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The Experiences of Community-dwelling older adults during the COVID-19 Lockdown in Wuhan: A qualitative study

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Abstract

Aims: To explore the experiences of community-dwelling older adults in Wuhan during the coronavirus disease 2019 lockdown.

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Design: An empirical phenomenological approach was used to conduct a qualitative study.

Methods: We performed semi-structured, in-depth telephone interviews between July 24 and August 2, 2020. A purposive sample of 18 participants (≥65 years old) who lived in Wuhan during the lockdown was recruited, including both infected and uninfected people. Data summarization and theme categories refinement were performed following Colaizzi's phenomenological approach.

Results: Four main theme categories emerged. First, the 'Challenges' posed by the epidemic. Older adults were challenged with barriers in seeing a doctor and daily life inconveniences. And they experienced negative emotions, whether infected or not. The second domain was 'multi-dimensional support', which helped older people went through the difficult period. The third domain was 'resilience amid challenges'. Although they experienced physical and psychological distress, most of them could self-adjust and achieve transcendence from the unique experience. Lastly, the remaining impact after the epidemic affected older adults. Some still had mental burdens, while others though they have benefited from the quarantine time (e.g. regular diet, learning new skills).

Conclusion: The epidemic and lockdown of the city brought significant physical and mental challenges to community-dwelling older adults. Active adaptation and multi-faceted support helped them through this period. However, the mental burdens after the epidemic still require attention. These experiences would provide guidelines for the protection of vulnerable populations during public health emergencies.

Impact: The results of the study suggested that certain social dynamics and individual behaviours helped the elderly to better cope with the stressful lockdown period. The findings in this study provided guidelines on how to reduce the negative effects on older adults during the pandemic and enlighten studies concerning the well-being of older adults or other vulnerable people in future crises.

Qing Yang and Yuxin Wang contributed equally to this work and should be considered joint first author.

1 | INTRODUCTION

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The Coronavirus disease 2019 (COVID-19) has rapidly spread worldwide (Zhu et al., 2020), infecting more than 140 million individuals and causing 3,003,794 deaths until April 18, 2021 (World Health Organization & COVID-19 outbreak situation, 2021). Among all the people worldwide facing this pandemic, older adults suffered the most. Older adults are at higher risk of infection, deterioration and death from COVID-19 than young people (Liu et al., 2020; Wang, He, et al., 2020; Zhou et al., 2020). The United Nations also warned of a looming mental health crisis due to the COVID-19 pandemic and asserted that older adults are prone to more psychological instabilities (United Nations Policy Brief, 2020). To prevent infection, the government introduced physical distancing policies and older adults were constrained from visiting family members and friends, leading to a state of social isolation, which could further propose a negative impact on mental and physical health in older adults, such as anxiety, depression, disability, chronic diseases, physical inactivity, increased risk of Alzheimer's disease and mortality (Brooks et al., 2020; Nicholson, 2012).

1.1 | Background

With the continuously expanding ageing society (Abbatecola & Antonelli-Incalzi, 2020), older adults should be paid special attention under the pandemic (Landi et al., 2020). Low immune function, comorbidities (e.g. hypertension, diabetes, frailty) and cognitive decline contributed to COVID-19-related high risk among older people (Cunha et al., 2020; Wu & McGoogan, 2020; Zhou et al., 2020). Meanwhile, many countries (e.g. China, Italy, Spain) adopted lockdown policies to curb the spread of COVID-19 (Chinazzi et al., 2020), which also caused much inconvenience and distress for older adults (Gaur et al., 2020; Pan et al., 2020). People were not allowed to have outdoor activities as before. What is even more alarming is the second wave of the pandemic. Many countries in Europe showed exponential growth in new cases in October, 2020 (World Health Organization & WHO COVID-19 Dashboard, 2021). Ireland, Spain, Germany, France and the United Kingdom (Scotland) have announced a national lockdown. A prolonged quarantine period and minimum social contacts would bring more challenges to older adults (Busby, 2020; Moradian et al., 2021). Comprehending older adults' conditions would be a basis for practical interventions to guarantee their well-being.

Most previous studies focused on specific psychological and physical symptoms or risk factors, and objective descriptions were used (Bergman et al., 2020; Robb et al., 2020). Little is known about older adults' real-life experiences during the COVID-19 pandemic, which might be complicated and underestimated due to the complexity of daily lives. Meanwhile, why did some older adults cope well during the epidemic? How did they recover from the adversity and become stronger? Many problems were raised without solutions proposed. Exploration of these issues would provide ideas for the welfare of older adults during the crisis.

Wuhan, Hubei, China, the first epicentre of the COVID-19 pandemic, has experienced outbreaks and stringent lockdown (social distancing, traffic restriction, strict stay-at-home policy) (National Health Commission of the People's Republic China [NHC], 2020). Wuhan is a city of 11 million people, 1.33 million of whom are aged above 65, accounting for 14.74% of the total population (Wuhan Municipal Health Commission, 2020). Located in central China, Wuhan serves as a major transportation hub. When the epidemic happened, it was just several days ahead of the spring festival, when millions of Chinese people would travel across the country to celebrate with relatives, especially those older adults staying in the hometown, bringing them more risks. To control the epidemic, Chinese government has made much effort. 'Upholding life first' and 'leaving no one unattended' policy were adopted on the country level. Medical services were reorganized and 42,000 healthcare workers were dispatched to help Wuhan. The government also undertook all medical expenses for COVID-19 treatment to relieve the financial worries of patients infected with COVID-19. Moreover, communities in Wuhan have taken much responsibility during the lockdown. The community system in China is the basic unit that provides residents with living services (Chen et al., 2013). Social workers in the community have the responsibility to integrate resources and coordinate social relations in the community and help those in need. And communities enforced the guarantine policy and supported every resident in the face of COVID-19 as all residential communities in Wuhan were locked down.

