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Inequality in Treatment of New Coronavirus Infections in Japan



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ABSTRACT

The new Coronavirus disease (COVID-19) has been spreading across the globe, and Japan is no exception. As of September 2021, the medical system in Japan appeared overburdened, and depending on the location, the healthcare system may likely collapse. Even if a patient's condition warrants admission to a hospital, he/she may be forced to isolate at home, which could prove fatal at times. However, the situation may be different for influential people such as politicians and celebrities, who can access treatment on a priority basis, compared to the general population. In this article, we discuss how such a difference arises and how it matters.

INTRODUCTION

Triage is the selection (and decision) of dealing with emergency issues on a priority basis. Specifically, it means that the priority for providing medical treatment is determined based on the severity of a patient's condition. It is used in the treatment order of patients, the order of emergency transportation, and the determination of transportation destination facilities at emergency accident sites. Triage is also provided at the hospital's emergency department and emergency call services to patients who require treatment first, or those who should be prioritized in an emergency.

The new Coronavirus infection (COVID-19) continues to spread worldwide, even in the latter half of 2021. In Japan, the medical system has remained overburdened as of September, and in some cities, the situation is likely to result in the collapse of the healthcare system¹⁾. Before the outbreak of COVID-19, anyone could receive medical treatment at any hospital in Japan. In the current situation, even if you want to be admitted to the hospital for COVID-19 treatment, you may be forced to end up waiting at home, and the patient may likely be unable to receive sufficient medical attention such as medication and oxygen. In some cases, this situation may become serious and even fatal. In the treatment of COVID-19, life selection, such as triage, may become imperative. Politicians and celebrities, who are commonly referred to as elite class citizens, generally receive preferential treatment owing to their status, which differs from that of general citizens. This article discusses how such differences arise and how it matters.

Prevention, testing, and treatment of COVID-19

The outline of the treatment course for COVID-19 as of October 2021 is presented. COVID-19 infection occurs when the Coronavirus invades the body through the mouth and nose and propagates. Direct or indirect contact with an already infected person and droplets such as saliva released during sneezing or coughing are considered to be major modes of transmission (Fig. 1). Symptoms include fever and respiratory discomfort, similar to a cold, in mild cases, as well as fatigue, and sometimes respiratory failure²⁾. As a countermeasure, to prevent the virus from invading the body, it is recommended to sterilize all items before touching and to wear a mask. In addition, the Ministry of Health, Labor, and Welfare has called for avoiding the three densities (close, dense, and sealed), and is encouraging remote work or to ensure appropriate ventilation indoors and in vehicles and workplaces³⁾. The

government is funding and providing free vaccinations to people over 12 years of age across Japan to prevent aggressive infections (as of September 2021, there are reports that the inoculation age may be reduced further)⁴. However, this vaccination is not always freely available to those who want to receive it, and there is a priority list for receiving the vaccination. The details are provided in the next section.

The detection of viral antigen proteins and nucleic acids is one of the methods of diagnosis. When symptoms emerge, this test is performed to determine whether or not it is derived from COVID-19 and to determine whether or not the patient needs to be hospitalized. Alternatively, you need to test in advance to ensure that you are not infected when entering or leaving the country. In addition, people in occupations requiring regular contact with people, such as store clerks, medical personnel, and educators, may receive the vaccination to ensure the safety and security of those around them. The measurement of oxygen saturation in the blood is also becoming the standard. As the symptoms aggravate and respiratory failure sets in, oxygen saturation decreases. Therefore, staff at health centers increasingly measure oxygen levels in advance before sending patients to medical institutions, or the patient individually owns a measuring device.

The next step is treatment when the infection is confirmed (Fig. 1). After the patient is admitted to the hospital, respiratory conditions such as oxygen inhalation and symptomatic treatment such as antipyretic medication are provided. In the meantime, recovery is expected based on the self-immune function. If the symptoms are mild in the early stages of infection, antibody cocktail therapy, a treatment method in which an antibody is introduced externally may be used. However, as the symptoms progress, the focus is on relieving pain with anti-inflammatory drugs rather than treatment. Currently, many countries are developing new drugs and vaccines, but presently (as of September 2021), the general treatment options approved in Japan are limited⁵⁾. Unfortunately, it is not a situation that can be addressed with medicines. Antiviral and antiparasitic drugs that have been approved for other diseases are expected to be used in the future after determining their therapeutic effect.

