

# Chapter 1

## Impact of Early Termination of Lockdown and Maintaining Social Distancing: COVID-19



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**Abstract** A novel corona-virus named COVID-19 has spread rapidly and has caused a global outbreak of respiratory illness. It has been confirmed that the bats are the source host of SARS, and camels act as a source for MERS. However, the source host of the COVID-19 remains unknown. All three kinds of pneumonia show human-to-human transmissions. Among which, COVID-19 shows a longer incubation period. The routes for the human to human transmission are common, respiratory droplets, contact, and aerosol. In which, the new form is Aerosol transmission. In which, integration of the air with droplets will occur during transmission that leads to the formation of Droplet Nucleus. It can lead to infection after inhalation. Because of this, the virus has already spread to South Korea, Japan, Iran, Italy, and other countries. The objective of this chapter is to address the impact and list the suggestion to handle COVID-19 safely. The methodology followed in drafting this chapter is to provide answers to the following questions: Q1: The clinical manifestation of COVID-19? Q2: How to prevent the transmission of this disease and protect themselves? Q3: The outcome of COVID-19 pneumonia. Q4: How to diagnose COVID-19? Q5: The effects of COVID-19 pneumonia on pregnancy: Q6: Coronavirus pneumonia in children. Q7: The response strategies against the COVID-19 in China. Q8: Therapeutic Strategy for COVID-19. Q9: Consequences

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of COVID-19 in Human Daily Life. Q10: How to deal with the novel Coronavirus disease calmly? Q11: The COVID-19 prevention among students. Q12: Plan to return to the campus. Q13: Home-based self-care in climacteric women Q14: Strategies to climacteric women's psychological problems during COVID-19 pandemic. The outcome of the present research is to provide suggestions to the human-kind towards handling the epidemic safely.

**Keywords** COVID-19 · SARS · MERS · Pregnancy · Climacteric woman

## 1.1 Introduction

Coronavirus consists of a core of genetic material surrounded by an envelope with protons spikes. It can cause severe Acute Respiratory Syndrome. The sudden attack of COVID-19 is related to people both in China and to the whole world. Before COVID-19, our human beings have suffered from SARS and MERS. Coronavirus is a kind of single and the positive strand RNA is coated by the envelope with the corolla-like spikes. All Coronavirus belong to the Beta genera. They are different in their diameters. The receptor of the SARS and the Novel Coronavirus are the same, which is ACE2, and to the MERS is CD26. The overall number of infected people around the world is 8427 for SARS, 1135 for MERS, and 105,335 for COVID-19. As for the death toll, it's 919 for SARS, 427 for MERS, and 3587 for COVID-19. Hubei province of China is the most serious province of the epidemic. The methodology followed in drafting this chapter is to provide answers to the following questions: Q1: The clinical manifestation of COVID-19? Q2: How to prevent the transmission of this disease and protect themselves? Q3: The outcome of COVID-19 pneumonia. Q4: How to diagnose COVID-19? Q5: The effects of COVID-19 pneumonia on pregnancy: Q6: Coronavirus pneumonia in children. Q7: The response strategies against the COVID-19 in China. Q8: Therapeutic Strategy for COVID-19. Q9: Consequences of COVID-19 in Human Daily Life. Q10: How to deal with the novel Coronavirus disease calmly? Q11: The COVID-19 prevention among students. Q12: Plan to return to the campus. Q13: Home-based self-care in climacteric women Q14: Strategies to climacteric women's psychological problems during COVID-19 pandemic. The outcome of the present research is to provide suggestions to the humankind towards handling the epidemic safely.

The organization of the paper is as follows: In methodology section, the questioner formed is answered from the literature review made on impact of COVID-19 on human life style. In conclusion section, the inference obtained from the study made is included along with the future scope.

## 1.2 Methodology

The diseases have spread from sick people to others in close contacts including family members, health workers staff, and the people who're living, studying, traveling together, etc. The COVID-19 is an infectious disease. It could spread from person to person through two main methods.

