Iranian older adults women: The Impact of COVID-19 and Coping Strategies

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Abstract
In the field of epidemics, some vulnerable groups, such as older adults, are at greater risk. Many psychological, social, economic and physical hazards have threatened older adults during the COVID-19 pandemic. Some threats can be managed with medical system interventions. However, social and psychological challenges cannot be controlled quickly. People will have a better quality of life if they can take appropriate action in critical situations. There is a strong theoretical and empirical background that a sense of control and self-efficacy can promote psychological well-being. The main questions of this study included the following: What were the main problems experienced by older Iranian women during the outbreak of COVID-19? What coping methods did they use to control the situation? What were their views on the future? This research was conducted in Kerman city, the capital of Kerman Province. A phenomenological method was used. We interviewed 15 women over 65 years old. We extracted five main themes from the interviews. These themes were health issues, persistent anxiety, economic and social pressures, identifying unique solutions to the current situation, and optimism versus pessimism: what is the future? From the participants’ point of view, psychological, social and physical problems have disturbed them during the pandemic, especially at the beginning. However, they controlled their problems by using selective coping strategies. In Iran, planners can use the potential of the two institutions of family and religion to reduce the problems of older adults.

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1 Introduction

The COVID-19 pandemic began in the second half of 2019 and quickly became widespread in many countries. Age has been found to be a significant risk factor for COVID-19-related death. Populations 65 years and older are at serious risk of such a death (Jordan et al. 2020). The Centers for Disease Control and Prevention (CDC) reports that 31% of COVID-19 cases and 80% of COVID-19 deaths are seen in people aged 65 years and older (Centers for Disease Control and Prevention 2020). This vulnerability makes them more at risk (Girdhar et al. 2020). Worldwide, the highest rates of COVID-19 mortality have been reported in older adults and those with chronic disease (Tandon, 2020). Older adults are considered more vulnerable to COVID-19 due to their weakened immune system (Meng et al. 2020). However, various lines of evidence show that against COVID-19 and in comparison to other traumatic conditions, older adults are less likely than others to perform preventive behaviors properly (Petretto and Pili 2020). Reduction in self-care capacity is likely to convert older adults into sick or even asymptomatic carriers (D’cruz and Banerjee 2020).

The first wave of the COVID-19 outbreak in Iran was reported on February 19, 2020 (Shahriarirad et al. 2020). From the beginning of the pandemic to August 2020, 340,000 cases of COVID-19 and 190,000 COVID-19-related deaths were reported in Iran (BNO News 2020). From the beginning of the pandemic, there was a widespread belief that older adults became infected with the virus more quickly than others. These beliefs were prevalent among the public despite the lack of scientific evidence. The Ministry of Health of Iran announced that 6,004,460 cases had been infected with the new coronavirus disease by November 10, 2021, and 127,551 individuals had died. Approximately 63.5% of the deaths have occurred in people over 60 years of age (Shati et al. 2022). The Ministry of Health of Iran presented a protocol for the prevention and control of the disease. This protocol included the following:

- Closing crowded places such as markets and shopping malls, universities, schools, mosques and tourist places (Shahriarirad et al. 2021).
- Emphasis on keeping one’s distance from others.
- Forcing the use of masks in public places and any kind of social interaction situation.
- Recommendation of proper hand washing and the disinfection of tools and surfaces (Malekzadeh et al. 2021).
- Closing the entrances and exits of contaminated areas to restrict the public transportation system and encourage quarantine (Shaer and Haghshenas 2021).

There were no specific instructions for older adults, such as shopping hours only for them or social assistance in the form of shopping regulations or other items.

Epidemic diseases have significant psychosocial effects, such as anxiety, panic, adjustment disorders, depression, chronic stress, and insomnia, to which older adults are vulnerable (Armitage and Nellums 2020). In addition to physical illness, COVID-19 exposes older adults to many challenges. These challenges include disruption of plans, frustration and boredom, separation from family and friends, irregular access to resources (such as food and medicine), and financial pressures (Lind et al. 2021). With the onset of the pandemic, most governments have begun taking actions to curb outbreaks, such as quarantine or physical restrictions, the cancellation of gatherings and parties, and travel restrictions.
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These limitations put older adults at a social and economic disadvantage (Van Tilburg et al. 2021). As the effects of the disease continue, economic impacts such as job losses, job closures, and financial market volatility have become clear (Li and Mutchler 2020). The combination of these factors may directly or indirectly impact the lives of older adults. Providing nursing care during a pandemic is on top of regular costs, which increases the overall costs for older adults. Media coverage of widespread hospitalization and high mortality among older adults during the outbreak may also portray older adults as powerless, weak, and burdened. This condition indirectly impairs the health of older adults (Finlay et al. 2021). Societal opinions may portray older adults as unnecessary and redundant (Ayalon et al. 2020).

The World Health Organization (2020) warned about the effect of the COVID-19 pandemic on the psychosocial well-being of older adults. The United Nations (2020) noted that COVID-19 is a physical health crisis that also triggers a major mental crisis, particularly for some people, such as older adults. Although the basic needs of older adults may be similar throughout the world, some of the needs and how to respond to them are related to particular societies (Shrestha 2003).