The epidemic in Wuhan is under control now, but regular epidemic prevention and control measures are implemented to prevent relapses. Community-dwelling older adults in Wuhan faced various challenges throughout the whole epidemic and lockdown period and their experiences were unprecedented. Every aspect of their life changed dramatically in terms of food, transportation and getting medical support. A comprehensive understanding of older adults' experiences in the epidemic is needed to guide further support for older adults in this post-epidemic period and develop better antiepidemic programmes preparing for future crises.

2 | THE STUDY

2.1 | Aims

Our research aimed to explore the details and understand the experiences of community-dwelling older adults in Wuhan during the COVID-19 lockdown to provide guidelines for other cities

TABLE 1 Semi-structured interview guide

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Main categories	Questions and probes
1) Experience (medical services, food, transportation, and entertainment)	 A. Could you please tell us about your experience during the whole COVID-19 epidemic and lockdown period (January 23-April 8, 2020) in Wuhan (e.g. physical and psychological feelings, food, entertainment, medical services and transportation)? B. What challenges did you encounter? C. What facilitated or hindered you in this crisis?
2) Coping the challenges	 A. How did you spend your day during the epidemic? B. How did you respond to the difficulties/discomforts you encountered? C. What support had you got? Who provided the help? What other support did you need? D. Had you asked for help? What was your experience when you asked for help? Why didn't you ask for help? E. Have you actively participated in volunteer work? Did you want to participate? Why?
3) Feelings after the epidemic	A. How are you feeling now?
4) Questions used to enhance the depth of discussion	A. Can you give me some examples?

B. Is there anything else you would like to add?

C. Do you have any questions to ask me?

Abbreviation: COVID-19, coronavirus disease 2019.

challenged with COVID-19 and for similar challenges to human society in the future.

2.2 | Design

We used an empirical phenomenological approach to conduct a qualitative study. Semi-structured in-depth telephone interviews were used to explore the experiences of older community-dwellers during the COVID-19 lockdown in Wuhan. The focus of phenomenological research was to describe the commonalities of experiences across the older population. We followed the Standards for Reporting Qualitative Research guidelines (SRQR) and the consolidated criteria for reporting on qualitative research (COREQ) throughout this study (O Brien et al., 2014; Tong et al., 2007).

2.3 | Sample/Participants

Community-dwelling older adults in Wuhan were chosen as study objects. Eligible participants included older community-dwellers who were 65 years old and above and spent the whole COVID-19 epidemic and lockdown period (January 23-April 8, 2020) in Wuhan. Exclusion criteria were: (a) cannot communicate and (b) unwilling or refuse to participate. Participants were recruited using purposive and snowball sampling. Firstly, we purposely selected older adults with different infection histories regarding COVID-19 and living statuses (e.g. were infected with COVID-19 or not, lived with family members or alone, lived in different districts in Wuhan). Then, we used the initially recruited participants as informants to locate more older adults that met our inclusion criteria to enlarge the study population. The sample size was decided by data saturation and recruitment ended when no new themes emerged. Twenty-two older adults were approached. Eighteen people consented to be interviewed, and four declined due to their health conditions (e.g. fatigue). Seven participants were known to the research team members before, and others were approached through snowball sampling.

Our team reviewed relevant literature and consulted two geriatric experts' opinions (a geriatric nursing specialist and a geriatric medical professor) to formulate a semi-structured interview guide. Then we conducted a pilot test with three older adults to adjust and determine the final interview guide. At the beginning of the interviews, the participants' social-demographic information and infection history were collected. The interview guide covered three main categories: (a) Experiences and feelings (medical services, food, transportation and entertainment) during the epidemic, (b) Ways to cope with the challenges and (c) Feelings after the epidemic. The open-ended questions and probes in the guide were flexible to allow the interviewer to explore relevant issues as they emerged. The telephone interview guide is presented in Table 1.

2.4 | Data collection

In total, 18 individual in-depth telephone interviews were conducted from July 24 to August 2, 2020. The interviewers (YQ, WYX) had the experience of qualitative research and conducted the interviews following the interview guide. The telephone interviews were adopted because social distancing was encouraged in Wuhan. They also ensured a greater level of anonymity and privacy, allowing the participants to be more comfortable sharing personal feelings. Prior to the interviews, we had contacted the older adults first to explain our study purpose, provided information on the whole interview process and obtained informed consent. The interviews were scheduled at Wiley-<mark>Jan</mark>

a time convenient to the participants. Interviews were conducted in Mandarin or Wuhan dialect. Each interview lasted between 11– 105 minutes and was audio-recorded. Thematic redundancy was achieved at the 16th interview, and two more interviews were further conducted to confirm data saturation. Detailed field notes were written during and immediately after the interviews to inform data analysis. If the participants showed negative emotions (anxiety, depression, panic) during the interviews, the interviewer would provide psychological support and offer time to rest before continuing.

