



## THE EXTENT OF THE PREPAREDNESS OF THE HEALTH OF MECCA TO CONFRONT MUTATED CORONAVIRUS

Mohammed. H. Almasoudi<sup>1</sup>, Faisal. A. Tashkandi<sup>2</sup>, Yusuf. A. Algerainees<sup>3</sup>, Ammar. Y. Bakhsh<sup>4</sup>, Majed. A. Alshli<sup>5</sup>, Majed. M. Allahyani<sup>6</sup>, Bandar. A. Ganim<sup>7</sup>, Mohammed. A. Alghamdi<sup>8</sup>, Abdulhadi. R. Alotibi<sup>9</sup>, Turki. A. Sardar<sup>10</sup>, Abdulaziz. K. Almoamri<sup>11</sup>, Abdullah. A. Alsulami<sup>12</sup>, Jamil. D. Alkhatabi<sup>13</sup>, Maher. M. Allehyani<sup>14</sup>, Mohammed. A. Albishri<sup>15\*</sup>, Abed. A. Alotaibi<sup>16</sup>, Ahmed. M. Alotaibi<sup>17</sup>, Khalid. A. Althobaiti<sup>18</sup>, Abdalazaiz. M. Kutbi<sup>19</sup>, Abdulmajeed. A. Alotaibi<sup>20</sup>, Basim. K. Alhassani<sup>21</sup>, Saad. B. Alsaedi<sup>22</sup>, Turki. A. Alshaikh<sup>23</sup>, Tawfiq. M. Alharbi<sup>24</sup>, Sahel. O. Alfadhli<sup>25</sup>, Abdulaziz. A. Alwuthaynani<sup>26</sup>, Yasser. A. Alahmadi<sup>27</sup>, Fahad. M. Alqarni<sup>28</sup>

**Abstract:** Assessing the importance of the health preparations of Mecca to confront the mutating Coronavirus, in order to prevent its spread among people in a large way, about 1,000 questionnaires were distributed through the social networking application WhatsApp, in order to avoid infection with the Coronavirus, as it has not been completely completed yet. Only 800 questionnaires were obtained from various departments of the Department of Health Affairs in Mecca.

**Keywords:** mutated coronavirus, the health of Mecca

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1,2,3,4,5,6,7,8,9,10,11,12,13,15\*,16,17,18,19,20,21,22,23,24,25,26,27,28 Ministry of Health, king Abdullah Medical City\*, Makkah, Saudi Arabia

**\*Corresponding Author:** Mohammed. A. Almasoudi

\*Ministry of Health, Health cluster Mecca\*, Makkah, Saudi Arabia

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**1- Introduction:** The novel coronavirus illness 19 (COVID-19) first grew on 31 December 2019 in Wuhan city, China. COVID-19 is distributed as the seventh member of the group Orthocoronavirinae under the family Coronaviridae. Most organs of this family are zoonotic viruses inherited by humans through connections with infective animals. Although bats and snakes are the natural tanks of most coronaviruses, there is no proof so far that COVID-19 generate in or was ancestral to a seafood market (5). A rapprochement of the lipid crowd of coronaviruses has specific that the new line COVID-19 has 80% similarity with hard sharp respiratory syndrome coronavirus (SARS-CoV). Lipid molecules such as caveolins, clathrins, and dynamin have a fundamental part in the internalization of viruses. These molecules are interested in the entry of viruses into steward cells, and goal host lipids are being studied as an antiviral strategy and could have different implementations(6). COVID-19 appears to need to bind to the angiotensin-converting enzyme-2 receptor on the membrane host cell to can it contract the host cell pair with a reliance on serine protease TMPRSS2. This intracellular protein likes to be a set of the virus's capability to infect the cell (7). Over the past two decades, flares of coronavirus have been spotted—SARS-CoV in 2003 and Middle-East respiratory syndrome (MERS) -CoV— and have been described as the main public health impendence. The WHO considers COVID-19 to be a more earnest and spread epidemic illness (8). To date, it looks like the mortality average of COVID-19 is lower than those of SARS or MERS. A considerable raise in the number of COVID-19 cases was observed as an outcome of the non-attendance of standing out pathological symptoms in virus carriers. For this reason, it may lead to the breakdown of local healthcare systems (8). Some countries face an outbreak crisis and are trying to block the spread of COVID-19 by stopping human gatherings, imposing a curfew in cities, rein travel between countries, and closing land borders, all of which may reduce the outbreaks. The main transmission of COVID-19 starts with human-to-human connections, including Akins and friends who have warm contact with patients or promote carriers. Many studies have reported that coughing and sneezing are quicker paths of virus dispersion, indicating the need for droplet and airborne provision when encountering an infected person (9). The expansion of the Coronavirus sub-mutator "XBB" is reason horror in some countries, rapiding the Saudi health authorities to increase realization of its hazard and supply counsel to stop it after observation some status of infection in the