Common problems and patient triage

However, there are many challenges in providing the aforementioned treatments such as a shortage of medical staff and the lack of facilities such as beds in hospitals. The lack of medical equipment or operators is considered anotherchallenge⁶. If you feel sick at home,

you can visit the hospital or call an ambulance. The current situation in Japan is that if COVID-19 is suspected, it is not certain whether it is possible to receive immediate medical attention in a hospital (Fig. 2)⁷⁾. Hospitals decide on designating isolation areas and beds to distinguish COVID-19 from other diseases to prevent the spread of infection. Correspondingly, the number of beds is limited and owing to the protection measures taken by the medical staff, a situation may arise in which a person suspected of being infected cannot be accepted immediately. Local health center staff are often involved in coordinating hospitalization, but if the number of beds in the place of residence is insufficient, it will not be possible to transport the patient to the hospital, or the patient may be transported to another area⁵⁾. Since there is limited coordination between hospitals at this time, patients who have been hospitalized once can be discharged from the hospital following recovery or can be vacated only when their condition becomes serious and they are likely to die. It is often difficult to move the patient to another hospital, even if the condition is mild. There may not be vacant beds and the hospital may not be in a position to accept new patients, which will further aggravate the condition (as of October 2021, the situation has eased marginally and the number of beds has become noticeable)⁶⁾. People who cannot be admitted to the hospital in the first place but suffer from COVID-19 are required to isolate at home. In some cases, a doctor may visit the patient and provide treatments such as oxygen inhalation or antibody administration; however, the proportion is limited and there are cases in which the patient dies at home without receiving any treatment.

Meanwhile, another challenge is that not all people who want to be vaccinated have received the vaccination. It is also true that vaccinations are provided on a priority basis. Generally, medical staff, people with co-morbidities (those who already have underlying health conditions such as malignant tumors, type 2 diabetes, chronic kidney disease, and dyslipidemia), and the elderly aged 65 and above were vaccinated on a priority basis. Subsequently, the inoculation of people below the age of 64, who are mainstream workers, commenced. However, young people such as university students have yet to receive a dose of the vaccination, and some cannot get the vaccination even if they want to. Vaccination has not been approved worldwide for children under the age of 12 (as of September 2021), and there is a possibility that treatment may be almost impossible if this age group is affected by the virus. Another issue is that the staff at government offices that used to work at vaccination centers may use the surplus vaccines without permission, and individuals from a higher economic background may get the doctor's appointment and receive the vaccination

first. Although the latter is unacceptable, we believe that it is necessary to carefully consider how to consider the former as corruption. There is also the idea that it is better to use it for someone than to throw it away. This problem can be attributed to the fact that the vaccines have not been distributed properly. Additionally, there is also a shortage of doctors who conduct vaccination drives.

Triage-like attempts to prioritize treatment for patients are also being made in Japan⁶⁾. This is based on the idea that advanced medical care should be provided on a priority basis to those who are more likely to recover. Vaccines were the priority for the elderly and patients with co-morbidities, who may be more vulnerable to contracting the disease. Regarding therapeutic actions, it is considered that young people who are relatively strong have a more active immune function, a lower risk of aggravation, and are more likely to recover. Such patients are given priority in hospitalization and are often subject to the use of medical devices such as oxygen inhalers and extracorporeal membrane oxygenation $(ECMO)^{8}$, which are limited in number⁵⁾. Although the former requires limited post-inoculation care and applies to a situation where everyone can be vaccinated once the system is in place, in the latter case, it is not possible to expect that the number of hospitalization beds will improve significantly over time or the proportion of medical staff will increase significantly. Therefore, it seems impossible to provide fair medical treatment to all. This can be considered as discrimination, depending on individual perspectives. In other countries, only ranking is done according to the conditions, so there is also the perception that individuals are not selected and that there is no discrimination⁹⁾. It is based on the idea that people should be treated by rules, regardless of their status, by ranking according to certain conditions, and it may be said that they are equal in a sense. The chairman of the Japan Medical Association had stated earlier that the selection of patients such as triage is not preferable¹); nevertheless, many selections have already been carried out in this manner.