The share of people over 60 years of age in the total population of Iran was 8.2% in 2010. (The number of older people was equal to 6, 146, 859 older individuals (Motlagh et al. 2014). Iranian culture emphasizes the care and maintenance of older adults in the family by young family members. Approximately 85% of older adults live at home (Hajinejad et al. 2019). There is a deep and close relationship between older adults and other family members. In Iran, older women are considered economically, socially, professionally, and literately less than their male counterparts (Tajvar et al. 2008).

Depending on their life experience with critical conditions, older adults find strategies to overcome disabilities and limitations (Morrow-Howell et al. 2020). Resilience and the use of individual solutions help them to withstand crises. Some reports have even suggested that older people have been able to cope with the challenging conditions of the pandemic through coping strategies. Older adults have even achieved personal growth and development (Yang, et al. 2021). One view is that almost all stressful situations encompass opportunities for approach coping either with the situation itself or its immediate aftermath. For example, a health crisis raises practical issues that call for approach coping, such as making decisions about treatment, being assertive with one’s health care providers, and planning potential lifestyle changes (Moos et al., 2006).

Understanding the different aspects of a problem can facilitate policy-making (Carta et al. 2020). Any support program for older adults in a pandemic that is made without full knowledge of all aspects of the problem is incomplete (Petretto and Pili 2020).

However, because full vaccination has not yet been carried out in Iran, older adults are forced to find solutions and strategies to overcome their physical, mental, and social problems. This paper aims to identify older women’s needs, limitations, and problems during the pandemic period and their strategies for the relative normalization of conditions.

The main research questions are as follows:

What was the life experience of older adult women during the COVID-19 pandemic? What strategies did they use to reduce the challenges posed by the COVID-19 pandemic? What are their viewpoints on the future?
2 Theoretical review

Some theorists have described wellbeing as the realization of one’s true potential through the pursuit of perfection. Ryff et al.’s model takes a multidimensional approach to measuring mental well-being. The authors found six dimensions: autonomy, personal growth, self-acceptance, purpose in life, mastery of the environment, and positive relationships with others (Ryff and Keyes 1995).

Facing a critical period can change a person’s emotional balance and perception of well-being. Behavioral and cognitive strategies must be implemented to achieve adaptation. Wrong responses to challenging situations can lead to maladaptive behavior and exacerbate vulnerabilities (Steinhardt and Dolbier 2008).

There are two types of coping strategies for well-being: problem-focused coping and emotion-focused coping. If the goal is to gain emotional support and reassurance, the strategy is emotion-focused; if the goal is to get practical help or advice, the strategy is problem-focused. Problem-focused coping addresses stressors. Steps are taken to either eliminate or avoid stress, or if it cannot be avoided, to reduce its impact. Emotion-focused coping attempts to minimize the stress caused by stressors. Folkman (1984) explained that problem-focused coping strategies are used to maintain mental health in situations where environmental challenges can change. In contrast, emotion-focused coping strategies are more likely to be implemented when the problem is immutable (Folkman 1984).

An important theory is interactive theory. This theory defines coping as an ever-changing cognitive and behavioral effort to manage specific external and/or internal situations (Lazarus and Folkman 1984). Problem-focused coping and emotion-focused coping can reinforce each other. Problem-focused coping reduces the threat, as well as the discomfort caused by that threat. Emotion-focused coping reduces anxiety. The interrelationship between problem-focused coping and emotion-focused coping causes us to assume that the two factors are interconnected (Lazarus 2006). There is a model that assumes that chronic environmental factors and transient conditions shape evaluation and coping responses. In turn, coping responses, along with chronic stressors, affect performance events and outcomes (Moos 2002). In the face of adverse situations such as epidemics, it is common to adopt coping strategies, that is, actions that improve adaptations and ways of responding to the challenges experienced at the time (Patias et al. 2021).

The COVID-19 pandemic is a major life stress (Sands et al. 2020). Therefore, people have to use coping strategies to deal with it. The results of complementary research have consistently shown that psychological inflexibility exacerbates the destructive effects of COVID-19 on one’s mental health. Accepting painful feelings and thoughts and aligning one’s actions with one’s core values has been associated with more beneficial outcomes (Babore et al. 2020). Studies of coping strategies in previous epidemic events, such as the 2009 H1N1 epidemic, have shown that people with a low tolerance for new situations are more likely to perceive the epidemic as threatening and to use more emotion-focused coping strategies (Taha et al. 2014). Some sociodemographic factors predict the use of better coping strategies, such as aging (Chen et al. 2018). Experts have expressed concern that increased stress and isolation due to the pandemic could negatively affect the health of older adults (Fuller & Huseth-Zose 2021). Adequate coping skills have been shown to protect physical and mental health among older adults (Yancura and Aldwin 2008).
3 Research methodology

3.1 Study design

This study was conducted in Kerman, the capital of Kerman Province, one of the most important provinces of Iran. To understand the experiences of older adults during the COVID-19 pandemic, we used the phenomenological approach. The core focus of the phenomenological method is the human experience involving the world (Colaizzi 1978). The major concern is with individuals and their views. Informants, not theories, are consulted and trusted (Cohen 1987). We specifically used descriptive phenomenology. Descriptive phenomenology is attributed to Husserl. Husserl’s approach is called descriptive because he believed in describing the general and pervasive nature of phenomena. He considered the phenomenologist to be an independent and separate person who could identify and describe the nature of a phenomenon in the consciousness of individuals (Wojnar and Swanson, 2007).

