TRADE IN COVID-19 MEDICAL SUPPLIES IN OIC COUNTRIES

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Acronyms Used

COVID-19 Novel Coronavirus 2019 UAE United Arab Emirates
HS Harmonized System USA United States of America
ITC International Trade Centre USD United States Dollars
PE Protection Equipment WHO World Health Organization
Introduction

Coronaviruses belong to the family of viruses such as Middle East Respiratory Syndrome (MERS), Severe Acute Respiratory Syndrome (SARS), and Novel Coronavirus (COVID-19). Due to its extraordinary spread speed and damaging impacts on the well-being of people across all countries, COVID-19 was declared as a pandemic by the World Health Organization (WHO) in March 2020. To fight against the pandemic, the global response developed is based on the experiences learned from the earlier outbreaks of different infectious diseases over the last few decades as well as the lessons drawn from the broad range of scientific studies on the treatment of similar types of respiratory diseases. In this connection, the development of vaccines, test kits, apparatus for diagnostic tests, and therapeutics for the treatment of infected people from COVID-19 emerge as the critical tools for this fight.

Despite this fact, supplies of medical products have been in an acute and critical shortage since the emergence of the COVID-19 crisis. In this regard, considering the limited technical capacities of many OIC countries to produce medical supplies and the vital importance of such products in emergency and crisis situations, this OIC Statistical Outlook reviews and analyses the trade in COVID-19 medical supplies to present how well the OIC countries are equipped to provide treatment and protection to people infected with COVID-19.

The analyses have been conducted for imports, exports, and trade balance in 2019 and 2020 across four product groups of medical supplies that were extracted from the “COVID-19 Medical Supplies” category of International Trade Centre (ITC)’s TradeMap Database. The first product group includes the aggregate of all COVID-19 medical supplies used both for the protection and treatment of the disease. The second product group is comprised of the protective equipment (PE), namely protective spectacles and visors, mouth-nose-protection equipment, and protective garments. The third product group contains ozone / oxygen / aerosol therapy, artificial respiration or other therapeutic respiration apparatus that are used in the treatment of infected people, especially of vital importance for severe hospitalised cases. The fourth product group covers vaccines, test kits, instruments, and apparatus for diagnostic tests.

Imports of COVID-19 Medical Supplies by OIC Countries

This section analyses the imports of the medical products that have intensively been used in the treatment of and prevention from COVID-19 in the OIC countries group.

At the global level, total imports of the products in the group of COVID-19 medical supplies based on the Harmonized System (HS) classification increased from 788 billion USD in 2019 to 954 billion USD in 2020, equal to a growth of 166 billion USD. On the other hand, the OIC countries group increased its imports from 54 billion USD in 2019 (7% of
imports of COVID-19 medical supplies in the world) to 57 billion USD (6% of imports of COVID-19 medical supplies in the world) in 2020. The imports of COVID-19 medical supplies increased its share from 3% in 2019 to around 4% in 2020 in the total imports of OIC countries group.

At the individual member country level, top ten importers among the OIC countries received 66% of the total OIC imports of COVID-19 medical supplies in 2020. Saudi Arabia came first with 7.4 billion USD, followed by Turkey (6.4 billion USD), United Arab Emirates (5.4 billion USD), Malaysia (4.2 billion USD), Indonesia (3.8 billion USD), Egypt (2.5 billion USD), Kazakhstan (2.5 billion USD), Nigeria (1.8 billion USD), Iraq (1.7 billion USD), and Kuwait (1.6 billion USD). From 2019 to 2020, 42 OIC countries were observed to increase their imports of COVID-19 medical supplies (Figure 1).

**Figure 1: Imports of COVID-19 Medical Supplies by OIC Countries, 2019 vs 2020**

Source: Data extracted on 20/09/2021 from the International Trade Centre (ITC) Trade Map Database.
In 2020, the global imports value per capita of COVID-19 medical products was estimated as 123 USD, corresponding to around 20% increase from 103 USD in 2019. In the OIC countries group, it increased from 29 USD to 30 USD over the same period (Figure 2).

