Title:

Understanding the indirect impacts of COVID-19 on older adults in the community: A qualitative approach.

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Executive Summary

Emerging evidence shows that the COVID-19 pandemic transformed the lives of older people not only through elevated mortality and morbidity, but also through sustained disruptions to daily routines, social connection, autonomy, and emotional well-being. While direct epidemiological risks have been widely documented, the less visible psychological and social consequences—including prolonged isolation, increased loneliness, loss of independence, and deterioration in mental health—have received limited policy attention despite their enduring implications for healthy ageing. This multi-country qualitative study, aligned with the WHO Decade of Healthy Ageing and the Age-Friendly Environments framework, investigates these indirect effects by examining the lived experience of older adults and the actions taken to support them in Brazil, Italy, Kyrgyzstan, the Philippines, Qatar, and Tajikistan. Using desk reviews, stakeholder focus groups, and in-depth interviews with older adults, the research identifies common vulnerabilities and sources of resilience, and highlights opportunities to strengthen systems to better protect older people during future public-health emergencies.

Across diverse contexts, older adults described heightened loneliness, anxiety, stress, and depressive symptoms exacerbated by confinement, bereavement, uncertainty, and interruptions to chronic-disease management. Feelings of fear and withdrawal were compounded by the closure of religious, social, and community spaces that normally sustain emotional well-being and meaning in later life. Declines in mobility and reluctance to seek healthcare further undermined physical and cognitive functioning. Digital exclusion, particularly acute among those with limited resources or low digital literacy, restricted access to tele-health, information, and social interaction. Those living alone, with limited income, disabilities, or caregiving responsibilities experienced the greatest hardship, revealing how the pandemic deepened pre-existing inequalities.

Despite these challenges, family support and community solidarity offered important psychological protection. Multigenerational households and faith-based networks played a central role in many settings, while municipalities and organisations participating in age-friendly initiatives mobilised volunteers, adapted services, and scaled remote and home-based care. These examples demonstrate how established age-friendly structures and strong local partnerships can promote continuity of care and foster social connection in crises.

However, responses were uneven and often insufficient. Mental health and psychosocial support remained peripheral to emergency plans, overshadowed by disease control imperatives. Disruptions to routine care and rehabilitation were widespread, and support for caregivers was rarely formalised. Communication strategies were not always accessible or culturally sensitive, and many older adults felt overwhelmed by information yet underserved by guidance tailored to their needs. Weak data systems limited the ability to track inequities or target assistance. As a result, older women, migrants, low-income households, and people with disabilities faced disproportionate risks.

These findings offer an evidence-informed foundation for advancing future agendas on pandemic preparedness and healthy ageing. Older people must be recognised as active contributors to planning and response, with meaningful mechanisms for participation embedded across governance structures. Integrating mental-health and psychosocial support within primary and community care, and institutionalising innovations such as tele-geriatric services, volunteer outreach, and inclusive communication platforms, will be essential. Expanding digital access and literacy, investing in home- and community-based care, and supporting informal caregivers through guidance and respite can strengthen resilience at both household and community levels. Finally, enhancing cross-sector coordination and improving data systems will enable timely, equitable, and evidence-informed action.

COVID-19's indirect impacts on older adults are enduring markers of systemic vulnerability. Building age-inclusive, community-anchored systems grounded in equity, participation, and dignified care will strengthen preparedness, protect well-being, and advance healthy ageing in future crises.

1. Introduction

People aged 60 and older were at the greatest risk of the direct health effects of the COVID-19 pandemic, facing the highest rates of severe illness, hospitalization, intensive care admission, and death*(1-4)*. Of the estimated 7.1 million global deaths, the majority occurred in older populations—for example, 96% of deaths in Sweden were among people aged 60+*(5)*, 75% in the USA were aged 65+ *(6)*, and 64.6% in Brazil were over 60 *(7)*. Yet beyond mortality, the pandemic also produced widespread indirect effects on older people's health and well-being, consequences that remain underexplored due to limited monitoring and insufficient attention to older adults in data collection

In the current study we focus specifically on the indirect impact of COVID-19 defined as the wide-ranging consequences and secondary effects that have occurred as a result of the pandemic but are not directly related to the virus itself. These impacts encompass a multitude of social, economic, and healthcare consequences that have rippled through communities and nations worldwide, often exacerbating pre-existing challenges. Examples of indirect impacts include mental health crises, economic recessions, supply chain interruptions, strain on healthcare systems due to non-COVID medical needs being deferred, and increased disparities in access to essential services and resources *(8)*. The indirect impact of COVID-19 highlights the complex web of interconnected issues that can emerge during a global health crisis, emphasizing the need for comprehensive and adaptable responses beyond the immediate health concerns posed by the virus.

Among older persons, physical-distancing measures, disruptions to routines and specialist care, and constraints on social participation were associated, for instance, with elevated risks of loneliness, depressive symptoms, and stress, with downstream consequences for multimorbidity, functional status, and quality of life *(9-11)*. Documenting these experiences is essential to inform recovery, strengthen health and social systems, and sustain progress toward healthy ageing.

Governments, civil society, and community organisations introduced measures to protect older adults' mental health and maintain essential supports. The WHO Global Network for Age-friendly Cities and Communities (GNAFCC) provided a platform for initiatives addressing social participation, community and health services, communication, and neighbourhood environments *(12)*. However, evaluations of these efforts remain fragmented, often focusing on operational outputs while neglecting questions of equity, appropriateness, and the lived experiences of older people *(13-15)*

As part of this project, a systematic review and meta-analysis was undertaken, synthesising 75 primary studies across 26 countries, involving over 210,000 participants and 290 effect sizes. Results revealed significant increases in loneliness (SMD 0.397), anxiety (0.242), depression (0.228), and stress (0.221). At the same time, declines were noted in mobility (–0.515) and life satisfaction (–0.132) *(16)*. These findings highlight the disproportionate burden of indirect impacts borne by older adults, reinforcing the need for tailored policy responses.

As countries transition from emergency response to recovery, decision-makers need comparative, context-sensitive evidence to prioritize investments that mitigate main indirect effects of the pandemic (e.g., loneliness, depression, and stress); identify scalable age-friendly practices; address inequities related to gender, disability, digital exclusion, and socioeconomic status; and strengthen preparedness for future emergencies.

Grounded in the WHO healthy-ageing framework, this study's recommendations support the Decade of Healthy Ageing agenda by promoting resilience, equity, and improved quality of life for older populations in both recovery and future emergencies.

2. Aims and Methods

Aims

The study had two aims:

1. To document older adults' lived COVID-19 pandemic, with a focus on the most salient indirect effects identified in the literature – loneliness, depression, stress, in addition to two other indirect effects most relevant to each site.
2. To identify and appraise community responses – especially those led by members of the WHO Global Network for Age-Friendly Cities and Communities (GNAFCC), where present – assessing what worked, implementation challenges encountered, and priorities for strengthening future responses.