The audio-recordings were transcribed verbatim within 24 h of the interviews and then reviewed by the interviewer for accuracy. For older adults who only speak the Wuhan dialect (n = 6), one researcher, who is a Wuhan local, ensured the transcripts possessed the original meanings of the dialect. The interviews, original transcriptions and data analysis were in Chinese. Theme categories and quotations were determined after discussions of the team. All quotations were translated into English and translated back by two researchers to ensure that meaning was retained.

2.5 | Ethical considerations

The study protocol was approved by the Ethics Committee of Tongji Medical College, Huazhong University of Science and Technology (S184). All participants gave oral informed consent before interviews, and all dialogues were audio-recorded. The aims of the study were clearly explained to all participants, and they were assured of the anonymity and confidentiality of their responses. Confidentiality was guaranteed by using numbers instead of names (e.g. N1, N2) and eliminating identifying information from the transcriptions. The data were only used for academic research. The recordings and relevant notes were safeguarded by the principal investigator. It was clarified to the participants that their participation was voluntary, and they could withdraw from the study at any time.

2.6 | Data analysis

Data analysis was initiated alongside data collection. We utilized Colaizzi's phenomenological method to analyse the transcripts (Colaizzi, 1978). The method comprised seven steps: (a) Familiarization of the data, (b) Identifying significant statements, (c) Formulating meanings, (d) Clustering themes, (e) Developing an exhaustive description, (f) Producing the fundamental structure and (g) Seeking verification. Two researchers (YQ and WYX) analysed the transcripts independently, extracted significant statements and meanings and coded the data to formulate categories. The research team compared and discussed findings until consensus on themes, subthemes and quotations was achieved. The findings were presented using illustrative verbatim quotations. Our research group consisted of eight members, including two senior professors, a PhD in public health, a registered nurse with a master's degree in geriatric nursing, a nursing graduate and three nursing undergraduates with experience of ageing-related researches.

2.7 | Rigour

The Consolidated Criteria for Reporting Qualitative Research (COREQ) was rigorously followed. We strictly carried out the sampling strategy to ensure a maximum variation of the data set. Concurrent data analysis ensured that the emerging themes were probed in the following interviews to explore the themes in greater depth. All participants were interviewed using the same interview guide. An audit trail was created to document all decisions made throughout the study.

3 | FINDINGS

We enrolled ten females and eight males between 65 and 82 years old. Seven older adults had been infected with COVID-19. The participants' characteristics are summarized in Table 2.

We identified four main theme categories encompassing nine subthemes from the 18 interviews: (a) Challenges posed by COVID-19; (b) Support during the COVID-19 epidemic; (c) Resilience amid challenges and (d) Impact after the epidemic. Details of the themes and experiences are presented in Table 3.

TABLE 2 Participant characteristics (n = 18)

Characteristics	Number (percentage)
Gender (female), n (%)	10 (55.6%)
Age, years, Mean \pm SD	72 ± 5.53
Infected with COVID-19 before, n (%)	7 (38.9%)
Education	
Illiterate, n (%)	1 (5.6%)
Primary school, n (%)	4 (22.2%)
Junior high school, n (%)	5 (27.8%)
Senior high school/Technical secondary school, n (%)	7 (38.9%)
Undergraduate or higher, n (%)	1 (5.6%)
Living status	
With spouse, n (%)	11 (61.1%)
With spouse and other family members, n (%)	4 (22.2%)
With other family members, n (%)	1 (5.6%)
Alone, n (%)	2 (11.1%)
Marriage status	
Married, n (%)	14 (77.8)
Widowed, n (%)	4 (22.2%)
Had chronic disease, n (%)	14 (77.8%)
Family income, US\$/month, range	0~1300

Abbreviation: COVID-19, coronavirus disease 2019; SD, standard deviation.

Challenges posed by COVID-19 3.1

3.1.1 **Tight medical resources**

Medical resource shortage was the most prominent challenge. Pre-existing health comorbidities made older adults more in need of medical help. However, almost all participants reported that the COVID-19 epidemic reduced their access to medical resources. In the early days of the outbreak, with the rapid spread of the virus and the surge of patients, the healthcare system was overwhelmed. Some participants were frustrated about the situation. N10 said: 'The scene (in the hospital) was quite scary. People queued up everywhere.' Some participants hesitated to consult a doctor. N1 said: 'It is not easy for us to go to the hospital and queue up again and again to buv medicine.'

Participants who were COVID-19 patients had a more authentic experience of the overwhelming hospitals. The process of getting treatment was quite difficult. N3 said: 'We waited from 9 am to 9 pm to see a doctor.' N4 said: 'We asked several hospitals. There were no vacant beds.'

3.1.2 Inconvenience in daily life

Another major change for all participants was the decline in the quality of daily life. The biggest challenge was the shortage of daily supplies. N10 said: 'It was not convenient to buy things. Many shops were closed. The supply of masks and disinfectants was insufficient. Meanwhile, the price rise bothered older adults. Five participants expressed financial worries. N16 said: 'Things like meat were expensive.' Moreover, bank services were suspended. They could not withdraw cash from the banks. N16 said: 'I have not got my pension for two or three months during the epidemic.' Some participants also reported that guarantine interventions caused inconvenience in going out, having daily activities and entertainments. N7 said: 'I usually went shopping, hung out, and visited friends (before the epidemic). But I could not even go downstairs (during the lockdown period).' Others stopped outdoor activities because of being afraid of infection. N10 said: 'I was so scared to go out.'