1. The droplets produced when an infected person speaks, cough, or sneeze.
2. Through Close contacts.

### *Q1: How about the clinical manifestation of COVID-19? [1]*

Three kinds of pneumonia have quite similar in nature clinical importance. Fever at different degrees, fatigue, and dry cough. When SARS patients show the continuous high fever, severe and critical COVID-19 patients have moderate a lower fever, even not a fever at all. Severe patients usually can develop to an RTS rapidly. Laboratory test of these three kinds of pneumonia is almost the same, which is in line with the characteristic of the virus infection. Routine blood tests usually show normal or decreased white blood cells. Decrease the lymphocyte, increased the CRP, and also increased in creatinine, LDH, muscle enzyme, and the myoglobin. Nucleic acid testing is applied as the gold standard for diagnosis. Samples include the nasopharynx swab, sputum, lower respiratory secretions, blood, and the feces. In severe patients, doctors may also detect progressively decreased lymphocytes, increase the troponin, D-dimer and the inflammatory factors such as the Interleukin 6. The imaging features of these three kinds of pneumonia? This is the dynamic imaging of a SARS patient. At Day 3, things are onset, small Ground-Glass Opacity (GGO) image could be observed in the lung. At Day 9, multiple GGO images in both two lungs, together with the crazy paving sign. At Day 20, multiple large GGO images in both lungs, and on Day 25, we can see consolidation image, and it developed into a white lung in the end. Imaging of MERS shows the several features that lack the exudation GGO, and also consolidation imaging. Imaging features of COVID-19 can be divided into three stages; early-stage, progressing stage, and the severe stage. At the early stage, lesions are atypical, which makes it as easy to miss, thus we should pay more attention.

Treatment of three kinds of pneumonia is the same basically. The first is to determine the treatment site. Severe and critical patients will be automated by the intense care unit. Secondly, common treatment contains bed rest, support, biochemical monitoring, suitable oxygen therapy, antiviral treatment, and the anti-bacterial treatment. The third part is the treatment of severe and critical patients. Apart from treating basic disease and preventing complications, one should also pay attention to the prevention of the secondary infection organ support, which is partial to the respiratory and circulatory system. There is no specific medication for the virus and as a treatment is a supportive care. There is no vaccine to protect against this virus. Treatment and vaccines are still in development. The symptoms could range from mild to severe. There can be fewer respiratory symptoms such as cough and shortness of breath or diarrhea. In severe cases, there are difficulty breathing, kidney

failure, hypoxemia, even cause death. COVID-19 can be diagnosed by a history of epidemiology, clinical manifestation, and the lab test. Common signs of COVID-19 include mild to severe respiratory illness with a fever, cough, and shortness of breath. In more severe cases, infections can cause pneumonia, severe acute respiratory syndrome, kidney failure, heart failure, central nervous problems, and even death. So far, the global number of the reported cases of COVID-19 has surpassed 100,000 more, including about 80,000 in China and over 28,000 outside of China, including 100 countries/areas.

Different ways to deactivate the corona virus:

1. Thirty minutes in 56 centigrade can effectively deactivate viruses.
2. Using suitable disinfectants such as the Ether, 75 percentage, the ethanol can inactive the virus.

Different countries responded differently depending on whether they had zero cases, sporadic ones, clusters, or widespread transmission. Wuhan, the center of the coronavirus outbreak has been totally locked down to contain in the spread of COVID-19.

***Q2: How do we prevent the transmission of this disease and protect themselves? [2, 3]***

1. Have to make the regular hand washing with soaped water or alcohol-based hand rub.
2. Covering mouth and nose when coughing and sneezing.
3. The choice and appropriate to use the mask.
4. Open your door, window to improve the air circulation.
5. To reduce out of the activities, and stay at home.
6. Having a fever, cough, and difficulty in breathing, please go to the hospital, seek medical care earlier, and share your previous travel history with your health provider.

Most of them even after contracted with virus have no clinical symptoms, due to their strong immune system [4]. In most of the cases, the immune system is not aware enough to keep the balance. To do so, everyone needs to cooperate with their immune system to protect themselves from the viral infection [5, 6]. To boost the strength of the immune system, healthy lifestyle is most important [7].

At present, according to the clinical features and the radiographic imaging, patients with COVID-19 pneumonia have three stages.