To observe the research ethics standards, the code of ethics was taken from Kerman University of Medical Sciences. For research participants, we clearly explained the purpose of the research and told them that all their personal information would be hidden. Older adults were assured that they could easily exit the research process at any stage of the inquiry.

4 Contributors

Participants in the study were 15 women over the age of 65 who lived in their own homes, either with family or alone. Despite the adverse health status of older adults (Kousheshi et al. 2014) and the prediction of aging feminization in Iran (Motlagh et al. 2014), the country’s aging programs have not been made gender-sensitive (Tayeri et al. 2021). According to the World Health Organization’s integrated care strategies, gender should be considered (World Health Organization 2017). Thus, given what has been said, we only examined women. These women were residents of Kerman, which is a large city.

Purposeful snowball sampling was used to select individuals. The maximum variation sampling strategy was also used. Based on this strategy, the researchers tried to include the most diverse participants in the research process by relying on occupation, age, economic and cultural diversity, marital status and education. The researchers continued to conduct the interviews until they reached theoretical saturation and no new codes were created.

The eligibility criteria included the following: being a woman, aged over 65, living at home, lacking a disability, and having the ability to listen and speak. We excluded people with the complete inability to move and those with hearing or visual impairments because the presence of this type of disability in a person before the outbreak could affect a person’s social interactions and mental health. Most likely, such a person had chosen coping strategies to overcome her problems before the outbreak of COVID-19. We decided to consider the population that did not have any experience with disability as the target population.
5 Procedure

Interviews were conducted by the members of the research team; after obtaining informed consent from the participants, the respondents provided written consent to participate. First, in informal interviews, the outlines of the interview were determined, and then the main questions were determined. The participants were asked questions according to the general interview guide. Interviews were conducted either at home or in public places by maintaining physical distance and observing all COVID-19 health protocols. The length of the interviews ranged between 20 and 65 min. All interviews were conducted between December 11, 2020, and March 5, 2021 (during this period, public vaccination had not yet begun in Iran). The questions were based on important categories: normal life before the COVID-19 outbreak, a person’s experience of living in quarantine and maintaining physical distance, changes in physical and mental health during the pandemic, changes in family relationships during the pandemic, changes in the socioeconomic conditions of one’s life during the pandemic, selection of strategies to deal with pandemic restrictions and an individual’s view of future conditions.

Three techniques, namely, member checking, analytical comparison and auditing, were used to determine reliability. The first technique was member checking, in which participants were asked to obtain and assess the general results then comment on their accuracy. The second technique was analytical comparison, in which the raw data were reviewed to evaluate the structure of the codes and themes and compare the results with the raw data. The third technique was auditing, during which the researchers ensured that they were themselves active participants in the different stages of the study, including the coding, conceptualization and extraction of the subjects. Together, all of these verification strategies built reliability and validity, thus ensuring trustworthiness (Morse et al. 2002).

6 Data analysis

Three coding methods, i.e., open, axial and selective (Strauss and Corbin 1998), are the basic strategies of data analysis. First, the interviews were conducted by the researchers and voice recorded with the interviewee’s consent while the researcher also took notes. Coding was performed during each interview, and the primary categories were simultaneously determined. The 3 researchers then reviewed the interview texts, the emerged codes and the primary categories separately to identify the main themes of the study. They then discussed the themes that emerged in a number of meetings to reach a final agreement. The main theme finally emerged using this process.

7 Results

The findings showed that none of the women in the study had a job at the time of the interview. Some of them lived alone, and some lived with their family members or spouses. They had a wide range of education. One individual had cancer (surgery) and needed medical attention. However, the rest had high blood pressure, hyperlipidemia, heart problems, muscular problems, anxiety and depression, which were controlled at home with drugs. The results are shown in Table 1.
In analyzing the interviews, many responses were coded according to five themes: health problems, continuous anxiety, economic and social pressures, identification of unique solutions to address the current situation, and optimistic versus pessimistic: what is the future?

Table 2 presents all of the interview themes and subthemes. The themes and subthemes are discussed below.
| Themes                          | Health problems                                                                 | Continuous anxiety                                                                 | Economic and social pressures                                                                 | Identifying unique solutions to address the current situation                                                                 | Optimism versus pessimism: What is the future?                                                                 |
|--------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Sub themes                     | Disturbance in the usual treatment process                                      | Concern over infection with the virus                                               | Reduction or termination of social relations                                                                                   | Extended communication with friends and family by telephone and social media                                                | Hope and disappointment regarding the use of the vaccine and its effectiveness                                          |
|                                | Causing allergies                                                              | Fear of the treatment process and hospitalization                                   | Restriction of physical contact with family members                                                                          | Prayer and petition                                                                                                             | Reflection on life and a new meaning of death                                                                            |
|                                | Reduction of physical activity                                                  | Fear of painful death                                                              | Social stigma                                                                                                                  | Exercise in home                                                                                                                | Enjoying the remainder of life, general ambiguity on the conditions to come                                               |
|                                | Continuous checking of COVID-19 infection symptoms                              | Heart palpitations, sleeplessness, panic, and anxiety                               | Decreased family income and increased expenditures                                                                          | Increased verbal communication with those who live at home                                                                  | Continuing previous hobbies or beginning new ones                                                                        |
|                                |                                                                                | Feeling depressed and anxious due to illness or death of loved ones                  |                                                                                | Continuing previous hobbies or beginning new ones                                                                           |                                                                                |
|                                |                                                                                | Sense of being too dependent on others and being in control                         |                                                                                | Carrying out normal household chores patiently                                                                               |                                                                                |
8 Health problems

This theme includes four subthemes that are all related to physical health and physical care.