The Study Sites

Figure 1: Map of six sites

The study was carried out in the following in six countries – Brazil, Italy, Kyrgyzstan, Philippines, Qatar, Tajikistan (see Figure 1). Please refer to Table 1 and the results section for more detailed information on each of the sites.

Study design and data collection

The investigation adopted a qualitative design using a phenomenological orientation. It sought to understand how adults aged 60 years and over perceived and made sense of the pandemic's indirect consequences. Data were generated through three complementary sources:

1. A desk review aimed to identify and appraise community responses. It systematically identified and synthesised materials relevant to indirect outcomes. Documents were organised by type and by the specific impact addressed, and age-specific information was extracted wherever possible;

Table 1: Key characteristics of countries, including COVID-19 indicators

	1. Brazil	2. Italy	3 Kyrgyzstan	4. Philippines	5. Qatar	6. Tajikistan
Population *(17)*	211'140'729	58'934'177	7'162'000	114 891 199	2 979 082	10 389 799
Main Religions *(18)*	Christianity: Catholic, Evangelical/Protestant; unaffiliated	Christianity (predominantly Catholic)	Islam, Christianity	Christianity, Islam	Islam (majority); Christian, Hindu, Buddhist minorities	Islam
Languages (official) *(18)*	Portuguese	Italian	Kyrgyz, Russian	Filipino, English	Arabic (official); English widely used	Tajik; Russian
WHO Region *(17)*	Region of the Americas	European Region	European Region	Western Pacific Region	Eastern Mediterranean	European Region
World Bank income level *(19)*	Upper middle	High	Lower-middle	Lower-middle	High	Lower-middle
Number of cities/communities member of Age-Friendly Cities & Community Networks *(20)*	55	4	0	0	0	0
GDP per capita (PPP, current int'l $)*(21)*	22,333	60,847	8,009	11,794	126,110	5,406
% Population ages 65+ *(17)*	12.1%	26%	6.8%	6.3%	2.7%	4.7%
Life expectancy at birth (years) *(17)*	72.4	83.4	72.2	66.4	82.4	71.8
Health expenditure (% of GDP) *(17)*	9.89	9.3	5.44	5.87	~2.2%	8.01
Income inequality, Gini index *(22)*	51.6	34.3	27.2	39.3	35.1	36.1
Gender Inequality Index *(23)*	0.39	0.043	0.34	0.351	0.195	0.258
Total cumulative number of COVID-19 deaths (till October 2025) *(24)*	703'324	198'523	1024	66'864	690	125
Rate of COVID-19 death per million *(25)*	3'344	3'329	147	586	238	12
Total cumulative number of cases (till October 2025)*(24)*	37'823	26'969	88'953	4'140'383	514'524	17'786
Percentage of total population vaccinated with at least one dose of a COVID-19 vaccine (till 31 December 2023) *(24)*	87%	85%	23%	75%	99%	56%

1. Focus groups with key informants aimed to explore community responses. Guided by structured, open-ended questions, key informants discussed community responses, implementation challenges, equity considerations, and opportunities for enhancing future interventions.
2. In-depth qualitative interviews aimed to explore the lived experience of the indirect effects of the pandemic, as well as community responses to these. Semi-structured interviews with older adults typically lasted 30–40 minutes. Participants described personal experiences of loneliness, stress, and depression, as well other locally-important indirect effects; evaluated the adequacy of available services; highlighted unmet needs; and offered recommendations. Interviews were held in private, supportive environments and recorded with consent.

A content-analytic strategy allowed researchers to move systematically from raw data to insights of policy and practice relevance. The emphasis was on generating credible accounts of both the consequences of COVID-19 for older adults and the adequacy of responses intended to mitigate these effects.

Participants

Local research teams identified appropriate geographical units—municipalities, districts, or regions—ensuring contextual relevance. Two distinct participant groups were recruited:

1. Key informants, for the focus groups, were selected for their knowledge of age-friendly policies and interventions, including those tailored to marginalized populations. They were drawn from government institutions, international agencies, NGOs, community-based organizations, academia, and programme implementers. Their role was to discuss community responses, resource gaps, and opportunities for improvement.
2. Community members, for the in-depth interviews, were adults aged 60 or over who had directly experienced indirect effects of the pandemic. Recruitment sought diversity in gender, socioeconomic status, living arrangements, and health conditions, and was carried out through health services, community centres, outreach initiatives, and religious or social organisations. For those facing mobility or travel barriers, interviews were arranged in accessible and confidential locations.

Table 2 summarises the qualitative data collected across six countries, demonstrating a diverse and contextually grounded evidence base. Interview samples varied in size and composition, capturing a broad range of socio-demographic characteristics, living arrangements, and health circumstances among older adults. Focus groups incorporated key institutional and community stakeholders, including health and social-care professionals, local authorities, civil-society actors, and ageing specialists, providing complementary system-level insights. Desk reviews further situated these perspectives within national and subnational policy contexts. Overall, the dataset reflects heterogeneous ageing experiences and policy environments, enabling meaningful cross-country comparison while preserving the specificity of each context.

Sampling

Purposive sampling was employed at both the country/site and participant levels. At the country selection stage, representatives from the six WHO regions—Africa, the Americas, South-East Asia, Europe, the Eastern Mediterranean, and the Western Pacific—were consulted in July 2023. These consultations included presentation of early meta-analytic findings on COVID-19's indirect effects on older adults. Countries were invited to participate based on their

motivation and capacity. Feasibility assessments considered academic expertise, resource availability, and ability to adhere to timelines and budgets.

At the participant level, purposive sampling ensured inclusion of information-rich cases. Key informants were chosen for their substantive knowledge of policies and interventions. Inclusive coverage across government, international agencies, NGOs, community-based organisations, academia, and programme implementers was supported through collaboration with local communities and WHO country offices. Diversity across gender, socioeconomic position, living arrangements, and other relevant characteristics was sought. Potential participants were fully briefed, provided written informed consent, and were recruited via health services, community and religious organisations, and other local networks. Table 2 provides detail on the number and characteristics of interviewees and focus group participants.