Note: During the lockdown, residents were not allowed to leave the communities except for getting medical treatment. Residents were encouraged not to leave their houses unless necessary and not to have gatherings in the community. Usually, people would only go downstairs to fetch food or other necessities. Some people never went downstairs because of the fear of infection.

Negative emotions 3.1.3

Several participants showed abnormal psychological symptoms (anxiety, depression, panic, etc.). They were always over-worried, paying much attention to their health conditions and tracking all kinds of information about the epidemic. N10 said: 'I was nervous. I

TABLE 3	The experiences of	f older adults during t	he COVID-19 epid	emic in Wuhan					
Categories	Challenges posed	by COVID-19		Multi-dimensiona	l support	Resilience amid challen	ges	Impact after COVID-	19
Subthemes	Tight medical resources	Inconvenience in daily lives	Negative emotions	Social Support	Technical support	Coping in daily lives	Transcendence	Mental burdens	Benefits from quarantine
Experience	 Excessive patients versus limited medical resources Hesitation to consult a doctor 	 Shortage of daily supplies Financial worries Lack of entertainment and outside activities 	 Abnormal psychological symptoms Psychogenic diseases 	 Family members Community workers Government 	 Smartphones (online chat groups and various APPs) Tele-health 	 Learning to use internet resources Maintaining e- contact with friends and family members Rearranging daily schedules at home and discovering new entertainment Maintaining autonomy in solving problems and showing empathy for others 	 Active cooperation with community workers Participation in volunteer work Encouraging other family members 	 Fear of infection Stigmatization (social withdrawal) Stress 	 Better environment and healthier lifestyle More company with family members
Abbreviation	: COVID-19, coronav	virus disease 2019.							

did not dare to think, listen, or watch anything else.' Two participants even exhibit psychogenic diseases. N10 said: 'My stomach was uncomfortable for more than 20 days. I do not know if it was due to the excessive tension or other reasons.' Additionally, N9, who lived alone, said: 'Sometimes I felt a little lonely.'

Participants infected with COVID-19 showed more negative emotions. N7 said: 'I was very anxious at the time.' Some participants felt powerless and helpless and even expressed extreme ideas, such as giving up treatment. N4 said: 'I did not want to be treated, let me go (die).' N15 said: 'I was very depressed because I was sick and felt like dying of illness.' Infected participants who had heard or witnessed other patients' death showed exacerbated negative emotions and expressed much grief. N3 said: 'A patient who lived in the same ward with me died three days after I was admitted. He was a little older than me. We were very scared and depressed.' They were separated from their family members, which also increased their stress. N4 said: 'I was very sad that I could not see my grandchildren.'

3.2 | Support during the COVID-19 epidemic

3.2.1 | Social support

Family was the most important source of support for most participants. N12 said: 'My children brought back food.' N16 said: 'Our kids bought us new phones so that we can use the QR (quick response) code.' Some reported increased contact with family members. N15 said: 'We had more time together.' For participants infected with COVID-19, family members helped them get medical treatment and provided support. N6 said: 'I asked my son-in-law to take me to the hospital.' N3 said: 'When I was sick, my daughter encouraged me to stay positive and receive treatment.'

Almost all participants have received help from communities. N2 said: 'Community worker called us once or twice a day and delivered food to us. And if we need any help, we could call them.' Also, community workers monitored the condition of the residents and released timely information. N11 said: 'Community workers sent masks to us and monitored our body temperature.'

The government dispatched medical teams to help Wuhan. Many participants were proud and thankful. N2 said: 'The whole country was supporting us. We praise the country and express our gratitude.' And N16 said: 'I think COVID-19 is controlled by the government. If the country did not cover the expenses for the treatment, more people would die.'

3.2.2 | Technical support

Modern technology played its part in the epidemic. Most of the community support was based on online chat groups. N9 said: 'I told community workers the things I needed in the WeChat group, and they would buy and send them to me.' To reduce contacting others,

participants used services from the 'Takeaway platforms'. N10 said: 'I asked "riders" (deliver guy) to buy drugs and vegetables for me.' Other participants reported shifting health-consults from face-face in hospitals to tele-health via smartphones. N4 said: 'My son took a picture of my neoplasm on the shoulder, and my daughter-in-law helped me consult a doctor online.'

3.3 | Resilience amid challenges

3.3.1 | Coping in daily lives

Most of the participants said that although their lives were affected, they could gradually adapt to the new condition. With help from family members or community workers, they learned to use internet resources (QR codes, e-pay and online chat groups) to cope with the daily challenges. N8 said: 'We must keep up with the society during the epidemic. So, we learned to use WeChat and e-pay with QR codes'. To maintain social connections with friends and family members, they used telephone and video-chatting when physically isolated. N3 said: 'I video-chatted with my wife every day.'

Older adults changed their previous activities (square dance, tai chi, etc.) to curtail public interactions. They focused on activities at home or in the communities and rearranged their lives according to their physical conditions during the epidemic. N2 said: 'I walked 15–30 minutes in the yard every day. Furthermore, I walked from the living room to the balcony five or six times every day, about six to seven thousand steps.' Additionally, participants have discovered new entertainment. N16 said: 'We learned to watch short videos on Douyin (Tiktok).'