8.1 Disturbance in the usual treatment process

Older adults are usually afflicted with one or more diseases that require care, regular visits to the doctor, hospital, or referral to paramedical centers. The restrictions related to the pandemic imply that they have stopped or limited their routine follow-ups. Therefore, the normal process of treatment and disease control has been interrupted.

P1 "Before the pandemic, the ophthalmologist told me that I had cataracts and that I needed surgery a couple of months later. Now I’m really scared to go to my doctor for a sight test in this situation. So, how can I accept the risk of hospitalization and surgery? I expect this situation to change soon so that I can prepare for surgery with peace of mind."

P2: "I’ve had a lot of swelling for a long time now. Doctor told me to do a colonoscopy, but I’m afraid to go to the hospital for a diagnostic operation and get involved in the coronavirus pandemic. I’m going to wait."

1–2 -Causing allergies. The continued use of masks, detergents, and disinfectants may cause problems for older people’s skin and sensitive organs.

P7: "I washed all my belongings, purchases, and body with disinfectants to the point where my hands became sensitive. I went to the doctor, worried, and she gave me many drugs that I have to use for a long time."

P11: "The mask made me allergic. The doctor said I should wear the mask less. We have a particular patient in the house with whom I must wear a mask. When I wear a mask, I cough and scratch myself."

8.2 Reduce physical activity

The formal and informal restrictions imposed following a pandemic have limited or cut off walking for older adults in the park or on the street. The closing of clubs and swimming pools has also disrupted their routine exercises.

P10: “We were walking around the neighborhood park with friends. It was a sport, as well as a hobby, but we cannot do it anymore."

P9: “I swam once every three to four days. However, sometimes the pool is closed, and sometimes, when it is open, my children will not let me go to the pool for fear of getting the coronavirus."
8.3 Continuous checking COVID-19 infection symptoms

Observing the slightest sign of COVID-19 may make older people more scared because of their particular circumstances. In the next phase or feeling sick, they must visit the COVID-19 diagnostic centers, either alone or with family, which is sometimes a long and tedious process.

P8: "I had been coughing for several days. The kids said it must be the coronavirus. They forced me to a diagnostic center, a laboratory, and have a CT scan. Thank God that was only a seasonal allergy."

P9: "I did it too. My son had to take time off and come with me too, and I was very angry."

It should be noted that physical activity limitations were often problematic for younger participants because they were more able to walk and exercise outdoors before the pandemic limitations were implemented.

9 Continuous anxiety

9.1 Concern over infection with the virus

One of the constant preoccupations of older adults during a pandemic is infection with the virus. Their concerns about family members are heightened when they are forced to appear in public places.

P6: "I have not been out of the house for a long time, but I am apprehensive about my children and their families. One is a physician who deals with patients on an ongoing basis. I have no idea how he is doing. Young people do not pay much attention. It is terrifying to see my children or grandchildren fall ill. It is horrifying if my children or grandchildren get sick."

P2: "My husband is a shopkeeper, and he has to go to work anyway. He’s old; he’s more prone to catching the virus. If he falls ill, so will I, and then who will take care of him?"

9.2 Fear of the process of treatment, hospitalization, and nursing (if infected)

During the different phases of the pandemic and the appearance of different strains, medical centers and hospitals are faced with many patients. This problem generally makes admission to the hospital complex. The exhaustion and fatigue of medical personnel may reduce the accuracy and care of patients. Many noncute patients are hospitalized at home and cared for by family members or trained nurses. Older adults living alone are concerned
about who will care for them. Older adults living with family members are worried about nursing being a burden on their family members.

P4: “I live alone, and my children are not in Iran; my brothers and sisters are older adults. Who will take care of me when I’m ill? Am I financially able to hire a nurse? I’m worried. I probably cannot.”

P6: “I have always been scared of the hospital environment. They say if you’re hospitalized for Corona, you will see other people die every day. I do not know if they would take good care of me at a good hospital.”

Twelve of the 15 participants indicated that they felt more negative emotions at the start of the pandemic. Because it was at that point all new, vague, and uncertain, over time, they were able to control these emotions on their own or with the help of others, especially peers and family members.

9.3 Fear of painful death

The fear of death and the manner of death are concerns of human beings. The participants were concerned about a painful death as a result of COVID-19. The media and friends told them that if someone dies from the disease, it is not a good death.

P12: “One of my relatives lost his sister to the Corona; he told me how the lack of oxygen and lung damage had caused her to die. I’m afraid that’s what’s happening to me. Being alone in the hospital and dealing with that suffering is real. I think it’s unfair.”

Participants acknowledged that there was a fear of death in the first months of the COVID-19 outbreak. Fear also intensified with the death of an acquaintance. This type of fear was more common in younger adults.

9.4 Heart palpitations, sleeplessness, panic, and anxiety sensations

People become anxious at critical times and experience different symptoms. One of the most common issues among older adults during a pandemic, especially during the first months, is anxiety, palpitations, and insomnia. These symptoms gradually decreased in most participants.