Table 2: Interviewees and focus group participants

	Brazil	Italy	Kyrgyzstan	Philippines	Qatar	Tajikistan
Interviews						
Number of interviewees	24	9	6	6	20	7
Geographic coverage	Cities of Francisco Beltrão and Pato Branco	City of Ancona, Marche region	Cities of Bishkek, Balykchy , Kara-Balta	Marikina City	City of Doha, Qatar	City of Dushanbe
Characteristics of interviewees	Diverse in terms of gender, race/ ethnicity, age group (65–74, 75–84, and 85+), educational level, socio-economic status, place of residence (urban/rural), and presence of disability.	All retired. Ages: 6 between 70-79; 3 between 80-85; 5 female, 4 male; 3 married; 4 widowed; and 2 single/divorced; 6 living alone; 3 living with spouse.	Age: 64 to 75 with an average age of 70; 2 male, 4 female; All living in cities; 3 living with children and spouses; 2 living alone; 4 are retired but continue to work.	All aged 60 and above; 3 male, 3 female; From middle class and lower class backgrounds; Diversity of health statuses and living arrangements.	Age: 60 to 78; 10 male and 10 female; 11 Qatari and 9 non-Qatari; Diversity in age, gender, nationality, health status, and living arrangements.	Age: 63-92; All from capital, Dushanbe.
Focus groups						
Number of focus group participants	12	8	8	6	8	Not clear
Geographic coverage	Cities of Francisco Beltrão and Pato Branco	Marche region	National	Marikina City	National	National
Characteristics of focus group participants	Managers from the areas of health, social work, and human rights; researchers; representatives of associations and institutions; as well as professionals working at the city, regional, and state levels in policies, programs, and services aimed at older adults during the pandemic.	One municipal representative, two regional policy representatives, three presidents and vice-presidents of voluntary and social promotion associations for ageing, one representative of a regional trade union and one of a social centre for older people.	Specialists in social work, medicine, psychology and gerontology.	Members of local government unit, the “barangay”(i.e. local administrative district), and representatives from the church and community organizations.	One patient, two psychiatrists, one representative of an NGO, one representative of a government institution and three of a community based institution.	Members of the Republican Headquarters; representatives of NGOs; the coordinator of a social club of the Central Asia gerontology centre; the director of the Research Institute of Epidemiology; the Head of the Department of Sanitary and Epidemiological Safety, Emergencies and Emergency

	Brazil	Italy	Kyrgyzstan	Philippines	Qatar	Tajikistan
						Medical Care of the Ministry of Health.
Desk reviews						
Geographic coverage	National and local	Five Italian regions of Lombardy, Emilia-Romagna, Marche, Campania, and Apulia	National	National and local	National	National

Data Analysis

The three sources of evidence – from the desk review, the focus group data, and the in-depth interviews – were analysed using an iterative content-analytic approach.

- Desk Review Analysis: documents were sorted by document type and indirect impact addressed, extracting age-specific findings. Recurrent strategies and gaps in provision were identified and assessed against known needs of older adults. Results were synthesised to draw policy and practice implications, highlight uncertainties, and identify research priorities.
- Focus Group Analysis: transcripts were read repeatedly and coded inductively to generate initial codes. These were later consolidated into higher-order themes aligned with the study's core outcomes. Where feasible, interpretations were validated through participant feedback and triangulated with documentary and interview evidence.
- Interview Analysis: a parallel analytic process was followed for interviews. Transcripts were coded iteratively and emerging insights and documenting decisions were captured. Cross-case comparisons helped identify common patterns and differences across participant experiences. Themes highlighted the richness and variability of older adults' lived realities.

Ethics

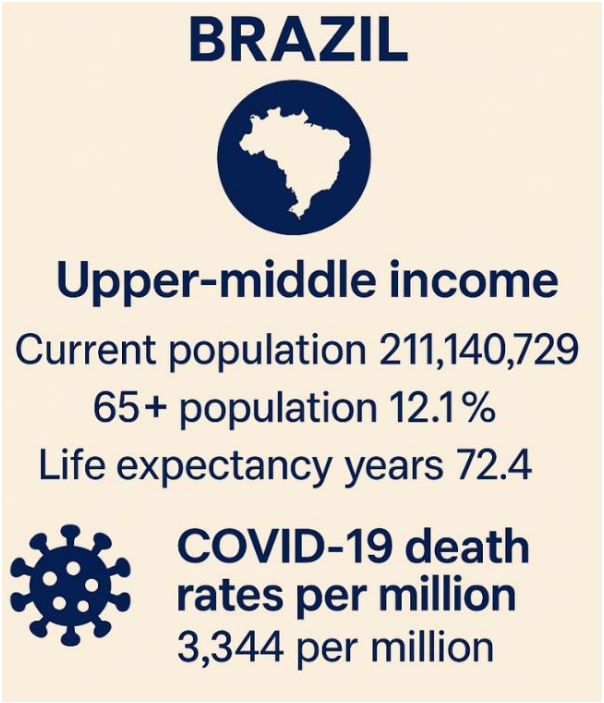
Ethical approval for this project was obtained both from WHO's Ethics Review Committee and from relevant ethics review committees in each of the six sites. All participants signed an informed consent before the data collection started.

4. Country reviews

A. Brazil

General description of the site

Brazil is an upper-middle-income country—the largest in South America and the fifth largest in the world, both by area and population. It is currently experiencing a rapid demographic transition characterized by declining fertility rates, an aging population, and a shrinking youth cohort. These shifts present significant challenges for social protection systems, healthcare provision, housing policies, and broader questions of citizenship and inclusion *(26)*. Paraná exemplifies this demographic shift: by 2027, its population aged 60 and over will surpass those under 15 for the first time. The state's Aging Index is projected to rise from 87.6 in 2024 to 100.1 in 2027 and exceed 200 by 2046, indicating twice as many older adults as youth. Life expectancy is expected to reach 83.9 years for those born in 2070 *(27, 28)*.



Source:*(17, 24, 25, 29)*

Paraná has become a national and international reference in aging policy. Of Brazil's 51 municipalities in the WHO Global Network of Age-Friendly Cities and Communities, 39 are located in Paraná. In 2025, it became the first South American state to formally join the WHO/PAHO Global Network—recognising its robust intersectoral policies, caregiver training, strengthened social protection, and more than R$150 million invested in accessible housing and adaptive equipment since 2019 *(30)*.

Within this context, Pato Branco and Francisco Beltrão stand out as regional urban hubs in Southwestern Paraná. Pato Branco (91,836 residents in 2022; 9.93% aged 60+) has a diversified economy in agribusiness, commerce, and technology, and became the first city in Paraná to join the WHO Network in 2018 *(28, 31)*. Francisco Beltrão (101,302 residents in 2024; 14.5% aged 60+) is a regional centre for agribusiness, commerce, and services, joining the WHO Network in 2023 and establishing an Age-Friendly City Committee in 2024 *(32)*.

Both municipalities exhibit strong social and health indicators, with a Municipal Human Development Index above the national average (0.774 and 0.761) and primary healthcare coverage above 80%. Their high urbanisation rates (93% and 91%) facilitate service provision but demand accessible infrastructure. During the pandemic, both cities mobilised social networks, supported vulnerable older adults, and expanded community programmes such as the Open University for Older Adults—illustrating how medium-sized cities can successfully promote active and healthy ageing through innovation, intersectoral governance, and alignment with WHO/PAHO frameworks.