When there were problems, they always tried to solve them by themselves first. N2 said: 'I had an allergic reaction and found a private clinic to consult.' And they showed great empathy for others. N3 said: 'Consider your difficulties in others' perspectives. We did not want to trouble the community workers too much.'

3.3.2 | Transcendence

Most participants helped infection control in different ways. They actively cooperated with the community workers when they were recording temperatures or arranging nucleic acid testing for all residents. N12 said: 'I did it myself (wash hands and wear masks), and I was also a good publicist. We cooperated with the community workers and helped with their work, which was also being responsible for ourselves.' Two participants wanted to be volunteers. N12 said: 'I wanted to be a volunteer. But the community workers thought I was too old to be a volunteer. And they could not find any suitable job for me...I tried my best to engage in small things like throwing out garbage.' Other participants thought that protecting themselves would be the greatest contribution. N1 said: 'We tried not to go out. That would be the best support for the community and government.'

Some COVID-19 patients not only took care of themselves but also encouraged and helped family members, who were also infected, to get treated and recover from COVID-19. N13 said: 'My husband's condition was more serious and he did not want to be treated. I still actively contacted the hospital for his treatment." N3 said: "I encouraged my wife to intake more nutrients and fight against the virus.'

3.4 | Impact after the COVID-19 epidemic

3.4.1 | Mental burdens

Many participants were still afraid of being infected. N11 said: 'I must wear masks when I go out." Some were afraid to consult a doctor in the hospital. N10 said: "My bad feelings about hospitals have not disappeared. So many (COVID-19) patients had stayed in there. I do not want to go to the hospital.' Older adults infected with COVID-19 before felt they were discriminated against or stigmatized. Some of them thought they were treated differently by others. N13 said: 'Our neighborhood saw us as monsters. They somehow got the information that we were infected and kept talking about us.' They exhibited self-perceived stigma and refused to contact others. N4 said: 'I think others are looking at me, discriminating against me. I wear a mask and try not to contact others.' They were also afraid of infecting others. N13 said: 'I did not see my grandson until June. I did not dare to touch (him).' Some of them were afraid of being infected again. N7 asked: 'If someone else has COVID-19 and I eat and talk with him. will I be infected again?'.

3.4.2 | Sense of benefit from the lockdown

Some participants thought they had benefited from the lockdown. N11 said: 'At least, the air quality is better. I do not eat as unhealthy as before, and there is less noise outside.' They would have more time staying with their families and learning new skills. N3 said: 'My children care more about us. They spend more time accompanying us at home." N15 said: "I bought a new phone for myself. I can surf the internet now.'

4 | DISCUSSION

An empirical phenomenological approach was applied to understand the experiences of community-dwelling older adults during the COVID-19 lockdown in Wuhan. We refined four themes from their experiences: challenges posed by COVID-19, multi-dimensional support, resilience amid challenges and impact after COVID-19.

As one of the most vulnerable groups in the COVID-19 epidemic, older adults in our study faced challenges in nearly every aspect of their lives, including difficulties seeking medical help, inconveniences in daily lives and psychogenic diseases. It was reported that older adults expressed more negative emotions during the COVID-19 crisis (Reger et al., 2020; Shevlin et al., 2020; Wong et al., 2020). An epidemiological study reported that the prevalence of anxiety symptoms among Chinese older people during the epidemic was twice as high as before the epidemic (Wang, Qi, et al., 2020). Suicidal ideation was also reported among Chinese older adults (Wand et al., 2020). Meanwhile, mental pressure and psychogenic disease were observed in other study populations or different crises (Cheng et al., 2004; Hamm et al., 2020; Li et al., 2020). These data suggested that both material help and psychological help are needed during public crises.

In line with previous findings, support was seen as a key determinant for older adults to overcome difficulties (Dolovich et al., 2019; EclinicalMedicine, 2020). Family and mobile internet were the two most often mentioned themes in our study.

'Family' is a unique concept in Chinese culture. The Chinese believed that family members should take care of each other, and the government is obligated to take care of their people. A Chinese proverb says that the home is the smallest country and the country is the largest home, which means for Chinese people, they not only have the small families but also are members of the big family (China). 'Harmony in the family brings prosperity' is widely embraced in China, and Chinese people value collectivism more than individualism. Facing this epidemic, the Chinese hold the value that when disaster strikes, all members of the big family and small family should help.

For each small family, although the family size had reduced significantly due to a reduction in delivery in China, and the increased flow of labour force increased empty nest families (Flaherty et al., 2007). The most important source of help for our participants was still the family members. Older adults regarded family members as an important psychological support and communication with family could relieve their negative emotions. While in the big family, the Chinese government has put enormous effort into combating the virus. China has mobilized resources from the whole country to win the battle against the epidemic. Most older adults have expressed their gratitude and praise towards the government. Also, during the lockdown period, the community, as an organization bridging the government and people, enforced the quarantine regulations and was responsible for ensuring the basic living of the residents. Community workers and volunteers paid special attention to those vulnerable older adults in the community, delivered food and medicine they needed and provided timely support constantly. The family, community and government all took it as their responsibility to take care of older adults.