P11: “At the beginning of the illness, I still felt anxious. My sleeping habits had been disturbed. I would always wake up at night and find it difficult to fall asleep. I had a wholly reduced appetite. I have always been anxious. I got used to the situation one step at a time. It’s not scaring me like it used to. I also talked to my doctor, who gave me medicine. I feel better.”
9.5 Feeling depressed and anxious due to illness or death of loved ones

One of the crises facing older adults is the death of loved ones, friends, and relatives of the same age.

P15: “To date, two of my friends have passed away, one of whom was a neighbor. They were close to my age. I had many memories with them. But they’re not here anymore. I miss them. It must have been their fate to die that way.”

At the beginning of the COVID-19 outbreak, most people over the age of 75 had these same feelings.

9.6 Sense of being too dependent on others and not being in control

The overall condition of older adults requires increased restrictions during the ongoing pandemic period. Therefore, many things, such as shopping, going to organizations, banks, doctors, which they used to do by themselves, are now done by others, especially their children. This situation increases their sense of dependence and lack of independence.

p14: "Now I must wait for every little purchase for my daughter to come and buy it for me. I used to walk in the neighborhood and buy everyday necessities like bread, milk, etc., but now I cannot. I respect this. My family says it is dangerous not to get out, so we do other things."

At times, family members’ concerns about the health of older adults and their monitoring of protocol compliance make them uncomfortable.

p4: “I was very afraid in the beginning. Every moment I thought I might have been infected with the virus. I have seen death very near. I felt uncomfortable. Insomnia was a big problem for me. But gradually, I spoke to my friends, and I saw that everyone was in the same position. It turns out that we were all afraid together. I got a lot of encouragement from my children. I hope to hear good news from the media about new treatments for me."

10 Economic and social pressures

10.1 Reduction or termination of social relations

Quarantine and physical distancing are activities aimed at controlling the spread of COVID-19. The direct consequence of these activities is the reduction in social relations, participation in parties and ceremonies, etc. This can be painful for many older adults who have a lot of free time.
“My husband died in that period. We couldn’t even have a good ceremony at it. Well, I’m agitated. Well, the rules didn’t allow it, but what does the family say? What do people think? “

“Religious ceremonies are of great interest to me. I was praying in that mosque. I used to attend Muharram ceremonies and fast. Still, I have been unable to attend these ceremonies for a long time. It makes me very sad. The ceremony appeased me. Moreover, I had many friends that I saw and talked to at these events and gatherings.”

10.2 Restrict physical contact with family members

In Iran, older adults often live with their families. Usually, children who have been separated from their families due to marriage or work visit their parents at least once a week. Having weekend parties with one’s grandparents is one of the signs of respect for older adults in Iran. During the pandemic, many families disrupted their routine of weekly visits or made changes that made older adults uncomfortable and lonely.

“I have five kids. They’re all married, but they don’t live with me. Everybody had dinner at my house every Friday. My daughters, my sons, their spouses, and my grandchildren. My house was filled with guests, and it was all right. But now the children have a plan for each of them to come to my house on a certain Friday, on alternating weeks, so that there is not too much crowding here.”

10.3 Social stigma

Early in the pandemic, it was noted that older adults were at greater risk than others. In the early months of the COVID-19 pandemic, many people believed that COVID-19 was easily transmitted to their bodies, and they could transmit it involuntarily. Weaker people, such as older adults, were thought to easily make such a transmission. This type of information has resulted in the stigmatization of older people as being sick and carriers. That stigma creates shame and embarrassment for older adults.

"I feel that everywhere I go, everyone looks at me and feels sorry for me that this unfortunate woman will soon catch the coronavirus and die. Maybe they’re scared I’m full of viruses and they’re getting the disease from me."

10.4 Limitation of family income and increase in expenditure

In Iran, revenues have decreased and expenditures have increased because of the pandemic and changes in the economic structure. This economic reality is a significant source of concern for older people.
"My husband and I are pensioners. That makes two of us. It is costly. If we get sick, the costs of hospitalization, medicine, and nursing will be very high. I continue to be concerned about our economic situation."

Fear of financial hardship is also more prevalent among older adults because they have limited financial resources and higher costs of care and treatment.

10.5 Being alone and isolated

The combination of the three previous subthemes causes older adults to feel lonely and isolated.

"I had many friends, but now I believe that I am in an empty world. I call them, but I cannot see their faces, and I miss them."

11 Identify unique solutions to address the current situation

11.1 Extend communication with friends and family by telephone and social media

The use of indirect communication is one of the most common methods in older adults. They spend more time on the telephone. Some of them use messaging and social networks such as WhatsApp, Telegram, Zoom, Instagram Skype to communicate with relatives and friends.

"First, I thought to myself, ‘I cannot live like that’. What is the purpose of the technology? I got a cell phone. I learned to use social media with the help of people close to me. Now I can easily talk to the people I love. In addition, I do not get lonely."

Our study identified flexibility in older adults. Restrictions during the pandemic severely affected their way of life. However, older adults have found ways to cope with quarantine. In some cases, they have even expanded their horizons. For example, they have learned to use smartphone apps, entertain themselves, connect with others, and buy goods. The use of modern technology is often seen among younger people and people with higher levels of education.

11.2 Using prayer and supplication

Prayer and participation in religious ceremonies are well-known means by which to achieve peace. Since all respondents in this study were Muslim, they used Islamic rituals to bring about peace.

"I have plenty of time: I pray, recite the Koran, recite different prayers, relax, and feel more religious. When I die, God will forgive me."
Older adults over the age of 75 use this strategy more. It must be acknowledged that everyone with any level of education has used this strategy.