Measures to Counter COVID-19

Brazil's most effective countermeasures for people aged 60+ combined vaccination, continuity of care, and psychosocial protection. In June 2021, municipal teams began with age-prioritised vaccination and boosters—using home and mobile outreach to reach the frail and those with mobility barriers—coordinated through primary care and social assistance registries. To prevent clinical deterioration from interrupted services, SUS preserved chronic-disease follow-up via teleconsultations and domiciliary visits, alongside "fast-track" refills, labs, oxygen, and device delivery *(33)*. Structured welfare checks—phone/video calls from municipal departments, family-health teams, and trained volunteers—monitored breathlessness, delirium, food insecurity, and caregiver strain, triggering rapid referrals when needed.

Because fear, loneliness, and grief were pervasive, mental-health care was embedded in routine services: brief counselling, bereavement support, and clear referral pathways, paired with age-tailored, non-alarmist public messaging *(33, 34)*. To reduce isolation, municipalities scaled telephone-befriending, small safe outdoor activities when feasible, and technology-supported contact with relatives—providing devices and basic digital training where needed *(35, 36)*. Donation hubs and coordinated grocery/medication delivery protected essentials, while caregiver support—brief respite, stipends/training, psychosocial screening—addressed hidden burdens *(35)*. Age-Friendly City networks helped operationalise rapid, intersectoral protocols with universities and civil society, and curated media streams countered the infodemic, especially via radio/TV/WhatsApp *(37)*. Collectively, these measures targeted the documented risks of depression, stress, anxiety, loneliness, and disrupted care among older Brazilians *(8)*.

Results

Lived Experiences of Older Adults During the COVID-19 Pandemic

Older adults' narratives highlighted profound psychological distress, with depression, stress, and loneliness emerging as dominant, intertwined impacts of the pandemic. Many described

the period as emotionally devastating, marked by confinement, fear, and the abrupt breakdown of social bonds. One participant captured the sense of entrapment: *"I didn't leave the house… almost two years just inside the house… it felt like punishment."* Another reflected on the painful loss of social connection: *"We were a group of older women… we had a beautiful friendship, and we had to stop, to distance ourselves."*

Depression surfaced repeatedly, often linked to grief, prolonged isolation, and the absence of normal routines. One interviewee shared, *"After my husband passed away, I became depressed… Some days I'm sad, upset,"* while another admitted, *"I almost went into depression, because I was stuck at home all the time… I slept a lot just for the time to pass."* The inability to mourn properly intensified emotional suffering. Another interviewee explained, *"I couldn't go to my sister's funeral… from the hospital she went straight to the cemetery, inside a black bag."*

Stress and anxiety were fuelled by fear of infection, relentless news coverage, and uncertainty about the future. *"Our lives during COVID-19 were full of anxiety and stress. You didn't know how it would end,"* said one participant. Media reports amplified panic: *"On TV… it was only Covid, people dying, dying, dying."* Stress also stemmed from caring responsibilities and disrupted daily life: *"It was a sad challenge"*, said on interview, *"my husband was undergoing treatment… imagine the care I had to take."*

Loneliness—even within multigenerational households—was a pervasive emotional burden. Participants described a collapse of community life and feelings of abandonment: *"Even older adults living with family members experienced profound loneliness."* Social isolation felt like a rupture of identity and belonging: *"Only at home… everything closed… the neighbourhood ended, everything ended."*

The cumulative weight of depression, stress, and loneliness was compounded by physical and cognitive after-effects of the illness, reinforcing withdrawal and diminishing quality of life. Yet, older adults showed resilience, using phone contact, faith, and small daily routines to cope. As one participants noted, *"I saw it as an opportunity to reorganize my life and reflect."*

Focus groups

The focus groups with managers, frontline professionals, and community leaders in Pato Branco and Francisco Beltrão highlighted mental health as the most affected domain for older adults during the pandemic. Participants reported that prolonged distancing and the abrupt interruption of community and family bonds intensified loneliness, anxiety, and feelings of abandonment, particularly among those in situations of social vulnerability. The inability to perform mourning rituals was described as one of the most traumatic experiences: *"Not being able to hold a wake was very impactful, because we have a social and cultural ritual."* Fear emerged as a multidimensional theme—fear of hospital shortages, of running out of food or medicine, of losing relatives, and of facing an uncertain future alone.

Despite these challenges, the focus groups also illuminated strong community mobilisation. Local governments, universities, associations, and volunteers created donation and food distribution centres, remote monitoring systems, and home-delivery support. The use of video calls, although unable to replace physical contact, was viewed as transformative in reducing isolation: *"They were very happy when they started receiving video calls, because they could see who was talking to them."*

Participants identified structural gaps—fragile primary care follow-up, absence of caregiver-focused policies, and lack of rapid-response protocols. They emphasised the need for sustained intersectoral coordination to protect older adults in future crises.

Analysis of Gaps

The focus groups highlighted persistent structural gaps in policy and service provision for older adults during the pandemic. The most frequently cited weakness was the fragility of primary

healthcare, particularly the interruption of routine monitoring of chronic conditions and limited home-based support for highly dependent older adults, which intensified vulnerability during periods of isolation. Participants also underscored the absence of specific policies for caregivers—despite their central role in supporting older adults—leaving families without guidance, financial support, or respite services *(35)*. Digital exclusion further widened inequalities, as many older adults lacked access to devices, connectivity, or digital skills, limiting their ability to benefit from remote services and maintain social bonds *(36)*. Additionally, communication strategies were perceived as insufficient and often fear-inducing, reinforcing anxiety rather than providing reassurance and clear guidance *(38)*.

Conclusions

The findings demonstrate that the indirect effects of COVID-19 on older adults in Pato Branco and Francisco Beltrão extended far beyond the biomedical sphere, profoundly affecting emotional well-being, social connections, and daily functioning. Older people experienced heightened loneliness, fear, anxiety, and depression due to prolonged isolation, disrupted routines, and the loss of community and familial bonds *(35, 38)*. Despite these challenges, strong coping mechanisms emerged, including community solidarity, spirituality, and the creative use of communication technologies. Local services adapted rapidly through donation centres, remote support, and intersectoral cooperation, yet structural weaknesses were exposed—particularly in primary care, caregiver support, and digital inclusion. The pandemic offered valuable lessons, underscoring the need for age-responsive crisis planning, humanised communication, and strengthened community networks. Future policies must institutionalise these gains to build more resilient, inclusive, and age-friendly systems capable of protecting older adults in future crises.

B. Italy

General description of the site

Ancona, where the interviews were conducted, is a city of some 102’000 inhabitants on the Adriatic coast in the Marche region of central Italy. The Marche region, which the focus group covered, has a population of about 1.5 million *(39)*.