Priority medical care for celebrities

Celebrities, such as movie stars, have preferentially been admitted to hospitals and have received medical treatment on a priority basis. The general public is not so fortunate, and many are on standby at home until they can be admitted to the hospital. Nevertheless, celebrities have been facing criticism on social media platforms for accessing medical care out-of-turn¹⁰. Why is this happening? Public hospitals are required to treat patients impartially, but this is not always the case with private hospitals, since they are governed by

individual policies. Some public hospitals usually have special rooms, which are expensive, and they are designated only for politicians and those who are not concerned about the highcost burden. Japanese citizens have to obtain National Health Insurance. Within the scope of medical treatment using the insurance, the amount of money that the person pays toward the cost of the treatment is fixed in part and is uniform regardless of the person's status. In private medical care, the cost is the asking price of the hospital, and the amount can be decided unconstrained. The special room mentioned above also includes additional costs that are not covered by insurance. If the hospital attaches great importance to economics, it will be possible to earn a high income if such patients are preferentially accepted. Celebrities and politicians may use such methods and seek immediate treatment in the event of an emergency. Influential people may benefit from the COVID-19 treatment as well¹⁰.

Similarly, methods for testing viral nucleic acids are now readily available at airports or by sending by mail, unlike earlier. Even in that case, it is sometimes regarded as a problem that the celebrity could be given priority to undergo the test and immediately access the results. Even if a person holds a career that attracts the attention of many people, there should be no reason why he/she should be given priority over the general population. He/she may have gained priority by paying a large amount of money. It can be seen that the seller of the test kit and the medical institution that conducts the test want to earn profits.

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CONCLUSION

In this paper, we have described the factors that influenced COVID-19 testing and treatment, as of October 2021. Although vaccination rates have increased and the hospitalization rate of critically ill patients has decreased marginally, we nevertheless believe that we cannot be complacent. As mentioned above, whether or not the patient can be hospitalized is discriminatory, and whether or not the patient requires hospitalization and can be sufficiently treated using appropriate medical equipment is also selected. The use of medical equipment is often restricted beyond the number of hospital beds, which can be attributed to the shortage of equipment and the limited number of medical staff who can operate it.

Individuals from a higher economic group can access COVID-19 testing and treatment by paying high medical bills without using an insurance system at a private hospital. The choice depends not on whether you are wealthy or not, but on whether you or someone around you, such as your staff, wants to do so. This is not because the lesion is progressing or because it is

facing death. Since it is expensive, a person who cannot afford it cannot access similar testing and treatment. Consequently, the general population will have to choose regular medical care with insurance and wait for their turn for tests and treatment, which could be timeconsuming. In some cases, the waiting time could result in mortality.

We believe that it is not always the case that a person from a higher economic background has a higher weight of life. It is certain that well-known or high-ranking people in society, such as company presidents, politicians, and actors, have an economic advantage. However, this does not mean that their lives can be prioritized and that the common man may die earlier. We believe that the weight of life does not differ from person to person.

The global impact of COVID-19 is unprecedented, and humankind must confront it. Now, something like triage may be prevalent in Japan for emergencies. Nevertheless, we hope that this situation will be resolved soon and that effective treatments will result in a higher rate of recovery so that people accept it as a common ailment such as influenza. Similar to other diseases, we hope that the medical system for COVID-19 will be normalized so that anyone can easily receive medical treatment. Even if the order of treatment is mixed up as mentioned above, it should not be a problem if everyone is treated appropriately and the chances of remission are high.

REFERENCES

1) Yoshiko Hashimoto. (2021) "I'm very angry about seeking medical prioritization" -Chairman of the Japan Medical Association, Nakagawa. m3.com, News / Medical Restoration, published April 28, 2021, https://www.m3.com/news/open/iryoishin/908945 (browsed September 2021).

