak of the covid-19 virus is widely reported in the media both print and electronic period that is estimated in January 2020 is relatively still and affordable by all levels of society. As conveyed by the informant below :

1) According to Cindy Ayu, staff of pharmacies

**The List of Purchases and Sales of Surgical Masks in Pharmacies**

Brand	Total		Purchase Price	Sale Price	Sale price/pc
	Box	Unit			
One med	1	50	Rp.17.500,-	Rp.25.000,-	Rp.1000,-
sensi	1	50	Rp.15.000,-	Rp.22.000,-	Rp.1000,-

2) Rinda Ayu Regita Sari, Marketing Staff in other Pharmacies

**The List of Purchases and Sales of Surgical Masks in Pharmacies**

Brand	Total		Purchase Price	Sale	Sale price/pc
	Box	Unit			
Rope masks	1	50	Rp.17.500,-	Rp.30.000,-	Rp.1.500,-
Rubber masks	1	50	Rp.17.500,-	Rp.30.000,-	Rp.1.500,-
Hijab masks	1	50	Rp.20.000,-	Rp.35.000,-	Rp.2.000,-

**The price of Surgical Masks after the Covid-19 Pandemic**

After the covid-19 outbreak, Surgical Masks are no longer in pharmacies, even in all pharmacies in the Mojokerto district and city can not be found anymore, whether the factory is already in produced, or turned off by certain parties. After trying with various steps, finally found that if you want to buy a surgical mask, but not at the pharmacy through ordering to someone.

As informed by Mrs. Ruroh, a seller in the market that the price of surgical masks is as follows:

**THE LIST OF PURCHASE AND SALES MASKS FROM CERTAIN SELLER**

Brand	Total		Purchase Price	Sale	Price/pc
	Box	Unit			
Rope masks	1	50	Rp.450.000,-	Rp.500.000,-	Rp.5.000,-
Rubber Masks	1	50	Rp.45.000,-	Rp.500.000,-	Rp.5.000,-
Hijab Masks	-		-	-	-



## CONCLUSIONS AND SUGGESTIONS

### Conclusions

1. Due to the outbreak of the virus -19 surgical masks are no longer sold in pharmacies, but are still sold in the public through the hidden market.
2. We still can buy the surgical masks but the price rises to 3.39 % - 3.40 % and buy to the seller particularly.
3. Producers of Personal Protective Equipment Surgical Masks Guarantee April , has met the needs of surgical masks can even increase the export of masks abroad, also chairman of the Association of Indonesian Pharmacists East Java ensures the stock of surgical masks in districts and cities are still available safely, but on reality people have difficulty finding surgical masks.
4. While for people who need personal protective equipment masks, just buy other mask types have been widely sold in the sellers on the roadside, although uncomfortable to wear, and meet health standards, it can still be used while in an emergency.

### Suggestions

1. If people have difficulty obtaining Personal Protective Equipment Masks can be made independently with a variety of creative designs, but should pay attention to the cleanliness of fabrics from germs and bacteria or should be free from bacteria and viruses.
2. Where possible the Central Government through the ministry of industry and trade should always strive to increase supervision of the personal protective equipment industry masks and encourage to increase the amount of production both in quantity and quality of surgical masks, as well as increase supervision of the distribution and sales system of production results.
3. For the National Police agency of the Republic of Indonesia as the guardian of security and public order, should increase efforts to increase investigations of the industry and the ongoing marketing system, because it is possible that the existence of industry and market in breaking the provisions of the law industry and market.

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