1. Early-stage, generally, patients have mild symptoms, and the radiographic features are simple. Include small patch GGO later and the nodule in the single lung or both lungs.
2. The disease progresses, the patient's symptoms have further gravitated. And the radiographic features a variety and follows multiple GGO or consolidation in bilateral mattery, halo sign, or reversed halo sign around the nodule. And we can say sub-segmental atelectasis, pulmonary fibrosis formation.

3. In the advanced stage, the patient's respiratory function decrease obviously and there can be a white lung. And there may be a lot of pulmonary fibrosis formation. All of these are typical imaging features of COVID-19 pneumonia.

**Q3: The outcome of COVID-19 pneumonia. [8]**

Lesion reduce, density decrease, GGO completely absorbed all within a short period of time, it developed into a fibrous cord shadow. The only way it develops for better and then that is the result of most patients. If the disease deteriorates it will turn into a white lung in only a very few patients.

**Q4: How to diagnose Coronavirus disease in 2019 (COVID-19). [9]**

There are four points we need to understand for this COVID-19:

1. The latent period for this COVID-19 is usually like 3–7 days. Need to pay attention for 14 days for one patient, whether the victim is infected with the disease (or) not.
2. Need to do a blood routine test to pay attention to white blood cell number and the lymphocytes number.
3. Clinical manifestation is imaging features. To do CT scanning to see whether the patient's lung has some change like Ground-Glass Opacity or patchy shadow.

To make a decision whether this patient is a suspected case or is completely not COVID-19. So there are two or three types of tests we needed to know.

1. First one is nucleic acid by RT-PCR to find whether she has or he has COVID-19 nucleic acids.
2. Get samples from throat swabs or blood to do a nucleic acid test. Use the same symbol to do genetic sequencing. To find some homologous with no COVID-19 sequence.
3. The antibody, either it is an IgM or IgG antibody. In early stage, it should be IgM, but in a recovery stage, natural stage, it should be IgG.

But compared with the nucleic acids or genetic sequencing, the antibody is not so acute. Sometimes it has high false-positive results. It's hard to make a final decision. There are four types of classes

1. The silent infection: The patient is infected with the COVID-19 but the symptoms are very slight or without any symptoms, imaging manifestation of his abnormal chest.
2. Mild pneumonia: That means the patient's condition is fine. Having a fever, respiratory symptoms, and also in lung, some imaging changes like the ground-glass opacity.
3. The third type is a severe one, which means the disease condition is slowly progressive to bad. So except the fever, except the blood tests that changed, except the CT scanning changes.

Either one of three types of these. The first one is you have increased respiratory rate, your respiratory rate is more than the 30 times per minute or you have hypoxia,

without any oxygen therapy, the pulse oxygen sensuality should be less than 93%. The third one is the ratio of arterial oxygen pressure with inspiration oxygen less than 300-mm mercury.

4. Critical cases: Need to be transferred to ICU to get an enhanced treatment.
  - Have respiratory failure, need to get mechanical ventilation.
  - Blood pressure is very low.

Combined with multi-organ failure (heart, kidney, and some important organ)

***Q5: The effects of COVID-19 pneumonia on pregnancy. [10]***

Infective fever during the second trimester, it could lead to a two-fold increase in the incidence of autism in infants. COVID-19 is a newly discovered virus. So it is worth further exploration of what short-term and long term effects the infective fever could have on infants. Two, the effect of pregnancy on COVID-19 pneumonia.

1. In principle, the weight gain will slow down after the second trimester. It is recommended to work around at home.
2. Measure blood pressure twice a day and make a record. For diabetes and gestational diabetes, regular blood glucose monitoring can also do at home.
3. Count fetal movement.

Fetal movement is reduced under intrauterine hypoxia, counting fetal movement can help identify fetuses with intrauterine hypoxia. The fetal movement is not less than six times within two hours, otherwise, fetal movements are considered reduced. Reasonable medical consultation, seek medical attention having any simple terms of discomfort such as nausea, headache, fetal movement reducing. The principle of X-ray and CT examination is basically the same and their effects on the fetus are related to the gestational week. At the early embryonic development, high dose exposure above 1 gray is fatal to the embryo. Radiation doses received at 8 to 15 weeks of pregnancy have the greatest impact on the fetus's central nervous system.