Italy’s overall population has been ageing rapidly and is one of the oldest in the world, creating major challenges for health and social care. COVID-19 intensified existing vulnerabilities rooted in these structural conditions.

Italy’s health and welfare system is multilevel, with national ministries setting frameworks and regions managing policies. The National Health System guarantees universal access to essential services via local authorities, hospitals, residential care, and public or accredited private providers, ensuring coordination between national standards and regional governance.

ITALY

High income

Current population 59,499,453

65+ population 26%

Life expectancy years 81.9

COVID-19 death rates per million

3.329 per million

Source: *(17, 24, 25, 29)*

Measure to counter COVID-19, including vaccinations

In early 2020, Italy implemented strict COVID-19 measures, starting with quarantines (21 February–8 March) and a nationwide lockdown on 9 March, the first in the Western world. National guidelines, later adapted regionally, supported prevention strategies. Measures included diagnostic and rapid antigen tests, mask use, social distancing, hygiene practices, and lockdowns during the first pandemic waves. These interventions, consistent with global responses, profoundly altered daily life and habits, aiming to limit virus spread and protect

public health. By 31 December 2023, 85% of the population had received at least one dose of a COVID-19 vaccine.

Results

Interviews and focus groups – the lived experience of the indirect effects

The qualitative analysis of the interviews and focus groups identified five main indirect impacts of COVID-19 experienced by older adults: loneliness, isolation, stress, depression, anxiety, and sleep problems.

Loneliness: Loneliness was identified as one of the most significant indirect effects of COVID-19 on older adults, primarily driven by restrictions and reduced opportunities for social contact. Many participants described feelings of shame, sadness, and helplessness, often rooted in pre-pandemic losses but greatly intensified during lockdowns. Five of the nine interviewees reported high level of loneliness, four a medium levels, and none a low level. One stated: *"During the isolation, I experienced a lot of loneliness; nothing was the same as before."* Experts confirmed that the pandemic exacerbated existing vulnerabilities, contributing to loneliness, isolation, delays in medical care, and mental health challenges. Although some older adults showed resilience by adopting coping strategies, the loss of community activities and family interactions severely impacted their overall well-being and quality of life.

Social isolation*:* Social isolation was identified as another critical indirect effect of COVID-19 restrictions on older Italians. Seven of nine interviewees reported high levels of isolation, while two experienced medium levels. Isolation limited interactions with family and friends, forcing individuals to rely on coping strategies such as reading, phone calls, or exercise at home. Social isolation triggered negative emotions—loneliness, anxiety, stress, and depression—and highlighted societal neglect of older people.

Stress: Older adults reported varying level of stress during COVID-19. One interviewee reported high stress, five moderate, and three low. Stress was often tied to restrictions and fear of infection. Another admitted: *"I think I experienced stress due to the constant fear of contracting the virus, keeping away from people and following all the indications"*. Restrictions disrupted daily routines, as another noted: *"Wanting to do something, but not being able to do it because they forced us to stay at home"*. While some felt their freedom limited, others adapted, finding solace in books, cooking, or family life. Stress was often a secondary effect, linked to isolation and uncertainty rather than direct health decline.

Depression: Seven respondents reported high levels of depression and two medium. Depression appeared to be either linked to loneliness and isolation or shared grief. Many struggled to recognise or admit their emotional states, often feeling shame. One interviewee recalled: *"I had a terrible time at home, but didn't want to admit it! (...) I was feeling unwell, and couldn't understand my emotional states"*. Others openly acknowledged depressive episodes, with one stating: *"Yes, during that time, I experienced depression... I began retaking medications"*. Loss of loved ones, social disconnection, and fear of death deepened depressive states, prompting some to seek therapy or rely on family support.

Anxiety: Two out of nine interviewees experienced high anxiety, four medium, and three low. Anxiety was closely tied to fear of infection, loneliness, and uncertainty about the future. Some had pre-existing anxiety, intensified by the pandemic. As one interviewee explained: *"I have always experienced states of anxiety in my life... During the pandemic, there was anxiety due to the fear of contracting the virus. Still, I must say that now I feel it more, perhaps due to the accumulation caused by the pandemic"*. However, three interviewees demonstrated resilience, avoiding severe anxiety by finding coping strategies and maintaining daily balance.

Other indirect impacts: Other indirect impacts identified included sleep disorders, fear of infection, avoidance of treatment, resignation, and fear of the future. No respondents reported severe sleep problems during COVID-19, but three experienced moderate issues, while six had

low levels. Fear of infection was deeply tied to vulnerability and media coverage. Many avoided treatments—five at a high level—for fear of contracting the virus in hospitals. Resignation emerged as a coping mechanism, often linked to restrictions, with some adapting by accepting limitations. Fear of the future persisted, reflecting uncertainty about post-pandemic life and recovery.

Strategies to cope and counteract indirect impacts: Resilience and the use of digital technology were key strategies older adults used to cope with and counteract the pandemic's indirect effects. Four interviewees showed high resilience, often through creative or physical activities. One explained: *"I started writing poems in dialect, then I recorded them and shared them with my relatives and friends to lighten the situation"*.. Phones, WhatsApp, and social media helped maintain contact with family and friends, easing loneliness. However, challenges emerged, including digital literacy gaps, affordability, and risks of misinformation.

Desk review, focus groups, and interviews – responses to indirect effects

During the COVID-19 pandemic, numerous initiatives were launched in Italy, with a focus on supporting older adults most affected by restrictions. A total of 53 initiatives were mapped across five key regions—Lombardy (12), Emilia-Romagna (11), Marche (10), Campania (10), and Apulia (10)—alongside several national projects. Most initiatives targeted people aged 65+ (60), with further attention given to those 75+ and 80+ (40). Only one national program addressed informal caregivers, including younger adults.

The initiatives aimed to counteract indirect impacts of the pandemic, primarily loneliness (60), isolation (50), agitation (53), frailty (45), and lack of self-sufficiency (40). Others targeted stress (29), anxiety (24), and depression (13), though none directly addressed sleep disorders. Their focus included delivering food and medicine, providing psychological support, and, to a lesser extent, using technology to meet basic needs.

Social innovation was a central feature, with initiatives improving quality of life (50), fostering new stakeholder collaborations (45), and adapting services to pandemic demands. They were implemented by public organisations (33), private bodies (23), NGOs (4), and informal citizen networks, including students who mobilised to help. While most began in 2020, some extended into 2021, highlighting sustained support for older Italians facing isolation and vulnerability.

During the pandemic, Italian unions which represent the rights of older people (SPI-CGIL, FNP-CISL, UILP) launched initiatives supporting older people with meals, medicines, healthcare, psychological aid, online training, and intergenerational projects. Cooperation between public bodies, NGOs, and citizens created strong support networks. Other important initiatives included housing, healthcare reorganisation, and in-home drug administration. While social and healthcare initiatives were effective, digital literacy was less prioritised, planned for later under the Italian Resiliation Plan (PNRR). Interviewees stressed the need for stronger communication, as many older people were unaware of available services.