In 12 OIC countries (Brunei, United Arab Emirates, Qatar, Kuwait, Bahrain, Saudi Arabia, Lebanon, Maldives, Kazakhstan, Malaysia, Djibouti, and Oman), imports value per capita of COVID-19 medical products was above the world average - ranged from 124 USD to 594 USD - in 2020. On the other hand, 12 OIC countries had less than 10 USD per capita imports value of COVID-19 medical supplies in the same year (Figure 2).

Figure 2: Imports Value per Capita of COVID 19 Medical Supplies, USD, 2019 vs 2020

Source: SESRIC staff calculations based on data extracted on 20/09/2021 from the International Trade Centre (ITC) Trade Map Database.
Ten countries with largest exports of COVID-19 medical supplies to the OIC countries group accounted for 69% of total OIC imports of these products in 2020. China and Germany exported COVID-19 medical supplies to the OIC countries group in the value of around 10.7 billion USD and 6.6 billion USD in 2020, respectively. They were followed by USA (5.3 billion USD), France (3.8 billion USD) and Switzerland (2.9 billion USD) (Figure 3).

**Figure 3: Top 20 Exporters of COVID-19 Medical Supplies to OIC Countries, 2019 vs 2020**

![Bar chart showing top 20 exporters of COVID-19 medical supplies to OIC countries, 2019 vs 2020.]

*Source: Data extracted on 20/09/2021 from the International Trade Centre (ITC) Trade Map Database.*

**Protective Equipment Imports**

The protective equipment (PE) prevents further spreading of the virus and safeguards the health of people, medical staff, and patients being treated from other diseases at the hospitals. As the impacts of COVID-19 pandemic have been continuing, the demand for PE that is comprised of protective spectacles and visors, mouth-nose-protection equipment, and protective garments has continuously been increasing.

In this regard, the imports of PE products by OIC countries have increased to 4.9 billion USD in 2020 from 1.7 billion USD in 2019 (Figure 4). While the PE products made up 3.1% of the total COVID-19 medical supplies imports of OIC countries in 2019, it grew to 8.6% in 2020. Among the PE sub-product imports by OIC countries, the mouth-nose-protection equipment accounted for the highest increase, from 679 million USD in 2019 to 3,379 million USD in 2020, equal to a 2.7 billion USD increase.

**Figure 4: Imports of Protective Equipment by OIC Countries, Million USD, 2019 vs 2020**

![Bar chart showing imports of protective equipment by OIC countries, 2019 vs 2020.]

*Source: SESRIC staff calculations based on data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.*
Artificial Respiration and Ozone / Oxygen / Aerosol Therapy Apparatus Imports

In people infected with the COVID-19, the virus is lodged deep into the lungs and it mainly affects the lower respiratory tract. This severe situation requires the usage of artificial respirators or ventilators to prevent a respiratory arrest and eventually death. Yet, there are few available therapeutics confirmed to bring positive results to people infected with COVID-19. While protective equipment and artificial respirators have seen a high demand since the outbreak of the pandemic, therapeutic apparatus such as ozone therapy, oxygen therapy, and aerosol therapy apparatus are also widely used and considered as effective treatment methods in tackling the respiratory viruses.

However, not many OIC countries are capable of producing artificial respirators, thus majority of them import them. The imports of artificial respiration, ozone / oxygen / aerosol therapy and other therapeutic respiration apparatus by the OIC countries group were 455 million USD in 2019. It increased almost threefold to 1.3 billion USD in 2020. The imports of OIC countries group claimed a share of 5.5% in the global imports of this product group in 2019 and increased to around 8.7% of global imports in 2020. Top 10 OIC countries (Indonesia, Kazakhstan, Saudi Arabia, United Arab Emirates, Turkey, Uzbekistan, Malaysia, Iraq, Morocco, and Pakistan) comprised 75% (987 million USD) of the total OIC imports of artificial respiration and ozone / oxygen / aerosol therapy or other therapeutic respiration apparatus in 2020 (Figure 5).