***Q6: Coronavirus pneumonia in children. [11]***

From the clinical characteristics of the children, fever and the cough are common. Some children and neonatal cases may have typical symptoms, manifested as gastrointestinal symptoms such as vomiting and diarrhea, or only manifested as a poor response and shortness of breath. Most cases of children significantly milder recover faster, and the prognosis is good. Critical cases often have an underlying disease or multiple infections. From the lab test, blood routine and the CRP tests, observe children's leukocyte, and the absolute lymphocyte counts are mostly normal.

Children with underlying lung disease should pay attention to the identification of new lesions based on the original imaging. The stages of disease process are as follows:

1. Early-stage: Localized lesions, sub-segmental or segmental patchy shadows and ground glass shadows distributed under the pleura, with or without thickening of the lobular septum.

2. Progression stage: The lesions increase, the scope expands, multiple lung lobes are involved, and some lesions become consolidated, which can coexist with ground glass shadow or strip shadow.
3. Severe stage: It is a diffuse lesion of the lung, mainly with consolidation, and the few are "white lungs", the whole lung involve showing bronchial air signs. Pleural effusion and pneumothorax are rare.
4. During the recovery stage: The absorption of the original lesion improves for the diagnosis and the clinical typing.

The characteristics of existing childhood infection cases are as follows:

Type of Case	List of symptoms
Asymptomatic infection [12]	No clinical signs and symptoms
Mild infection [13]	Fever, Fatigue, Myalgia, Cough, Sore Throat, Runny nose, and Sneezing
Common infection [14]	Frequent fever or cough, mostly dry cough, followed by sputum cough, some may have wheezing
Severe infection[15]	fever and the cough

For the standard of severe infection, there are five points.

1. Shortness of breath: Different ages, have different Respirator Rate (RR), if the baby less than two months of age, RR is more than or equal to 60 per minute, 2–12 months of age, RR is more than or equal to 50 per minute. One to five years old, RR is more than or equal to 40 per minute. If the baby is more then five years old, the respiratory rate is more than or equal to 30 per minute, but you should remember, you must, except for the effects of fever and crying.
2. Oxygen saturation less or equal to 92% at rest.
3. Assisted breathing: Find the groaning, wing flaps, triple concave sign, cyanosis, intermittent apnea.
4. Lethargy and the convulsions.
5. Refuse to feed or feeding difficulties, with signs of dehydration.

***Q7: The response strategies against the COVID-19 in China. [16]***

Late in December 2019 several local health facilities reported a cluster of patients with pneumonia of unknown cause in which initially was linked to the seafood wholesale market in Wuhan Hubei Province, China. This disease named COVID-19 by WHO was declared as a global public health concern after spreading in China and outside of China. As of March 5th 2020, the total number of confirmed cases of COVID-19 in China has exceeded 80,000. And cumulative confirmed cases outside of China have reached more than 15,000.

While there was a downward trend in China, there has been a gradual increase outside of China with the majority of reports from Korea, Japan, and Italy. Starting from February 25th, the daily confirmed cases of COVID-19 outside of China have exceeded as a number of cases in China. This means that China is now under trip

pressure control of the COVID-19 spread within China resumed production and control introduction or imported cases from outside of China.

There are three key components of an epidemic:

1. Source of infection
2. Transmission and
3. Susceptible cases

COVID-19 is neither SARS nor influenza, it's a new virus with its own unique string characteristics. Unlike SARS, which only confirmed cases as a main source of infection. Asymptomatic individuals also play a role in the COVID-19 virus spread. Some studies have also confirmed that patients in the incubation period are infectious. These two distinctive features of transmission during the incubation period as well as during the asymptomatic stage greatly increase the risk of COVID-19 spread in a community.

The main route COVID-19 transmission where droplets and the format during unprotected close contacts between infectors and susceptible. The aerosol road is potential transmission way, in aerosol-generating procedures, which are conducted in healthcare facilities.