Kingdom. The "XBB" mutant has been monitored in 19 countries around the world so far. It is a sub-mutant of Omicron and contains a number of popular mutations, according to a report by the Saudi Ministry of Health. The "XBB" mutant expand more quickly than the rest of the mutants, but not the same as the other major mutant "Omicron", according to the ministry's statement, and the Saudi Ministry of Health called for "completing the doses of the Covid 19 vaccine, and obtaining the booster dosages", which provides protection from severe complications, and she advised to "clothes a mask", especially when infected with infection, stressing the significance of this for "the old and those who pain from chronic or immune illness. "She also recommended to keep hand hygiene, to block the spread of the sub-mutant. For his part, the Saudi Minister of Health, Fahd Al-Jalajil, emphasized the ministry's pursuit to "all developments of the Corona pandemic", in a tweet via his counting on the "Twitter" website. And about the "XBB" sub-mutator and its watching in Saudi Arabia, he said that "there have not been indications of virulence and severity so far," noting the importance of "completing the Coronavirus vaccines because they are active against mutant. "He called on the public to "follow the advice and orders" of the Ministry of Health, and the Public Health Authority "Prevention", and to do preventive measures, according to what he recalled in the tweet. The Saudi Public Health Authority, "Prevention", had indicated that "the XBB mutant was uncovered in a limited number of plus samples. "And it sure in a statement, Monday, that the sub-mutants of "Omicron BA5 and BA2" are prevalent in more than 75% of the positive samples, according to the Saudi Press Agency "SPA". (10). Dr.A.A. Dawood, 2022, in his study about covid-19 mutated propose that "close contact with an infective person is the main agent in illness transference. Health-care workers must also go-ahead CDC guidelines and should not try to do any virus bleakness or characterization. The impact of mass gathering deletion on decreasing the spread of COVID-19 wants to be located. Any mutation occurring will be especially important. There is no evidence that part of COVID-19 is synthetic" (4).

## 2-Material and Methods:

This study was launched in (the city of Mecca in the kingdom of Saudi Arabia), start writing the research and then writing the questionnaire in June 2022, and the study finished with data collection in October 2022. The researcher used the descriptive analytical approach that uses a quantitative or qualitative description of the social phenomenon, and (The extent of the preparedness of the health

of Mecca to confront mutated coronavirus). This type of study is characterized by analysis, reason, objectivity, and reality, as it is concerned with individuals and societies, as it studies the variables and their effects on the health of the individual, society, and consumer, the spread of diseases and their relationship to demographic variables such as age, gender, nationality, and marital status. Status, occupation (1), and use of the Office Group 2010 histogram for Excel to rank the results by dragging them on the statistical software (2).

### 3- Results and Discussion:

A questionnaire is an important and useful tool for collecting a huge amount of data. However, researchers were not able to personally interview participants on the online survey, due to social distancing regulations at the time to prevent infection between participants and researchers and vice versa (not coronavirus participation completely disappearing from society<sup>1</sup>). He only answered the questionnaire electronically, because the questionnaire consisted of tenth questions, all of which were closed. The online approach has also been used to generate valid samples in similar studies in Saudi Arabia and elsewhere (3). Regarding the first question, do you have information about the mutated corona virus? 81.4% of the respondents answered yes, while 18.6% answered no. As for the second question, have you been infected with the mutated coronavirus previously? 37.9% answered yes, while 62.1% answered no. Regarding the third question, which is about whether one of your family members or relatives has contracted this virus? 66.7% of the respondents answered yes,

while 33.3% answered no. As for the fourth question about whether a message was sent to your mobile informing you of important information about the Corona virus? 77% answered yes while 23% said no. As for the fifth question, are there educational papers regarding this virus available at the health center near you? 76.7% of the respondents answered yes, while 23.3% answered no. As for the sixth question, have you noticed that the health center near you has taken any noticeable measures (putting posters or awareness leaflets outside or inside the center) to prepare? 73.3% answered yes, while 26.7% said no. Regarding the seventh question, what is the source of your information about this virus? 24.1% answered through health fairs, 5% each from a media outlet, a news website, and awareness brochures, 4% for the doctor, 2% for a friend or colleague, 1.5% for the other and none, while 51.7% answered all of the above. As for the eighth question, do you have your information? Do you want to add about this virus? 92.9% answered no while 7.1% answered yes. As for the ninth question, are there tours or campaigns inspected by the health or municipality on all public stores or malls to find out the application of the facility to prevent the spread of the mutated virus between people? All participants 100% answered yes. As for the tenth question, write any additional information about this virus? If your answer was yes in the previous question? Some of the participants answered that it is necessary to follow the supervisory and preventive instructions and fortify themselves with God and with the vaccine, and some claim God to avoid the evils of the virus by supplicating and fearing God.

**Table No.1:** Monitoring and inspection campaigns on shops, food centers and malls by the Ministry of Health, the Municipality and Environmental Health

Questions	Yes	No
do you have information about the mutated corona virus?	81.4%	18.6%
have you been infected with the mutated coronavirus previously?	37.9%	62.1%
which is about whether one of your family members or relatives has contracted this virus?	66.7%	33.3%
whether a message was sent to your mobile informing you of important information about the Corona virus?	77%	23%
are there educational papers regarding this virus available at the health center near you?	76.7%	23.3%
have you noticed that the health center near you has taken any noticeable measures (putting posters or awareness leaflets outside or inside the center) to prepare?	73.3%	26.7%
are there tours or campaigns inspected by the health or municipality on all public stores or malls to find out the application of the facility to prevent the spread of the mutated virus between people	100%	0%

**Conclusion:**

The state sponsored it, represented by ministry of health, in the extent of its lands, whether they were citizens or residents on its lands, as it took care of them from the beginning of the pandemic, as it brought them vaccinations for this virus and appealed to everyone to take vaccine and other stimulating doses in order to reduce and prevent the spread of the virus and reduce its symptoms almost completely so that they do not feel any satisfactory symptoms, so the ministry of health is keen to wear a mask in public places due to overcrowding, especially in shops, markets and large malls to prevent the spread of this virus.

We found many results from this study: ministry of health is keen to prevent the transmission and spread of infection, especially the mutated coronavirus that is currently spreading in some countries, so it is coordinating with environmental health and municipalities to monitor public places by stressing the need to wear a muzzle and distance between people, especially in shops such as markets, large malls, and cafes also prevents people who did not take from entering public places only after taking all stimulating doses to prevent the transmission of the virus between people.

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