Figure 5: Top 20 OIC Importers of Artificial Respiration, Ozone / Oxygen / Aerosol Therapy or Other Therapeutic Respiration Apparatus, Million USD, 2019 vs 2020

Source: Data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.
The imports value per 100 persons of artificial respiration, ozone / oxygen / aerosol therapy or other therapeutic respiration apparatus of the OIC countries group increased from 24 USD in 2019 to 69 USD in 2020. At the individual country level, 12 OIC countries were above the global average of 196 USD per 100 people and ranged from 210 USD per 100 people (Albania) to 1,348 USD per 100 people (United Arab Emirates) for those member countries with values above the world average in 2020. On the other hand, 12 OIC countries (Gambia, Niger, Comoros, Uganda, Nigeria, Benin, Mozambique, Chad, Mauritania, Sierra Leone, Sudan, and Burkina Faso) had average import values below 10 USD per 100 people in 2020 (Figure 6).

Figure 6: Imports Value per 100 Persons of Artificial Respiration, Ozone / Oxygen / Aerosol Therapy, or other Therapeutic Respiration Apparatus, USD, 2019 vs 2020

Source: SESRIC staff calculations based on Data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.

COVID-19 Vaccines, Test Kits, Instruments, Apparatus for Diagnostic Tests Imports

The WHO and public health institutions recommend vaccines as a game-changing tool in combating the COVID-19 pandemic. While access to reliable vaccines is critical to ending
the COVID-19 pandemic, only a few COVID-19 vaccines got into the WHO’s Emergency Use Listing and some others are still at Pre-Qualification stages.

In that connection, the imports of COVID-19 vaccines, test kits, instruments, apparatus for diagnostic tests by the OIC countries group increased from 8.7 billion USD in 2019 to 11.7 billion USD in 2020. Accordingly, the OIC countries claimed a share of 5.1% in total world imports of this product group in 2019 which increased to 5.6% in 2020. As to the imports value per capita of COVID-19 vaccines, test kits, instruments, apparatus for diagnostic tests, it globally increased from 22 USD in 2019 to 27 USD in 2020. In comparison, the OIC average increased from 5 USD per person in 2019 to 6 USD per person in 2020. Seven OIC countries (United Arab Emirates, Qatar, Lebanon, Kuwait, Brunei, Bahrain, and Saudi Arabia) had per capita import values higher than that of the world ranging from 24 USD per person (Saudi Arabia) to 103 USD per person (United Arab Emirates) (Figure 7).

**Figure 7: Imports Value per Capita of COVID-19 Vaccines, Test Kits, Instruments, Apparatus for Diagnostic Tests, USD, 2019 vs 2020**

Source: Data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.
Exports of COVID-19 Medical Supplies by OIC Countries

This section analyses the exports of the medical products that have intensively been used in the treatment of and prevention from COVID-19 in the OIC countries group. At the global level, total COVID-19 medical supplies exports increased from 759 billion USD in 2019 to 918 billion USD in 2020, equal to a growth of 159 billion USD. In parallel, the OIC countries group increased its exports from 20 billion USD in 2019 (2.7% of COVID-19 medical supplies exports in the world) to 25 billion USD (2.8% of COVID-19 medical supplies exports in the world) in 2020. The exports of COVID-19 medical supplies increased its share from 1% in 2019 to 1.7% in 2020 in the total exports of OIC countries group.

At the individual member country level, the largest exporters of COVID-19 medical supplies in 2020 were Malaysia (12.4 billion USD), Turkey (5 billion USD), Indonesia (2.3 billion USD), and Pakistan (1.1 billion USD) (Figure 8). Turkey and Malaysia were also among the top 20 exporters of these products globally to OIC countries in the same year (Figure 3). The exports by these four member countries made up 81% of the total OIC exports in this product group in 2020.