There have been reports of positive various testing in the faces of confirmed cases, and newborns or mother diagnosed with COVID in China. Therefore, focal-oral and mother-fetus routes also potential transmission ways, this means, transmission routes of COVID-19 may be more complex than that of SARS. So based on the epidemiology characteristics observed in China, everyone is susceptible as to the present no waxing for prevention and no specific antiviral agent available for COVID-19.

So, understanding this main features of COVID-19 epidemics non-pharmacologic public house measure applications should be the key strategies to contain the COVID-19 spread. The overall strategies of National Emergency Response against the COVID-19 in China were Target and control of the source of infection, block transmission, and prevent further spread and protect us acceptable. For the purpose of controlling the source of infection and management, a series of policies were made around five early. That means early identification, early report, early isolation, early diagnosis, and early treatment. Reason two months period, six editions of guideline for prevention under control seven editions of national clinical guidelines were released.

These guidelines provide a clear definition of confirmed cases, clinical diagnosis cases, suspected cases, and simple terms. And also optimized the procedures so case confirmation, in addition to this, the board action imposed on separating Wuhan and its surroundings starting January 23rd, 2020. Has effectively prevented further spread of the disease to the rest of the country.

The novel PCR diagnostic tools were developed for early and quick diagnosis of cases. Fewer clinics with men task early identification of suspected cases have made significant contributions. More hospitals were mainly designated for early as a relation of cases and the early treatment. On top of this Chinese integration of COVID-19



is a national infectious disease information system has helped the dissemination of up-to-date information.

And coordinate intervention throughout the country, besides the five early strategies other joint strategies were applied to interrupter the chains of transmission and protectors acceptable. Including suspension or public gathering, disinfection of public places with dense population and the strings and personal protection practice of the general public and healthcare provider. And also strong epidemiology investigations were being carried out for cases clusters and context to identify the source of infection and implement targeted control measures such as contact tracing.

***Q8: Therapeutic Strategy for COVID-19. [17]***

General treatment includes taking enough rest, having balanced nutrition, guaranteed calories, and staying hydrated, and so on. Vital signs especially blood pressure should be monitored. Stem Cell Transplantation, Convalescent Plasma Therapy and Lung Transplantation are the new strategies for dealing with COVID-19.

***Q9: Consequences of COVID-19 in Human Daily Life. [18]***

1. At the beginning of the epidemic, individuals hoarded a large amount of food in their houses in case of food shortage. As a spring festival came to an end, it is understandable that some people were afraid of returning to the workplace.
2. The medical staff has experienced excessive fatigue, anxiety, insomnia, depression, and they may deeply blame themselves in the face of the death of patients infected with coronavirus.
3. Healthcare providers on the frontline of the fight against coronavirus are facing the risk of being infected, worrying about their families, and refusing to take a reasonable rest.

The fear and concern can be amplified by the pre-existing anxiety and depression disorders. The effect of outbreaks will cause high levels of paranoia and result in delusion. As stress increases, severe anxiety can also cause relapse and substance abuse in highly susceptible individuals. There is an interaction between immunity and mental symptoms. Worsening mental symptoms can render a person most susceptible to physical ailments.

When individuals face serious life events, this elevated, long-stayed stress can lead to poor decision-making, impair memory, and affect overall well-being. Now-a-days, insufficient and excessive stress caused by the epidemic is harmful to our mental and physical health, and the social stability as well. The feature of insufficient stress is a slow response. Example: people refused to wear a mask and wash their hands when they were infected with the coronavirus. They do not realize that they may spread the virus to others. When facing the coronavirus, people with excessive stress may have mental problems that should be treated urgently, such as resent or tend to hurt others, etc.

For an individual, we should know these temporary physiological reactions are normal. This is the human body's own warning response. Do not complain and be panic too much. Replacing with positive emotions like support and comfort in our

daily life. Stay away from stressors. Stay at home and learn by the necessary news. Do not pay attention to and send rumors or unconfirmed negative reports to your friends. Change your behavior and lifestyle. Keep a healthy diet and exercise regularly. Make use of this opportunity to communicate with your family members or do some pleasant things together, such as cooking, playing the piano. Pay more attention to what we can do and focus on the good things around us.