The internet was another important theme. Driven by technology development, mobile internet helped older adults to do lots of things through smartphones. They got updated information on the pandemic and participated in online chat groups organized by community workers to attend group purchases and talk with other residents. Maintaining social contact is of paramount importance during the epidemic. Older adults, especially those living alone, depended on the internet to contact family members and socialize with others. These online socialization activities helped them alleviate stress WII FY-IAN

and promoted interpersonal communication. Moreover, older adults with chronic diseases could consult doctors through tele-health to get their regular checks and medicine prescriptions.

Our study also highlighted the resilience of older adults. The restrictions during the epidemic reduced interpersonal interactions and seriously affected their way of living. However, older people found ways to cope and adapt in the lockdown period, and in a few cases, they even thrived. Some of them made a regular schedule and continued their activities, such as walking and Tai Chi at home. Some, who were inactive in the past, started exercises to fight COVID-19. Although studies have shown that some older adults had blind optimism for COVID-19 (Pu & Wang, 2020), most of them strictly followed lockdown policies and implemented personal protection measures. Older adults also learned to use smartphone apps to entertain themselves, communicate with others and buy goods. According to the online data released via a smartphone app, the number of middle-aged and older users increased by 237% during the epidemic (Yang, 2020). The resilience and the ability to continue learning exhibited in older adults suggested that besides help from others, empowering themselves might generate a better effect.

Older adults were reported to be at higher risk of mental health problems after the pandemic (Banerjee, 2020). The fear of COVID -19 emerged as an important issue in our study. Because of the stigma attached to COVID-19 patients, they would show social withdrawal (fear of contact with others). This observation suggested that the mental health of older people should be monitored continuously, especially in this post-epidemic period. Professional psychological counselling and crisis interventions are needed. Furthermore, public health education to reduce social prejudice and discrimination against infected people is necessary.

4.1 | Limitations

There are several limitations in this study. Firstly, data collection was conducted after the lockdown was relieved. Therefore, we could only reach the COVID-19 survivors in our study population, which prevented us from hearing the voices of those who lost their lives fighting the COVID-19. Secondly, the participants were asked to recall their past experiences, which could have ambiguity or miss some important points. Also, in the telephone interviews, we could not catch the nonverbal information. Moreover, the purposive and snowball sample strategy could limit the representativeness of our study population. And the Chinese cultural setting of this study could impede the generalizability of our study findings.

5 | CONCLUSION

This study explored the experiences of community-dwelling older adults in Wuhan during the COVID-19 lockdown. Although being challenged in every aspect of daily lives, older adults in our study showed amazing resilience and adapted to the situation. We believe that the 'family culture' helped them and other Wuhan citizens to look out for each other and get through difficult times. The results of the study suggest that certain social dynamics and individual behaviours helped the elderly to better cope with the stressful quarantine period. The findings of the study not only help to better understand the experiences of older adults but also provide guidelines on how to reduce the negative effects on the older adults during the COVID-19 pandemic and enlighten studies concerning the well-being of older adults or other vulnerable people in future crises.

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CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

AUTHOR'S CONTRIBUTIONS

All authors have agreed on the final version and meet at least one of the following criteria (recommended by the ICMJE*): 1) substantial contributions to conception and design, acquisition of data or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content. Study concept and design: All authors. Acquisition of data: Y.Q., W.Y.X., T.C., C.Y. Analysis and interpretation of data: Y.Q., W.Y.X., T.C., C.Y. Drafting of the manuscript: Y.Q., W.Y.X., T.C. Critical revision of the manuscript for important intellectual content: All authors.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

PEER REVIEW

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REFERENCES

- Abbatecola, A. M., & Antonelli-Incalzi, R. (2020). Editorial: COVID-19 spiraling of frailty in older italian patients. *Journal of Nutrition Health & Aging*, 24, 453–455. https://doi.org/10.1007/s12603-020-1357-9.
- Banerjee, D. (2020). The impact of Covid-19 pandemic on elderly mental health. *International Journal of Geriatric Psychiatry*, 35(12), 1466– 1467. https://doi.org/10.1002/gps.5320.
- Bergman, Y. S., Cohen-Fridel, S., Shrira, A., Bodner, E., & Palgi, Y. (2020). COVID-19 health worries and anxiety symptoms among older adults: The moderating role of ageism. *International Psychogeriatrics*, 32(11), 1371–1375. https://doi.org/10.1017/S1041610220001258.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet*, 395, 912–920. https://doi.org/10.1016/S0140-6736(20)30460-8.

