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Resilience during quarantine with the outbreak of COVID-19 in Iran

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The aim of this paper is to review Iran's activities on resilience during home quarantine of outbreak of COVID-19 disease. The present study is a narrative review study that was conducted with the aim of investigating resilience methods during quarantine. The databases searched were: PubMed, ISI Web of Science, Google Scholar with these key words: resilience, quarantine, COVID-19. Governmental activities were included; closing of all schools and universities, changes in office hours, closing shrines, delay in repayment of loans until three months, electricity and water costs were reduced for a month, and urging people not to visit each other, and do not take a trip during the Iranian new year. Also, the municipality and the Islamic Republic's army began to disinfect public passages. Medical activities: All medical staff and health providers provided care and treatment of patients in hospitals. Furthermore, midwives and other public health workers continued work in the health center. Also, physicians and other health workers such as midwives began setting up systems to answer questions from the public. Telephone counseling with women on any issues related to pregnancy, lactation, sex issues and other problems were provided by midwives. Staff of pharmacology schools started to prepare alcoholic sanitizer. Public activities were included; various groups of people have begun collecting public assistance to provide masks and disposable clothing for the health workers. Some groups started to disinfect the ATMs. Iran has a third rank of the COVID-19 disease outbreak after China and Italy. Home quarantine was started one week after the outbreak. There are some governmental, medical and public activities for resilience with the home quarantine.

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Introduction

Coronavirus 2019 (COVID-19) is a disease caused by SARS-COV-2 that was diagnosed for the first time in China in December 2019 (Ghinai et al., 2020). The outbreak of COVID-19 has been a serious threat to public health worldwide. The maximum incubation of the virus is up to 14 days, and the median time from onset of symptoms until admission to the intensive care unit (ICU) is 10 days (Li M et al., 2020).

In the report of the World Health Organization (WHO) the time span between the onset of symptoms and death was approximately two to eight weeks (- Baud D et al., 2020). With contamination of more than 100,000 people in more than 100 countries, the WHO announced this disease as a pandemic.

massive quarantines, travel restriction, monitoring and restriction of community formation, increasing of hospital beds to separate suspicious cases, and follow-up of communications of affected individuals, and initiating vaccinations are examples of efforts made by government to curb the outbreak of COVID-19 in Iran (-Macintyre CR ,2020). Disconnection of physical relationship is the most effective way to break the transmission chain of infection. Actions that used to reduce exposure to the disease include isolating infected individuals with an active disease and isolating those potentially exposed to infection in the hospitals and homes respectively, that all of them called social distance (Huremović D ,2019).

At the beginning of an epidemic, there is a need for high level of medication and hospitalization. Therefore, for keeping the cost of outbreak low, quarantine of people at the optimum time has a more favorable effect comparable to running a high but constant quarantine rate (Ahmad MD et al., 2016).

In suspected cases to COVID-19, some experts recommend a 22-day quarantine period, because a 14-day quarantine may lead to failure in 6.7% of cases (Li M et al., 2020).

Quarantine can also be done at home. Home quarantine (HQ) is a non-pharmacological intervention aimed at reducing virus transmission (Sheree et al., 2019). Having sufficient knowledge of the reasons for the HQ is one of the most important factors for its success (Adebimpe WO et al., 2019).

Psychological aspects must be taken into account when planning and executing isolation and quarantine (Huremović D2019). Typical reactions of people in stressful situations such as outbreaks of infectious diseases that require social avoidance, or quarantine may include anxiety, doubt about their ability to care of children, and fear of how others take care of themselves. Also, frustration at being quarantined for an uncertain time, uncertainty about the future, loneliness and the feeling of being cut off from the world and loved ones, anger at being exposed to the disease due to the negligence of others, boredom and despair of inactivity and daily activities, switching to alcohol or drugs, change in appetite, and sleep disorders are other reactions (SAMHSA, 2014).

Isolation, exposure and care of patients with critical illness and separation from loved one can have significant and lasting effects on health care providers. The consequences of such stressful experiences include post-traumatic stress disorders, relationship problems and substance use that may persist for many years after an infectious outbreak (Huremović D, 2019). The results of some studies suggest that people in quarantine are at risk of acute stress disorder. Also, the quarantined employees are significantly more likely to be fatigued, detached, anxious in contact with feverish people, irritable, depressed at work, and unwilling to work or consider resigning (Brooks SK et al., 2020).

HQ also affects children's activities. Prolonged school closure and home confinement during outbreaks can have negative effects on the physical and mental health of children. Evidence shows that when children drop out of school (such as weekends and summer holidays), they have less physical activity, spend longer time on television, computers and mobiles, erratic sleep patterns, and

inadequate diets, which can lead to weight gain and loss of cardiovascular fitness (Wang G et al., 2020). All of these disorders are evidence that quarantine success is not possible without support. Governments must ensure that certain basic individual needs are met in quarantine or isolation (Giubilini A et al., 2018).

Material & method

The present study is a narrative review study that was conducted with the aim of investigating resilience methods during quarantine. The databases searched were: PubMed, ISI Web of Science, Google Scholar with these key words: resilience, quarantine, COVID-19.

During the review, 18 relevant articles were obtained, of which 10 articles were used in writing resilience methods during quarantine.

Results

In Iran, after the corona virus epidemic on February 20, government officials did not declare a home quarantine for a week and all public centers, schools, universities and holy shrines were open. However, most students did not attend classrooms from 24 February.

At the beginning of the corona epidemic, the president of Iran has made the Minister of Health responsible for corona headquarters. Schools and universities were officially closed.

Corona prevention activities in Iran can be divided into three categories: governmental, medical and public.

Governmental activities: One week after the outbreak of corona in Iran, schools and universities were officially closed. Changes in office hours with two- hour delay at 10am.The holy shrines were closed from the beginning of the third week of the outbreak. According to government instruction, the repayment of loans was delayed three months. Electricity and water costs were reduced for a month. The Iranian new year is starting from 20th March. Iranian have the custom to go and visit their relatives and take a trip during two- week vacations in the new year. This year, due to the Corona epidemic, officials have urged people not to visit each other, and do not take a trip. The municipality and the Iran's Republic's army began to disinfect public passages.

Medical activities: From the beginning of the outbreak physicians, nurses, midwives and other health providers were on duty to take care of people affected by Corona virus. Most of these health providers worked in hospitals like physicians, nurses and midwives. A remarkable number of health providers (mostly midwives) worked in public health centers for providing health care for women, children, middle age and elderly people. From the second week of quarantine, physicians and other health providers such as midwives began setting up systems to answer questions from the public. Telephone counseling with women on any issues related to pregnancy, lactation, sex issues and other problems were provided. Some pregnant women that were at risk, were visited by a midwife at home. Staff of pharmacology schools started to prepare alcoholic sanitizer. Some of them worked for three shifting work in a day.

Public activities: Iran is under the sanction, especially in the last two years the severe sanctions have been imposed on Iran. Iran is in shortage of diagnostic test kits for Corona virus and medicines for prevention and treatment of affected people. Although Iran received some humanistic helps from other countries, it's still in the high shortage. Various groups of people have begun collecting public assistance to provide masks and disposable clothing for the health workers. Some groups started to disinfect the ATMs. Some people made packages including Sanitizers and soap for those that were not able to provide these items.

Conclusion

Iran has a third rank of the COVID-19 disease outbreak after China and Italy. Home quarantine was started one week after the outbreak. There are some governmental, medical and public activities for resilience with the home quarantine.

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