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2) Satoshi Kutsuna. "What are the symptoms of the new corona?" -5 things to know now- Doctor's commentary on the treatment of infected people. NTV News, Special site, New coronavirus and our lives, https://www.ntv.co.jp/news_covid19/static/pickup01.html (browsed September 2021).

3) Jun Kobayashi, Keiichi Ikeda. (2021) Why are some Japanese people not wearing masks during the COVID-19 pandemic? International Journal of Pharmacy & Pharmaceutical Research, 20 (4), 183-191.

4) Sota Ueki. (2021) Should a child be vaccinated against corona? -Infection spread to teens, but worried about side reactions- What are the points to judge? Tokyo Shimbun Web, Tokyo Sukusuku, published August 17, 2021, https://sukusuku.tokyo-np.co.jp/life/46311/ (browsed September 2021).

5) Chiharu Ichikawa. (2020) "Maybe life was a low priority." -A man who lost his mother in corona because he couldn't get the treatment he wanted. Tokyo Shimbun Web, published June 4, 2020, https://www.tokyo-np.co.jp/article/33194 (browsed September 2021).

6) Yumiko Shimoji. (2020) some situations force "selection of life" -An increasing number of severely ill corona patients feared by medical practice. Okinawa Times Plus, Now in Okinawa under the spread of the new coronavirus, published May 4, 2020,https://www.okinawatimes.co.jp/articles/-/567462(browsed September 2021).

7) Roche Diagnostics Co., Ltd. (2020) One in two people refrain from seeing a doctor due to anxiety about the new coronavirus infection -The most common diseases/sites for which consultation was postponed were blood pressure in men and the uterus/cervix in women- About half of people in their twenties have not yet visited the

clinic. Press Release Times, published November 13, 2020, https://prtimes.jp/main/html/rd/p/00000024.000050509.html (browsed September 2021).

8) Osamu Nishida. (2020) What is ECMO that is currently attracting attention? -Activities and future in the treatment of new coronavirus infections. Medical Note, published April 2, 2020, https://medicalnote.jp/contents/200420-002-RD (browsed September 2021).

9) Toru Kumagai. (2020) "Selection of life" pressed by the corona disaster -Recommendations of the German Medical Society- Contents of "strict rules". News, HuffPost, published April 8, 2020, https://www.huffingtonpost.jp/entry/story_jp_5e8d8121c5b62459a9313e11 (browsed October 2021).

10) Haruka Ayase corona infection, immediate hospitalization, the net still "rough" -Because of the collapse ofmedical care, criticism of "elite class citizens" is deep-rooted.NikkanGendai Digital, Yahoo! Japan News,publishedSeptember1,

2021,https://news.yahoo.co.jp/articles/2f766398d25070a5d6118e4941ab89937879c9e6(browsed 2021).

Infection (air, droplets)

 \downarrow Within 2 weeks

Cold symptoms (onset)

[80% of patients heal with mild illness]

 \downarrow About 1 week to 10 days

Dyspnea, cough / sputum [In 20% of cases, the symptoms of pneumonia worsened and hospitalization was required]

↓ after that

Artificial respiration management, etc. are required

[Fatal at about 2-3%]

Fig. 1 Course of new coronavirus infection

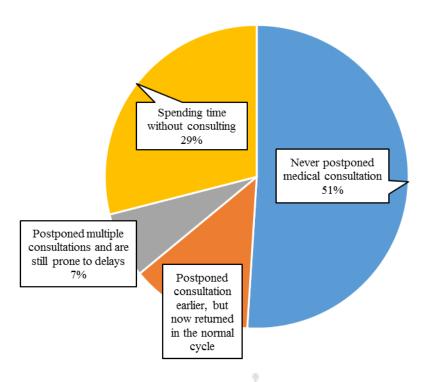


Fig. 2 Whether or not to visit a medical institution such as a regular hospital

In 2020, Roche Diagnostics surveyed 4,500 men and women in their 20-the 60s nationwide about changes in their behavior, such as medical examinations and tests.

Based on the data in reference 7).