IAN

- Busby, M. (2020). 'It's very lonely': older people's fears of extended lockdown. The Guardian, https://www.theguardian.com/uknews/2020/apr/28/older-people-in-uk-anxious-about-being -put-in-longer-lockdown.
- Chen, Q., Huang, W., Lei, X. Y., & Hu, H. P. (2013). Feasibility analysis on the construction of performance evaluation system for community health service units in China. *Chinese General Practice.* 16, 4020-4023. [in Chinese] https://doi.org/10.3969/j. issn.1007-9572.2013.12.003
- Cheng, S. K., Wong, C. W., Tsang, J., & Wong, K. C. (2004). Psychological distress and negative appraisals in survivors of severe acute respiratory syndrome (SARS). *Psychological Medicine*, 34, 1187–1195. https://doi.org/10.1017/s0033291704002272.
- Chinazzi, M., Davis, J. T., Ajelli, M., Gioannini, C., Litvinova, M., Merler, S., Pastore, Y. P. A., Mu, K., Rossi, L., Sun, K., Viboud, C., Xiong, X., Yu, H., Halloran, M. E., Longini, I. J., & Vespignani, A. (2020). The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak. *Science*, *368*, 395–400. https://doi. org/10.1126/science.aba9757.
- Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. S. Valle, & M. King (Eds.), *Existential phenomenological alternatives for psychology*. Oxford University Press.
- COVID-19 and older adults: more support is needed. (2020). *EClinicalMedicine*, 25, 100532. https://doi.org/10.1016/j.eclinm.2020.100532
- Cunha, L. L., Perazzio, S. F., Azzi, J., Cravedi, P., & Riella, L. V. (2020). Remodeling of the immune response with aging: Immunosenescence and its potential impact on COVID-19 immune response. *Frontiers in Immunology*, 11, 1748. https://doi.org/10.3389/fimmu.2020.01748
- Dolovich, L., Oliver, D., Lamarche, L., Thabane, L., Valaitis, R., Agarwal, G., Carr, T., Foster, G., Griffith, L., Javadi, D., Kastner, M., Mangin, D., Papaioannou, A., Ploeg, J., Raina, P., Richardson, J., Risdon, C., Santaguida, P., Straus, S., & Price, D. (2019). Combining volunteers and primary care teamwork to support health goals and needs of older adults: A pragmatic randomized controlled trial. CMAJ, 191, E491–E500. https://doi.org/10.1503/cmaj.181173.
- Flaherty, J. H., Liu, M. L., Ding, L., Dong, B., Ding, Q., Li, X., & Xiao, S. (2007). China: The aging giant. *Journal of the American Geriatrics Society*, 55, 1295–1300. https://doi.org/10.1111/j.1532-5415.2007.01273.x.
- Gaur, S., Pandya, N., Dumyati, G., Nace, D. A., Pandya, K., & Jump, R. (2020). A Structured tool for communication and care planning in the era of the COVID-19 pandemic. *Journal of the American Medical Directors Association*, 21, 943–947. https://doi.org/10.1016/j. jamda.2020.05.062.
- Hamm, M. E., Brown, P. J., Karp, J. F., Lenard, E., Cameron, F., Dawdani, A., Lavretsky, H., Miller, J. P., Mulsant, B. H., Pham, V. T., Reynolds, C. F., Roose, S. P., & Lenze, E. J. (2020). Experiences of American older adults with pre-existing depression during the beginnings of the COVID-19 pandemic: A multicity, mixed-methods study. *American Journal of Geriatric Psychiatry*, 28, 924–932. https://doi. org/10.1016/j.jagp.2020.06.013.
- Landi, F., Barillaro, C., Bellieni, A., Brandi, V., Carfi, A., D'Angelo, M., Fusco, D., Landi, G., Lo, M. R., Martone, A. M., Marzetti, E., Pagano, F., Pais, C., Russo, A., Salini, S., Tosato, M., Tummolo, A., Benvenuto, F., Bramato, G., ... Bernabei, R. (2020). The new challenge of geriatrics: Saving frail older people from the SARS-COV-2 pandemic infection. *Journal of Nutrition Health & Aging*, 24, 466–470. https:// doi.org/10.1007/s12603-020-1356-x.
- Li, J., Yang, Z., Zhang, J., Wang, A. N., Wang, X., Dong, L. L., Wang, F. S., Wei, R. H., Li, Y. F., & Zhang, J. P. (2020). The psychological symptoms of patients with mild symptoms of coronavirus disease (2019) in China: A cross-sectional study. *Journal of Advanced Nursing*, 77(4), 1813–1824. https://doi.org/10.1111/jan.14701.
- Liu, K., Chen, Y., Lin, R., & Han, K. (2020). Clinical features of COVID-19 in elderly patients: A comparison with young and middle-aged patients. *Journal of Infection*, 80, e14–e18. https://doi.org/10.1016/j. jinf.2020.03.005.