Figure 8: Top 20 OIC Exporters of COVID-19 Medical Supplies, 2019 vs 2020

Protective Equipment Exports

The OIC countries’ exports of PE also significantly increased from 1.4 billion USD to 3.4 billion USD from 2019 to 2020. The PE exports comprised 1% of the OIC countries’ exports of COVID-19 medical supplies in 2019 which increased to 1.7% in 2020. The largest growth in the OIC exports of PE products from 2019 to 2020 is observed in the exports of protective garments product group with an increase of 952 million USD (Figure 9).
Artificial Respiration and Ozone / Oxygen / Aerosol Therapy Apparatus Exports

The share of the OIC countries group in global exports of artificial respiration and ozone/oxygen/aerosol therapy apparatus was merely over 1.4% in 2020 as only a handful of OIC countries can produce them. Based on available data, only 29 OIC countries exported any of the products classified under this product group in 2020. Only seven of them recorded export values of above 1 million USD in the same year. Three OIC countries, namely Malaysia (85 million USD), Turkey (76 million USD), and Indonesia (12 million USD) made up 93% of the total OIC exports of artificial respiration, ozone/oxygen/aerosol therapy or other therapeutic respiration apparatus in 2020 (Figure 10).

Figure 10: Exports of Artificial Respiration, Ozone / Oxygen / Aerosol Therapy, or other Therapeutic Respiration Apparatus by OIC Countries, Million USD, 2019 vs 2020

Source: Data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.
COVID-19 Vaccines, Test kits, Instruments, Apparatus for Diagnostic Tests Exports

Despite the upsurge in demand for the medical supplies in the “COVID-19 vaccines, test kits, instruments, apparatus for diagnostic tests” product group, the exports of OIC countries in this product group decreased from 924 million USD in 2019 to 916 million USD in 2020. The OIC countries group comprised only 0.5 % of total world exports of this product group in 2019 which decreased to 0.4% in 2020 (Figure 11). The exports of top 10 OIC countries made up 94% of total OIC exports in this product group in 2020. Particularly in 2020, Turkey was the top exporter with 356 million USD, followed by United Arab Emirates (188.2 million USD) and Indonesia (93.9 million USD).

Figure 11: Top 20 OIC Exporters of COVID-19 Vaccines, Test Kits, Instruments, Apparatus for Diagnostic Tests, 2019 vs 2020

Trade Balance of OIC Countries in COVID-19 Medical Supplies

This section analyses the trade balance of the medical products that have intensively been used in the treatment of and prevention from COVID-19 in the OIC countries group. Trade balance or net exports is the difference between the monetary value of exports and imports of a country or group of countries over a certain time period.

The OIC countries as a group recorded a negative trade balance in COVID-19 medical supplies product group both in 2019 and 2020. However, the trade deficit of the OIC countries group reduced from around 34 billion USD in 2019 to nearly 32 billion USD in 2020, corresponding to an improvement of 2 billion USD. The trade deficit of 10 OIC countries was equivalent to 26 billion USD (76% of the OIC trade deficit in this product group) in 2019 which increased to 27 billion USD (84% of the OIC trade deficit in this product group) in 2020.

The largest net importer of COVID-19 medical supplies among the OIC countries in 2020 was Saudi Arabia with a negative trade balance of 7 billion USD. Saudi Arabia was followed...
by United Arab Emirates (-4.9 billion USD), Kazakhstan (-2.5 billion USD), Egypt (-2.1 billion USD), and Nigeria (-1.8 billion USD).

On the other hand, four OIC countries (Malaysia, Bangladesh, Guyana, and Pakistan) recorded positive balances of trade in COVID-19 medical supplies in 2020. Particularly, Malaysia topped the list with over 8 billion USD net exports in the same year (Figure 12).

**Figure 12: Top 20 OIC Countries with Negative and Positive Trade Balances in COVID-19 Medical Supplies, 2019 vs 2020**

![Figure 12: Top 20 OIC Countries with Negative and Positive Trade Balances in COVID-19 Medical Supplies, 2019 vs 2020](chart)

**Source:** Data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.

**Trade Balance in Protective Equipment**

The trade deficit of OIC countries group in protective equipment also significantly increased from 329 million USD in 2019 to 1.6 billion USD in 2020. At the sub-product group level, while the net exports of the OIC countries group in protective garments was 321 million USD – indicating a trade surplus, trade deficits worth of 1.8 billion USD in the mouth-nose protection equipment product group and 134 million USD in the protective spectacles and visors product group were observed in 2020.