Neighbourhood relationships proved vital during COVID-19, offering mutual aid with shopping, medicine, and emotional support. Stronger in villages than cities, these ties reflect cultural traditions in regions like Marche. While bottom-up solidarity eased inequalities, experts noted limited government integration of social and medical initiatives for equitable community care.

Analysis of gaps

During COVID-19 in Italy, initiatives mainly addressed loneliness, anxiety, and depression, and none targeted sleep disturbances. Stakeholders and older people highlighted the pandemic as a catalyst for innovation, particularly digital literacy, which helped reduce isolation and support access to services. Interviewees stressed the need for continuous technological training, wider

access to devices and the internet, and reliable information channels to prevent scams. *"During the pandemic, a technology issue arose. They should have provided Wi-Fi to everyone and offered tablets, PCs, and smartphones to those who could not afford them. Additionally, they should have set up courses to teach how to use technology, such as a small ambulance with the proper individual protections"*.

Respondents valued companionship initiatives, home delivery of food and medicines, and community centres for socialisation. Experts emphasised reorganising services, maintaining innovations, and strengthening integration between social and healthcare through co-planning with the third sector to meet emerging needs.

Conclusion

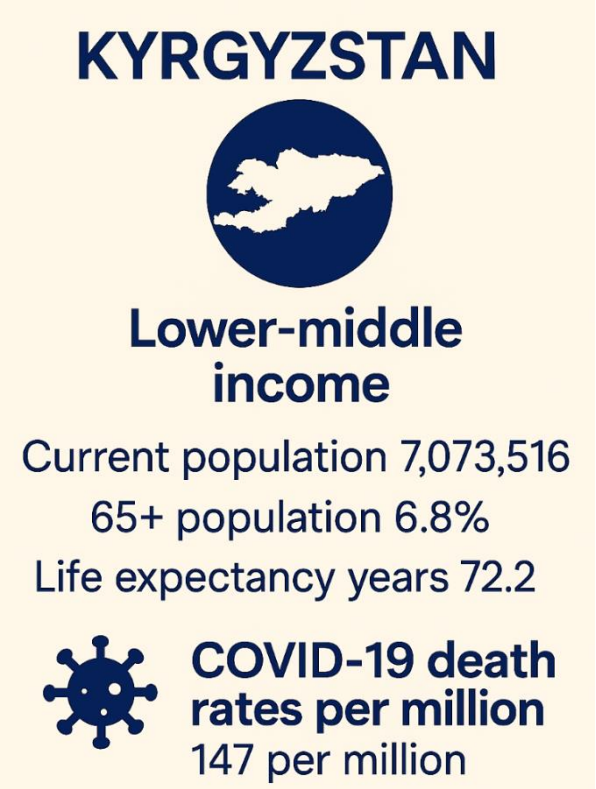
The study highlights the indirect health effects of COVID-19 on older Italians, with loneliness and depression most prevalent, followed by anxiety and stress. Isolation from reduced social contact worsened wellbeing, yet older adults developed coping strategies. Initiatives focused on addressing loneliness, but awareness and dissemination were limited. Respondents emphasised the need for digital literacy, technological support, and active inclusion in community initiatives. The findings stress that post-pandemic normality requires reorganisation of health and social systems around community participation, resilience-building, and social innovation, ensuring older people are active agents rather than passive recipients.

C. Kyrgyzstan

General description of the site

Kyrgyzstan, a lower middle-income, landlocked country in Central Asia, has some 7 million people. Its small economy relies heavily on mineral extraction, agriculture, and remittances, making it vulnerable to shocks; GDP fell 8.6% during the COVID-19 pandemic. A presidential republic with three administrative levels, Kyrgyzstan faces a high burden of communicable and noncommunicable diseases, plus injuries. While infant, child, and maternal mortality have declined, maternal mortality (60 per 100,000 live births in 2019) remains among the highest in the WHO European Region *(40)*

Demographic trends in Kyrgyzstan mirror global patterns, with a steadily growing population of older people—6.8% of its 7 million people are aged 65 or above *(17)*. This shift is creating significant challenges for healthcare, social welfare, and the labour market. Older citizens often struggle with inadequate pensions, limited access to quality medical services, and social isolation, all of which heighten their vulnerability.



Source: *(17, 24, 25, 29)*

The COVID-19 pandemic further intensified these challenges, not only through direct health risks but also by aggravating long-term problems such as chronic diseases, mental health issues, and difficulties in social adaptation. The crisis highlighted structural weaknesses in Kyrgyzstan's healthcare and long-term care systems, with older people facing barriers to essential services, including vaccination.

In response, some regions deployed mobile vaccination units to improve access for vulnerable groups. Addressing these interconnected issues requires coordinated state and societal efforts to strengthen health, social support, and protection mechanisms for older people.

Measure to counter COVID-19, including vaccinations

To contain the virus, the government declared a state of emergency on March 16, 2020, followed by the closure of land borders and suspension of most flights from March 24 to May 14. A Republican headquarters was established to coordinate the national response, while the Security Council and the Supreme Council ("Zhogorku Kenesh") regularly reviewed anti-COVID measures. These strict restrictions helped prevent mass spread, localize outbreaks, and safeguard citizens' lives and health. Government agencies also actively monitored and identified individuals with COVID-19 symptoms, including those exposed to confirmed cases, to curb further transmission. Overall, Kyrgyzstan's pandemic response combined strong epidemiological controls with the continuation of mental health and social protection programs, ensuring not only public safety but also attention to the psychological well-being of its population. By the end of 2023, some 23% of the population had received at least one dose of a COVID-19 vaccine (see Table 1).

Results

Interviews – lived experience of indirect impacts
Key indirect effects highlighted in the interviews included social isolation and loneliness, depression, stress and anxiety, and access to medical care.

Social isolation and loneliness: The study showed that the pandemic reduced social interaction. Quarantine measures prolonged the isolation of older people, increasing feelings of loneliness. Five of six respondents reported fewer meetings with friends and relatives and difficulties in maintaining contact with the outside world. Isolation was stronger in rural areas than in cities. Despite remote communication options (phone, video calls), six respondents still reported loneliness. One interviewee stated: "*Loneliness during COVID-19 was hard. But a phone call or a kind word healed just as much as medicine*."

At the same time, some participants noted that being confined at home strengthened family ties and increased interaction within households.

Depression: Restrictions on contacts, mobility, and attendance at mass events (including funerals) left many older people feeling vulnerable, producing psychological discomfort and symptoms of depression.