The government also rented buses or planes to escort the migrant workers back to the factory. For a hospital, before entering the fever clinic, ward, or intensive care unit, the medical staff were well trained on how to protect themselves from being infected. The hospital arranges enough medical staff in the fight against coronavirus, so the doctors and nurses can take a rest and avoid excessive fatigue. The hospitals must ensure that the supply of medical protective equipment for their employees. For people who need psychological therapy, they can get help through the hotline or in the hospital.

***Q10: How to deal with the novel Coronavirus disease calmly.*** [19]

The perspective of ordinary people are in the following three forms:

1. What is emotion and emotion response?
2. What is the neuro-endocrine-immune network?
3. How can we use this network to keep calm?

An emotion is a complex psychological state that involves three distinct components:

1. A subjective experience,
2. A physiological response, and
3. Behavioral or expressive response.

Angry, anxious, are the negative emotion, while love, happy, is a positive emotion. When we have emotions, our bodies will give some physiological responses. All the negative mood emotional responses are harmful to our bodies. So please do our best to be calm and to be positive when we feel stress.

The neuro-endocrine-immune network: It includes the nervous system, endocrine system, and the immune system. The nervous system regulates the endocrine and immune system through the neurotransmitters and the neuropeptides. The endocrine system interacts with the other two systems by the hormone, and the cytokinesis the main language of the immune system. The close interactions among these three systems help to maintain our body homeostasis, and the invasion of the Coronavirus brings great challenges to the nervous system, endocrine system, and the immune system.

***Q11: COVID-19 prevention among students.*** [20]

The virus is said to spread mainly from person to person.

1. Between people who are in close contact through respiratory droplets produced when an infected person coughs, sneeze, or speak. These droplets can land in the mouth and nose of the people who are nearby or possibly be held in the lungs.

2. It may be possible that a person can get a virus by touching a surface or object that had the virus on it, and then touching their own mouth, nose, or possibly their eyes.
3. There is the possibility of aerosol transmission in the related closed environment for a long time exposure to a high concentration of aerosol.

The route of transmission in the digestive tracts remains determined. There is a lot of person on the campus. So, students should pay attention to their daily life, develop good personal hygiene habits, and the restrict way, prevent, and control it.

1. Avoid going to public space, especially in a crowded place with bad ventilation such as restaurants, Libraries, and the classroom, and keeping a distance of more than one meter.
2. When returning to the apartment, wash hands immediately after blowing nose or coughing, using running water and soap for at least 20 s before and after meals.
3. Make use of a disposable surgical mask when going out, seeking medical treatment, or taking public transportation. Do not spit. Spitting should be wrapped with paper towels, and disposed of in a covered trash bin.
4. Avoid being exposed, or in close contact with people who are sick.
5. Household spray cleaners and paper towels should be used to clean and disinfect the objects and surface that you frequently touch, such as door handle, mobile phone, toilet ring.

It is recommended to ventilate 2–3 times a day each time for more than 15 min. For medical students who participate in various treatment in the house program, there are few points to note here.

1. Minimize exposure to respiratory passaging that cause the virus.
2. Select appropriate personal protective equipment, maintain hand hygiene, and put on clean, new sterile gloves before entering the ward, or care area.
3. Replace gloves if they are torn or heavily contaminated.
4. Put on a clean isolation gown before entering. Change to the gown if it becomes soiled.
5. Use a medical protect mask.
6. Disposable respirators should be removed and discarded after leaving the ward or clean area.
7. Remember to close the door, put on google before entering, and remove it after leaving.

**Q12: Plan to return to the campus. [21]**

1. Ensure compliance with campus policy.
2. Inform counselors and mentors of your plan.
3. Avoid close contact with people who have symptoms of respiratory disease such as fever, cough, or sneeze. Inform the temperature before getting back to school. If you have any suspicious symptoms such as fever or cough, you should cancel or post your plan, and seek local medical advice immediately.
4. Customize a reasonable way to campus, and choose the right transportation.

5. Prepare personal protective equipment.
6. Get in touch with the counselors and mentors and obey the campus's arrangement.