**Trade Balance in Artificial Respiration and Ozone / Oxygen / Aerosol Therapy Apparatus**

The OIC countries group was a net importer of artificial respiration and ozone / oxygen / aerosol therapy apparatus with a trade deficit amounting to 356 million USD in 2019. In 2020, this deficit increased to 1.1 billion USD (Figure 13). In 2020, at the individual country level, Indonesia was the largest net importer in this product group with 178.8 million USD trade deficit. Kazakhstan (-163.8 million USD), Saudi Arabia (-163.1 million USD), United Arab Emirates (-131.7 million USD), and Uzbekistan (-65.3 million USD) followed Indonesia in 2020. The trade deficits of 10 OIC countries (Indonesia, Kazakhstan, Saudi Arabia, United Arab Emirates, Uzbekistan, Turkey, Iraq, Morocco, Pakistan, and Kuwait) made up 78% of the total OIC trade deficit in this product group in 2020 (Figure 13).
Figure 13: Top 20 OIC Countries with Negative Trade Balances in Artificial Respiration, Ozone/Oxygen/Aerosol Therapy Apparatus or Other Therapeutic Respiration Apparatus by OIC Countries, 2019 vs 2020

Source: Data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.

Trade Balance in COVID-19 Vaccines, Test Kits, Instruments, Apparatus for Diagnostic Tests

The OIC countries group remained net importers of COVID-19 vaccines, test kits, instruments, apparatus for diagnostic tests product group both in 2019 and 2020. The trade deficit of the OIC countries group amounted to 10.8 billion USD in 2020; an increase of 3 billion USD compared to 2019 (7.8 billion USD). Ten largest OIC net importers of this products group were Nigeria, Turkey, Saudi Arabia, Indonesia, United Arab Emirates, Lebanon, Algeria, Pakistan, Kazakhstan, and Malaysia and their values corresponded to 67% of the total OIC trade deficit in this product group in 2020 (Figure 14).

Figure 14: Top 20 OIC Countries with Negative Trade Balances in COVID-19 Vaccines, Test Kits, Instruments, Apparatus for Diagnostic Tests, 2019 vs 2020

Source: Data extracted on 20/09/2021 from International Trade Centre (ITC) Trade Map Database.
Conclusion

In overall, the imports of COVID-19 medical supplies by the OIC countries group increased from 54 billion USD in 2019 to 57 billion USD in 2020 and comprised around 4% of the group’s total imports and 6% of the global imports of COVID-19 medical supplies in 2020. The data also show that the OIC countries group was net importers of the COVID-19 medical supplies both in 2019 and in 2020 which jeopardizes making the COVID-19 medical supplies available to their citizens due to the disruptions in supply chains and several wealthier countries entering into pre-purchase agreements with COVID-19 vaccine manufacturers.

In order to develop immunity to COVID-19 at the global and OIC levels, providing access to effective and approved vaccines, protective equipment, and treatment facilities to all people is a core necessity. Only after providing all necessary medical supplies, particularly to the most vulnerable people, the fight against the pandemic and reviving the economy and social life in the OIC countries and the world can be successful.

In this connection, the Report underlines the insufficient and undesirable levels of investments by the OIC countries in the development and production of medical supplies as indicated by the large deficit in their trade balances in medical supplies products. Considering the limited technical capacities of many OIC countries to produce medical supplies and given the high possibility of having pandemics in the future, it seems that there is an urgent need for the OIC countries to give special importance to this issue while preparing their national investment strategies. Accordingly, the public investment strategies of the OIC countries should prioritise allocating sufficient funds for developing their scientific and technical capacities in the development and production of medical supplies to get prepared for the future outbreaks. In this regard, it is also importance to enhance the intra-OIC partnership and cooperation as well as the cooperation with the private sector and relevant international organisations.

References

ITC, Trade Map Database: https://www.trademap.org/