Stress and anxiety: Four of six respondents reported stress, fear, and anxiety during the pandemic. Many feared not only infection but also death. Those with chronic illnesses (especially diabetes) were convinced infection would be fatal. The spread of misinformation worsened anxiety. Negative news reports and alarming stories on social networks (TikTok, Facebook) fuelled fear, as did personal accounts of deaths from COVID-19. Uncertainty, concerns about health, and general societal tension deepened distress. Four respondents feared for their health and that of loved ones; one was worried about the deaths of colleagues (as a nurse), while another was troubled by transport and daily difficulties.

Access to medical care: A major indirect effect was limited access to health services. Older people encountered shortages of medicines, difficulties with hospitalization, and restricted preventive examinations. Several respondents reported delays in receiving timely care due to overcrowded facilities. Nevertheless, four of six were vaccinated, reflecting trust in the health system and awareness of protection. Four respondents also struggled to obtain medicines and experienced postponed treatment. In rural areas, shortages of doctors and mobile teams were especially acute.

Focus groups – indirect effects experienced by older people

The focus group discussion identified a broad range of indirect effects of the COVID-19 pandemic on older adults, several of which coincide with those identified in the interviews.

Many reported memory problems and cognitive decline, including forgetfulness, confusion, and difficulty making decisions. These issues were often seen as consequences of COVID-19 itself but also reflected the wider mental health toll of the crisis.

Anxiety and depression were common reasons for seeking help. Many stress-related symptoms were reported, including fear, sadness, and psychosomatic complaints, such as chest or heart pain, that were not medically confirmed.

Psychosomatic disorders became widespread, with physical discomfort linked to emotional strain. Prolonged social isolation and loneliness further intensified these conditions. Older people living in small, confined spaces were especially vulnerable, as restrictions prevented walks or visits with family and friends.

Restrictions also reduced physical activity, eliminating opportunities for daily movement such as shopping, gardening, or walking. This decline in activity contributed to reduced endurance and heightened risks of chronic illness linked to sedentary lifestyles.

Beyond health, wider social issues emerged. Reports indicated a rise in domestic violence, with women and children particularly affected. At the same time, migration and economic challenges worsened vulnerabilities. Returning migrants often faced unemployment and unstable living conditions, which also placed strain on older relatives relying on their support.

Overall, the pandemic's indirect effects on older adults combined psychological distress, health risks, and socioeconomic hardship, underscoring the need for holistic support strategies.

Focus group and desk review – State and public responses to the indirect effects of COVID-19

Kyrgyzstan supported the indirect impacts of COVID-19 through existing programs. The Ministry of Health issued clinical protocols addressing both physical and psychological aspects. Strict quarantine measures, social protection for older people and people with disability, provision of personal protective equipment, home-based services, and expanded social procurement mechanisms improved service accessibility and strengthened cooperation with NGOs.

The study found that support for older people from the state and society was uneven. While government assistance, such as food packages, vaccination programs, and medical care, was available, many respondents perceived it as insufficient. The most frequent requests were for better access to medical services, subsidized medicines, and improved information about available resources. Around 70% of respondents emphasized the need for clearer information. Volunteer initiatives emerged as the most effective form of support, reflecting trends seen internationally *(41)*.

Psychological and mental health support was an important area, which was provided as part of the Mental Program 2018-2030 and the Multidisciplinary Team Project. Health workers conducted explanatory conversations, encouraged positive thinking, and promoted family contact. Professors and medical experts used television to reduce anxiety and spread prevention messages. However, primary care physicians often lacked time to address mental health in detail, referring patients with psychosomatic disorders to the Republican Center of Psychiatry.

The Ministry of Health responded by compiling lists of psychologists and psychotherapists to provide consultations, while the Republican Center of Psychiatry offered day-and-night

support. Community-based organizations established 35 self-help groups, involving about 350 older adults, and WhatsApp groups were used to share medical advice and information. Helplines also played a key role, providing counselling and helping older people manage fear and uncertainty during the crisis.

Conclusion

The COVID-19 pandemic exposed significant weaknesses in Kyrgyzstan's ability to address the indirect effects of the crisis, particularly on mental health. Major challenges included fragmented services, unclear mechanisms for coordination, weak inter-agency cooperation, limited funding, and insufficient research. Although the government made efforts to support mental health, initiatives were often implemented in isolation, lacked sustainability, and had limited reach. The Multidisciplinary Teams project demonstrated value in providing psychosocial support at the community level, yet its scale and accessibility remain constrained.

Several systemic issues emerged. Fragmentation of the mental health system created uncertainty around the role of psychological services and hindered cross-sector collaboration. Funding was inadequate, relying heavily on scarce domestic resources and limited donor support. Weak coordination between agencies prevented the creation of a comprehensive framework tailored to older people's needs, while the absence of research restricted understanding of mental illness prevalence and the effectiveness of interventions

Addressing these gaps requires a more coordinated and sustainable approach. Establishing an interdepartmental working group would align the responsibilities of health, social protection, and education agencies. Updating the regulatory framework could embed mental health provisions in national programs and strengthen the protection of older people's rights. Expanding funding from state and donor sources is essential for ensuring access to psychosocial support and building long-term resilience.

In parallel, greater investment in research and monitoring is needed to track prevalence rates, treatment outcomes, and citizen satisfaction. Proven initiatives, such as Multidisciplinary Teams and the WHO Mental Health Gap Action Programme (mhGAP), should be scaled up. At the community level, crisis centres, helplines, self-help groups, and volunteer programs can provide accessible support. Awareness campaigns, digital literacy training, and the promotion of telemedicine will also help expand access.

Ultimately, integrating mental health into national health, social protection, and aging strategies is vital. A coordinated, evidence-based system will improve older people's quality of life and strengthen resilience against future crises.

D. Philippines

General Description of the Site

The Philippines, a lower-middle-income country, though still a young nation—with only 6.3% of its population aged 65 and above *(17)*—had already developed several programs for older persons before the COVID-19 pandemic. During the crisis, the government's initial response aimed to protect vulnerable groups but was criticized as overly restrictive and militarized *(42)*.

On 8 March 2020, President Rodrigo Duterte declared a State of Emergency, creating the Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) and imposing Enhanced Community Quarantine (ECQ) across Luzon *(43)*. Under ECQ, adults aged 60 and above were required to remain at home, barred from outdoor activity or visitors, and dependent on family or barangay workers for essentials.

PHILIPPINES

Lower-middle income

Current population
114,891,199

65+ population
6.3%

COVID-19 death rates per million:
586 per million

Source:*(17, 24, 25, 29)*

Marikina City, the site of this study, is a highly urbanized industrial hub in eastern Metro Manila with approximately 456,000 residents *(44)*. Known for its shoemaking industry, Marikina contributes around USD 2.6 billion to the National Capital Region's economy, driven by manufacturing, trade, and finance *(45)*. Situated along the flood-prone Marikina River, the city has endured repeated disasters, notably Typhoon Ondoy (2009) and Typhoon Ulysses (2020), which destroyed about 40,000 homes and caused an estimated USD 0.52 billion in damages *(46)*. These experiences shaped Marikina's strong disaster-management systems and reputation for local governance and preparedness *(47)*.