11.3 Exercise in the home

For the older adults, the acts of leaving one’s home and engaging in physical activity and sports that were previously practiced in green spaces or clubs have been completely closed or restricted.

To eliminate inactivity and its negative consequences, older adults have tried to engage in as much physical activity as possible at home.

p12: “I live in a flat. It is not very big, but I walk in the same space as much as I can daily. Maybe even with a cane. I do not want to get lost in this difficult situation; I may lose the possibility of walking. I’m not going to give in and add a problem to my other problems.”

11.4 Increase verbal communication with those who live at home

Some older adults try to use their full potential indoors to compensate for contact and social communication limitations. One method is to increase oral communication with their family members and individuals within the home.

p6: “I have not talked to my husband much in the past. We both have our work. However, now that we have more time at home, we are talking about our memories, the future, the problems of our children, and what is happening around us.”

Family ties are still strong in Iran. Therefore, family members spend part of their time talking directly or indirectly with older adults. However, the participants, with the intention of getting rid of negative emotions, have recently talked more with family members. For the older adults, this type of interaction was the result of a conscious choice.

11.5 Returning to previous pastimes or beginning new pastimes

The majority of respondents reported using creative ways to take their time and have fun.

p3: “I hadn’t knitted in some years. Maybe twenty-five years. However, now I have made an effort to see how much I remember. I saw that it was great, I bought some accessories, and I started knitting. This new hobby is calming me down. I’m busy knitting, and I do not think much about Corona and sickness anymore.”

p9: “I am now enjoying myself with social media, online shopping, listening to podcasts and audiobooks. Before the pandemic, I did not know about these facilities at all, but during this time, my children have helped me use them, and I use them when necessary.”
11.6 Carrying out normal household chores patiently

In the Iranian family structure, the distribution of household tasks between couples is as follows: the wife does most of the housework, since housework is considered a female duty, and the husband has only an auxiliary role. This division of labor continues from youth into older adulthood. Of course, because of physical limitations, domestic work is usually done by maids or children, and the older women work less. However, the pandemic conditions provided an opportunity for women to enjoy household chores, not as a duty but rather as a hobby

P13: "I organize a cupboard drawer each day. Just hand wash the dishes. I clean the house some time. That kind of job is great. It is fun. However, fatigue causes me to go to bed early."

Younger participants were more likely to use this strategy.

12 Optimism versus pessimism: What is the future?

5.1 Hope and disappointment regarding the use of the vaccine and its effectiveness. Because the use of the vaccine had not yet become common at the time of the interview, most respondents were in a state of fear and hope.

p1: "I do not know whether I will live to be vaccinated or not. However, I’m glad the vaccine has finally arrived, although they say it is not 100% safe; but it is still good and I’m pleased."

12.1 Reflection on life and a new meaning of death

The pandemic has shown everyone how close death is for to each individual, and older adults have likely come to understand this fact better than others. This situation has somehow made everyone think about death and when it will happen, willfully or not. All respondents addressed this challenge.

P8: “I never expected to die so quickly. I have always been afraid of death, but now I see people everywhere die so fast and so quickly. I’m thinking, ‘Well, you’re one of those people. If today is not the moment of your death, tomorrow is probably the moment of your death.’”

P14: “We are in a situation where we are not far from death. I think everyone currently readily accepts death.”

5.3 Enjoying the remainder of life, general ambiguity on the conditions to come.

Although the pandemic conditions make it easier to accept death, people think of death more easily. However, most respondents are still confused about their future, their family, and the world in the future and do not know what is going to happen. However, most of the participants concluded that they should use the remaining moments as much as possible.
P15: "We do not know what the future has in store for us. Is that an apocalypse? The end of the earth? No one knows it. Only God knows it. I thank God now that my family and I are living and healthy. What else can I expect from God?".

P12: "I try not to think of the future for the time being. What are people up to? What has happened to the economy? How many people are dead? They’re driving me crazy. Thank God I’m not truly in trouble at the moment. God has helped me until now. He will help me again if he so desires."

P5: “I’m kind of worried about my children. Are they sick? Are they out of a job? How are they alive? I cannot help them. I trust the Lord. I am a Muslim, and I must believe in God. Otherwise, I will die of sorrow."

13 Discussion

This article outlines the results from a qualitative study of older Iranian adult women who experienced new conditions during the COVID-19 pandemic. The COVID-19 outbreak has limited normal community activities, thereby affecting the lives and wellbeing of older adults. Most participants reported following the health protocols provided by the Ministry of Health of the Islamic Republic of Iran. Other research has shown that older adult women are more likely to behave responsibly during a pandemic than men and those in other age groups (Ambrosino et al. 2020).

The first research question was as follows: what was the life experience of older adult women during the COVID-19 pandemic? The most important findings in answering this question are discussed below.

The everyday life of older adults has changed, but they have learned to manage unwanted problems. Shopping and going to medical service and office centers have become two of the most essential means by which to expose older persons to the virus. Most of the participants were living with family members, and they did not run many errands themselves; thus, they could stay at home and follow COVID-19 prevention protocols. Even those who lived alone often left the outside work to their children, other family members, and volunteer neighbors. Of course, the older adult women had concerns about this, such as not going to medical centers for routine care. There seems to be a flaw in the health care system here. While physicians have offered a wide range of services both online and over the telephone during this period, it should be noted that face-to-face interaction with a physician is significant for older adults (Rahimpour, et al. 2018). After the first wave of the pandemic, improving the conditions for doctor visits and home care services improved the care situation.