- Moradian, S., Bäuerle, A., Schweda, A., Musche, V., Kohler, H., Fink, M., Weismüller, B., Benecke, A. V., Dörrie, N., Skoda, E. M., & Teufel, M. (2021). Differences and similarities between the impact of the first and the second COVID-19-lockdown on mental health and safety behaviour in Germany. *Journal of Public Health (Oxford, England)*, fdab037. https://doi.org/10.1093/pubmed/fdab037
- National Health Commission of the People's Republic of China [NHC] (2020). Press conference of the joint prevention and control mechanism of the State Council on April 7, 2020. http://www.nhc.gov. cn/xwzb/webcontroller.do?titleSeq=11289&gecstype=1.
- Nicholson, N. R. (2012). A review of social isolation: an important but underassessed condition in older adults. *The Journal of Primary Prevention*, *33*, 137–152. https://doi.org/10.1007/s1093 5-012-0271-2.
- O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research. *Academic Medicine*, *89*, 1245–1251. https://doi.org/10.1097/ACM.00000000000388.
- Pan, A., Liu, L., Wang, C., Guo, H., Hao, X., Wang, Q., Huang, J., He, N., Yu, H., Lin, X., Wei, S., & Wu, T. (2020). Association of public health interventions with the epidemiology of the COVID-19 outbreak in Wuhan, China. JAMA, 323, 1915. https://doi.org/10.1001/ jama.2020.6130.
- Pu, C., & Wang, H. (2020). Psychological reactions and coping strategies of the elderly facing COVID-19. *Chinese Mental Health Journal.* 34, 257-258. [in Chinese] https://doi.org/10.3969/j. issn.1000-6729.2020.3.024
- Reger, M. A., Stanley, I. H., & Joiner, T. E. (2020). Suicide mortality and coronavirus disease 2019-A PERFECT STORM? JAMA Psychiatry, , 77(11), 1093. https://doi.org/10.1001/jamapsychiatry.2020.1060.
- Robb, C. E., de Jager, C. A., Ahmadi-Abhari, S., Giannakopoulou, P., Udeh-Momoh, C., McKeand, J., Price, G., Car, J., Majeed, A., Ward, H., & Middleton, L. (2020). Associations of social isolation with anxiety and depression during the early COVID-19 pandemic: A survey of older adults in London, UK. *Frontiers in Psychiatry*, 11, 991. https:// doi.org/10.3389/fpsyt.2020.591120
- Shevlin, M., McBride, O., Murphy, J., Gibson Miller, J., Hartman, T. K., Levita, L., Bentall, R. (2020). Anxiety, depression, traumatic stress, and COVID-19 related anxiety in the UK general population during the COVID-19 pandemic. https://doi.org/10.31234/osf.io/hb6nq.
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19, 349–357. https://doi.org/10.1093/intqhc/mzm042.
- United Nations Policy Brief. (2020). COVID-19 and the Need for Action on Mental Health (accessed on October 26, 2020). https://www. un.org/sites/un2.un.org/files/un_policy_brief-covid_and_mental_ health_final.pdf.
- Wand, A. P. F., Zhong, B. L., Chiu, H. F. K., Draper, B., & De Leo, D. (2020). COVID-19: The implications for suicide in older adults. *International Psychogeriatrics*, 32, 1225–1230. https://doi.org/10.1017/S1041 610220000770.
- Wang, L., He, W., Yu, X., Hu, D., Bao, M., Liu, H., Zhou, J., & Jiang, H. (2020). Coronavirus disease 2019 in elderly patients: Characteristics and prognostic factors based on 4-week follow-up. *Journal of Infect*, 80, 639–645. https://doi.org/10.1016/j.jinf.2020.03.019.
- Wang, Z. H., Qi, Z. H., Zhang, H., Mao, P. Q., He, Y. L., Li, J., Xiao, S. Y., Peng, H. M., Sun, W. W., Guo, H. Y., & Liu, M. (2020). Impact of the COVID-19 epidemic on anxiety among the elderly in community. *National Medical Journal of China*. 40, 3179-3185. [in Chinese]
- Wong, S. Y. S., Zhang, D., Sit, R. W. S., Yip, B. H. K., Chung, R. Y., Wong, C. K. M., Chan, D. C. C., Sun, W., Kwok, K. O., & Mercer, S. W. (2020).
 Impact of COVID-19 on loneliness, mental health, and health service utilisation: A prospective cohort study of older adults with multimorbidity in primary care. *The British Journal of General Practice: the Journal of the Royal College of General Practitioners, 70*, e817–e824. https://doi.org/10.3399/bjgp20X713021.

-WILEY-JAN

- World Health Organization (2021). Coronavirus disease 2019 (COVID-19) outbreak situation (accessed on April 18, 2021). https://www.who. int/emergencies/diseases/novel-coronavirus-2019.
- World Health Organization. (2021). WHO Coronavirus (COVID-19) Dashboard. (accessed on April 18, 2021). https://covid19.who.int/
- Wu, Z., & McGoogan, J. M. (2020). Characteristics of and important lessons from the coronavirus disease 2019 (COVID-19) outbreak in China: Summary of a report of 72314 cases from the Chinese Center for Disease Control and Prevention. JAMA, 323, 1239–1242. https://doi.org/10.1001/jama.2020.2648.
- Wuhan Municipal Health Commission. (2020). Situation Analysis of Population Aging in Wuhan City in 2019. (accessed on April 18, 2021) http://wjw.wuhan.gov.cn/zwgk_28/fdzdgknr/tjsj/202008/ t20200831_1440011.shtml
- Yang, J. (2020). China News: Middle-aged and older adults also love to shop online. http://www.chinanews.com/cj/2020/05-20/9189234.shtml.
- Zhou, F., Yu, T., Du, R., Fan, G., Liu, Y., Liu, Z., Xiang, J., Wang, Y., Song, B., Gu, X., Guan, L., Wei, Y., Li, H., Wu, X., Xu, J., Tu, S., Zhang, Y., Chen,

H., & Cao, B. (2020). Clinical course and risk factors for mortality of adult inpatients with COVID-19 in Wuhan, China: A retrospective cohort study. *Lancet*, 395, 1054–1062. https://doi.org/10.1016/S0140-6736(20)30566-3.

Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., Zhao, X., Huang, B., Shi, W., Lu, R., Niu, P., Zhan, F., Ma, X., Wang, D., Xu, W., Wu, G., Gao, G. F., Tan, W., & China, N. C. I. A. (2020). A novel coronavirus from patients with pneumonia in China, 2019. *The New England Journal of Medicine*, 382, 727–733. https://doi.org/10.1056/nejmoa2001017.

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