***Q13: Home-based self-care in climacteric women [22]***

Due to the decreased ovarian function in the female hormone, climacteric women can appear some physiological and psychological as factors of symptoms. The presence of COVID-19 may increase climacteric women sustainability to develop menopausal symptoms. In the space period of the outbreak of COVID-19, psychological and somatic symptoms for climacteric women may arise due to your special physiological and psychological states.

***1.2.1 Common Physiological and Psychological Symptoms in Climacteric Women and Their Impact on Women and Their Families***

Climacteric is from age 40–60. From physiology, it is a transition from a reproductive to non-reproductive life. From endocrinology, it is from decreased ovarian function to failure of ovarian function. It means loss of ovarian hormone, particularly estrogen. So, menopausal related symptoms including irregular menstruation, hot flasher sweat, emotional fluctuations, depression, anxiety, sleep disorder, vaginal dryness, painful intercourse, fatigue, etc., are early signs. Osteoporosis, chronic conditions such as diabetes, cardiovascular disease, and long-term harm. All symptoms that can have an impact on the early part of a woman's life, creating life quality issues that lead to further problems. So menopausal symptoms are associated with a poorer quality of life.

***1.2.2 Home-Based Self-Care in the Climacteric Women During the COVID-19 Pandemic***

To keep a balanced diet, have a variety of different foods, choose whole grain food, plenty of vegetables and fruits. Intake 300 millimeters of milk or equivalent dairy products per day. Control sugar, less oil, limit salt and drink plenty of water. Generally, 1500–1700 mm per day. If you can diversify the diet to achieve the balance, try it out. You can select nutritional supplements in order to maintain the body's health under certain resistance to the virus. If you lack a fresh vegetable, maybe your lack of Vitamin C, minerals, and trace elements. If you lack fresh meat, maybe you lack protein and trace elements such as iron and zinc. You can either single and multi-vitamins and minerals, or milk powder.

### ***1.2.3 Exercise or Physical Activities at Home Are Important***

Eating and moving are the keys to maintain a healthy weight. Exercise can maintain energy balance and manage your weight. So it is important to exercise for at least 30 min a day.

A good enough sleep is necessary for high-quality life and health. It is best to go to bed no later than 11:30 PM and do not go to bed too late. Stop smoking and eliminate exposure to second-hand smoke. Limit your alcohol consumption.

#### ***Q14: Strategies to climacteric women's psychological problems during the COVID-19 pandemic. [15]***

The climacteric are a crucial stage of female life and most of the women can achieve self-balance through neuro-endocrine self-regulation.

1. To know about the COVID-19 correctly, reduce exposure to the coronavirus, and take any measures for personal protection.
2. Enrich life, pay attention to information of COVID-19 in less time. Most time, read your favorite books, watch entertainment programs, listen to your music, and keep a normal life.
3. Keep lines of communication open and be honest in your relationships. It seems like staff, friends, and families could support and help each other.
4. Pay attention to the physical and mental health of your family members and create a positive home atmosphere. Clean your room, keep your room ventilated, try to improve your cooking skills, and prepare delicious meals for your family. Enhance the relationship with your husband and strengthen the parent-child relationship.
5. Mindfulness meditation means deliberately pay attention to your present moment without judging it. Sit comfortably and strengthen your upper body. Try to put aside all thoughts of the past and the future, and focus on the present. Remain in the present by paying attention to physical sensations, especially your breath. Attune to the sensation of air moving in and out of the body while taking a breath.

## **1.3 Conclusion**

In this chapter, the question framed to address the impact of COVID-19 and suggestions provided are useful to the researcher in providing useful insights. The questioner was based on climacteric, pregnancy women with psychological problems (Q8, Q16, and Q17). The impact on children is discussed with the help of Q9. The measures that the human community should take to avoid the spread of COVID-19 is discussed with the help of Q10. The overall suggestions provided to prevent the transmission of COVID-19 are to avoid contact with the virus. To wear the mask, clean your hands, and stay home to keep away from the crowd. Also, to keep a healthy lifestyle is important for your healthy immunity and be optimistic. The

outcome of the present research is to provide suggestions to the humankind towards handling the epidemic safely. In Future work, we would like to concentrate on Stem Cell Transplantation, Convalescent Plasma Therapy, and the Lung Transplantation strategies for dealing with COVID-19.

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