Reducing their level of physical activity was another concern for older adults. In many large cities in Iran, older adults walk, exercise and engage in aerobics in parks to cope with low mobility. Walking is a common type of exercise among healthy older adults (Goethals et al. 2020). During the pandemic, whenever the prevalence of the disease increased in a city, the Ministry of Health ordered that public places such as parks be closed. This reduced the physical activity level of older adult women. Most participants identified ways to compensate for inactivity. Compensatory methods for the lack of mobility of older adults should be considered in planning (Hammami et al. 2020).
This study found that the restriction of social relations and the fear of harming oneself and one’s family were important sources of anxiety among participants. The results of some research indicate that pandemics seriously affect the mental health of older adults (De Pue et al. 2021).

Factors such as economic stability and loneliness have been important factors in the level of mental health (Bu et al. 2020). Participants noted that over time, they were able to find better coping strategies. Using coping strategies helped increase their sense of control and reduce their anxiety and depression. The participants who lived alone and one who lived with a nurse were more anxious than the others. In Iran, the level of social capital in the family is relatively high (Garrusi et al. 2020), and this factor is similar to a defense against adverse conditions. We found that people who were more alone than others had more complaints about their mental health.

Decreased social relationships are likely to lead to social isolation and feelings of loneliness. Research participants also experienced this feeling because some of their direct and face-to-face social relationships were cut off or very limited during this period. This is one of the most significant negative consequences of quarantine, and it imposes physical and social restrictions (Savage et al. 2021). Of course, one’s lifestyle, like living alone, plays an essential role in creating a sense of isolation and loneliness during a pandemic (Takashima et al. 2020). There was some complaint about the loneliness related to the pandemic. This dissatisfaction and complaint was not so great because living with one’s the family and communicating and interacting with one’s children, (although limited) prevented them from feeling isolated, detached, and lonely. Older adults need many kinds of social support to solve their problems. The amount of love, help, and attention that a person receives from one’s family, friends, and others is social support (Rashedi et al. 2013). Having high levels of social support among older adults improves their quality of life (Garousi et al. 2012) and decreases their levels of depression and stress (Al-Kandari 2011; Melchiorre et al. 2013).

The second research question was as follows: what strategies did they older adults use to reduce the challenges posed by the COVID-19 pandemic? From the participants’ point of view, psychological, social and physical problems have disturbed them, especially at the beginning of the pandemic. However, women took control of the situation by using selective coping strategies. These methods include extending communication with friends and family by telephone and social media, using prayer and supplication, exercising in the home, increasing verbal communication with those who live at home, returning to previously enjoyed pastimes or beginning new pastimes, and carrying out normal household chores patiently. Women used a focus on spirituality and family connection to overcome problems. In the following discussion, we will explain the most important aspects of the strategies used.

Here, we must pay attention to the important role of family and religion in Iran. It seems that family members, through support and encouragement, and religion, through the improvement of spiritual conditions, led the older adult women to change their living conditions. In the following discussion, we will discuss the importance of the role of family and religion in Iran.

Iran is a family-oriented society, and traditional beliefs about the family and its importance are still accepted. According to these beliefs, older adults are important and respected and should be cared for. Caring for older adults, especially one’s parents, is considered a sacred duty in the family (Mortazavi et al. 2015).

The social support that older adult women have received from their families has reduced the social effects of quarantine. Such support minimized the adverse psychological and
social effects of pandemics. Younger family members also tried to facilitate the transition by spending time with, teaching the use of technology to, talking to, and supporting older adults.

In the early months of the pandemic, public service centers were believed to be the main source of the virus. However, family members were less likely to infect others if they followed the COVID-19 protocol. Communication with family members who used masks and disinfectants was thought to be less risky. Therefore, the participants were not too afraid of their children being at home.

Spirituality is assumed to be a positive aspect of successful aging and is one of the predictors of older adults’ health (Cowlishaw et al. 2013). Numerous studies have confirmed the link between spirituality and positive health outcomes. Spirituality allows older adults to be flexible and forceful in dealing with a chronic disease (Hajinejad et al. 2019). Positive religious beliefs and affiliations, such as confidence in God, the help of God, and belief in life after death, reduce levels of anxiety (Rosmarin et al. 2009). Religiosity generally implies an emotional connection with God, and research shows that this attachment has a substantial impact on mental health (Pirutinsky et al. 2019). The use of religious beliefs or behaviors is intended to help solve problems or to prevent the negative emotional consequences of stressful life situations. Several studies have shown that religious beliefs and practices have helped alleviate the stress and strain of the COVID-19 pandemic (Rababa et al. 2021). Iranian society is a religious society that takes into consideration individual and collective religious beliefs and rituals. The current study found that the majority of participants used religious behaviors, such as praying, reciting the Qur’an, and making relaxing vows, to cope with the pandemic.

Although participants could no longer participate in mass religious services, they tried to approach God by performing individual rituals and dealing with unfavorable conditions. Overall, the situation led participants to reflect upon the meaning of death; most said they were no longer afraid of death and its imminence. Their understanding of existence and nonexistence, the pursuit of meaning of life, and the way of life in this world have been influenced by the pandemic.

This study demonstrated that older adult women use positive coping strategies to address pandemic conditions. One of the interesting findings of the study was the use of communication technologies by older adult women. Six participants in the COVID-19 outbreak started using smartphones and entering cyberspace. Three people were already using new communication technology. Those who were less literate were less active in this field.

The results of some research suggests that the number of middle-aged and older adult internet users has increased by 237%, according to online data released through a smartphone app (Li and Mutchler 2020). A Portuguese sample of older adults was reported to use smart technologies to learn new languages, knit, listen to music, learn gardening techniques, write down their thoughts, meditate, etc. (Humboldt et al. 2020).

The subjects herein used active strategies to deal with psychological, social, and economic conditions. This method follows the transactional stress and coping model. Participants used cognitive strategies such as attitudinal shifts. These results are consistent with Baldwin’s categories: problem-based coping, coping with emotions, coping with social support, religious coping (praying), and cognitive reframing (increasing verbal communication with others living at home) (Finlay et al. 2021).

Based on the theory of internal resilience, which is based on needs and threats, different adaptations, which have evolved to adapt to or cope with the current pandemic crisis, are depicted. The first theme, everyday struggles, explains the challenges that older adults face in their daily lives. These challenges, in turn, have forced older adult women
to find solutions. It has also forced older adults to adapt and deal with their circumstances; this a response called internal resilience. Some research has shown that older people have managed to sustain their quality of life. They have done so by slowing down their routine, returning to a normal lifestyle, using coping skills they have already learned, and being resilient to the psychological and social risks of COVID-19 (Krendl and Perry 2021). One view is that almost all stressful situations provide opportunities to deal with the situation itself or its consequences. For example, a health crisis raises issues that require a coping approach, such as deciding on treatment, communicating with health care providers, and planning for potential lifestyle changes. However, given the issues that older adults face, it is necessary to take a coping approach.) Isaacowitz, and Seligman 2002).

Participants engage in a coping approach by changing lifestyle aspects such as home exercise, using communication technology, praying, interacting more with family members, spending time with past hobbies, and doing housework in a different way than before. A sense of control can be considered as a continuum. At one end of the spectrum is the belief that one can control one’s life. On the other side of the continuum, there is a belief that one’s life is out of control (Murkowski and Ross 1991). Most participants felt a greater sense of control at the time of the interview than they did in the first months of the pandemic. People who feel that they have less self-control are less likely to take responsibility for their own health and are less likely to engage in healthy behaviors (Rodin and Timko 1991).

We hypothesize that the participants consciously chose new paths in life. These paths were more selective than repetitive and habitual, for example, choosing to play sports instead of a sedentary lifestyle, choosing to have more conversations instead of watching TV, choosing to use new communication technologies instead of going out often, and so on. These types of choices, in addition to a sense of control, enhance the level of self-efficacy in older adults. Self-efficacy refers to a person’s belief in his or her ability to succeed in a certain field (Gan et al., 2020). Participants did not want to easily succumb to critical living conditions during a pandemic; therefore they were able to create better conditions by increasing their sense of control and self-efficacy (by choosing a life path). A strong sense of self-efficacy contributes to a person’s mental health. Low levels of self-efficacy are positively associated with depression (Hen et al. 2010) and anxiety (Endler et al. 2001).

Facing a critical period can change a person’s emotional balance and perception of well-being. Behavioral and cognitive strategies must be implemented to achieve adaptation that facilitates a successful transition. The participants seem to have increased their sense of control and self-efficacy through actions in the form of copy strategies (problem-based strategies and emotion-based strategies); in this way they have tried to overcome the problems caused by the pandemic.

The third research question was as follows: what are the participants viewpoints on the future? Interviews revealed that in the first months of the COVID-19 outbreak, the participants were concerned about infection and death from COVID-19. However, at the time of the interview, the older adults we interviewed seemed to be less worried about their own deaths. They paid attention not only to the life and future of the family but also to the general public. They thought more about the ambiguity in the future life of all people. It seems that given their age, at that moment, they did not think much about their death or life. The results presented in this manuscript confirm the findings of Chan et al. (2022).

According to the research findings, it is suggested that continuous training based on content related to how to cope with certain situations can increase the sense of control and self-efficacy for older adults. Older adults with higher abilities are better able to adapt to difficult conditions such as epidemics. It is very important to implement special support
and intervention plans for older adults in critical situations. Unfortunately, in the recent pandemic, little attention has been given to this important factor.

It was very difficult and time-consuming to convince people to participate in the interviews because the vaccine had not yet been given to the public at the time of the interviews. Keeping one’s distance during the interviews sometimes made it difficult to record audio and take notes. Sometimes the interviews were too long because the questions and answers had to be repeated.

13.1 Conclusion

The pandemic has created significant challenges for older adults. The adjustment and support of family and friends have been helpful during this period. However, the psychological consequences that remain after the outbreak still need to be addressed. In this study, family and religion are two important factors that can be used for strengthening the older adults’ sense of control and self-efficacy. Thus, these two institutions should be given special attention.

The study results showed that social dynamics and individual behaviors, as well as family planning and networking with friends and peers, help older adults better deal with stressful situations. The findings of this study provide strategies to reduce the adverse effects felt by older adults during the pandemic. These findings could inform further research on the condition of older adults in different pandemics.

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Declarations

Conflict of interest The authors have not disclosed any competing interests.

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