Measures to Counter COVID-19

Marikina reported one of the lowest transmission rates among Metro Manila cities *(48)*. The city implemented multiple ordinances to curb infection and support citizens. In 2020, mall operations were suspended, public gatherings prohibited, and a health curfew enforced. Ordinance No. 058 provided tax relief by waiving penalties and interest on unpaid amortizations for relocation and settlement beneficiaries. Public transport, markets, and establishments were required to provide hand sanitizers, while stallholders received rental relief and extended deadlines for taxes and fees.

In March 2021, vaccination in the city began alongside the implementation of Ordinance No. 016, which mandated the use of the StaySafe.PH digital contact-tracing app for all residents and visitors, enhancing rapid response capacity. The city introduced assisted registration for older adults unfamiliar with online vaccination systems, relying on barangay-level registries that enabled house-to-house vaccination of persons with comorbidities or mobility limitations. Older persons were prioritized for rapid testing after Typhoon Ulysses, while telehealth consultations and hygiene kits were distributed to safeguard health and ensure continuity of care.

Although not yet part of the WHO Age-Friendly Cities Network, Marikina has promoted senior welfare through programs such as *Dalaw kay Tatang at Inang* (home visitation), expansion of social-pension enrollment, and emergency financial and burial assistance *(49)*. The city's capacity for adaptive governance—rooted in its disaster-readiness framework—proved crucial in balancing containment measures with protection of vulnerable groups.

Results

Desk Review: Older adults are particularly vulnerable to psychological problems such as depression, anxiety, stress, and dementia, especially when social networks weaken due to bereavement or institutionalization *(50)*. During COVID-19, lockdowns deepened isolation, leading to poor sleep, physical inactivity, and worsening mental health *(51)*. Dependence on others for daily needs fostered helplessness *(52)*, while the suspension of non-COVID medical services and institutional quarantine reinforced confinement and loss of control *(53, 54)*. Despair stemmed from fear of mortality, financial strain, and misinformation *(52)*. Vaccine anxiety was heightened by the *Dengvaxia* controversy—a 2017 scandal in which a dengue vaccine increased health risks among children not previously infected—fueling public mistrust toward new vaccines *(54)*. Infection often led to stigma and social exclusion, deterring individuals from seeking care *(55)*. Psychological distress was most pronounced among unmarried, low-income, and medically vulnerable older adults *(56)*. However, research in Tuguegarao City found loneliness to be negatively correlated with social engagement, suggesting that technology helped maintain social ties and reduce isolation *(57)*.

In-Depth Interviews: Lived Experiences of Indirect Impacts

Stress. Older persons in Marikina experienced multiple stressors, notably caregiving and financial insecurity. Many cared for sick relatives despite their own health problems. One interviewee recalled, *"I had to care for my husband with cancer, and when he passed, my mother also fell sick. I had no choice but to take on the burden."* Similarly, another said, *"I was forced to help him [the sick relative] even if I had osteoarthritis and poor eyesight. His wife could not manage alone."* Lockdowns also devastated livelihoods. An interviewee's pet shop closed, cutting household income, while another, a carpenter, lost work when construction stopped. *"I had to lie to authorities just so I could travel for jobs,"* he said. *"If your employer paid your salary at 12 noon, then you will not have food for the day, because the market closed at 10 a.m."* Government aid was inconsistent; an interviewee's sister received help only because *"her son worked with the local government."* In contrast, another shared, *"My children abroad regularly sent money. I was even able to help my neighbours."* Despite inequalities, one of the interviewees noted, *"People seemed to be extra generous during that time. Neighbours gave us carpentry jobs so we wouldn't go hungry."*

Depression. Although few labelled their emotions as depression, accounts revealed hidden despair. Illness and immobility deepened hopelessness. An interviewee, bedridden after a fall, said, *"I feel worthless… sometimes I just want to die."* Another admitted, *"I thought it was really the end, that the illness would just engulf the whole world."* Many turned to spirituality for resilience. A church leader recalled, *"In the beginning, no one could go to church. Then we shifted to online Mass on YouTube, and it gave people comfort."* Faith helped older persons reinterpret the crisis as a test of endurance and acceptance.

Loneliness. Lockdowns sharply limited social contact. *"When my son left for work, I was alone all day. Sometimes I thought I was better off dead,"* said an interviewee. Others reported strengthened family bonds: *"The pandemic made our family closer; we had to rely on each other more."* Religious service also gave meaning. *"Being a lay minister and serving others kept me active and prevented me from feeling lonely,"* shared another respondent.

Isolation and Anxiety. Mobility restrictions caused both physical and perceived isolation. *"We used to play tennis together, but now they don't join us anymore because their children don't allow them,"* said a barangay worker. Fear of contagion was constant: *"I was afraid that if one of us got sick, everyone would get sick. Hospitals were full; I thought it was the end of the world."* An interviewee awaiting cornea surgery recalled, *"Of course, I was afraid to lose my eyesight totally. I thought I wouldn't be able to perform my church duties anymore."* Despite hardships, participants noted positive outcomes—improved hygiene awareness, vaccine acceptance, and generosity within communities that reinforced belonging and hope.

Focus Groups and Institutional Responses

Marikina's pandemic response emphasized containment through lockdowns and military-enforced *"hamletting,"* restricting movement without health clearance. Barangays stockpiled food supplies—initially 200 sacks of rice per barangay, later noodles—to sustain households. The *Bayanihan Heal as One Act* provided nationwide social, economic, and healthcare relief, promising PhP 5,000–8,000 to indigent families. However, many low-income residents reported receiving less or none, citing favouritism.

Each barangay maintained a Barangay Office for Senior Citizens' Affairs (BOSCA), a structure unique to Marikina, though many activities were suspended due to officers' age and pandemic restrictions. Nevertheless, BOSCA networks enabled efficient tracking of older residents, facilitating vaccination, welfare distribution, and outreach during lockdown.

Analysis of Gaps

Mental health received minimal attention as responses prioritized infection control and economic aid. Without national guidance, psychosocial care was not institutionalized. Barangay officials admitted this shortfall: *"We were focused on making sure that they are safe first—and then, they have food."* Faith-based initiatives partly filled this void. A church leader said, *"The online masses were a big help. Even until now, I hear online mass every day."* Participants emphasized the need for systematic communication strategies. As one barangay leader reflected, *"We can learn from our past... There should be a system in place, particularly on information dissemination. With older people, we observed that they listen to the younger generation—their children, and even their grandchildren."*

Conclusion

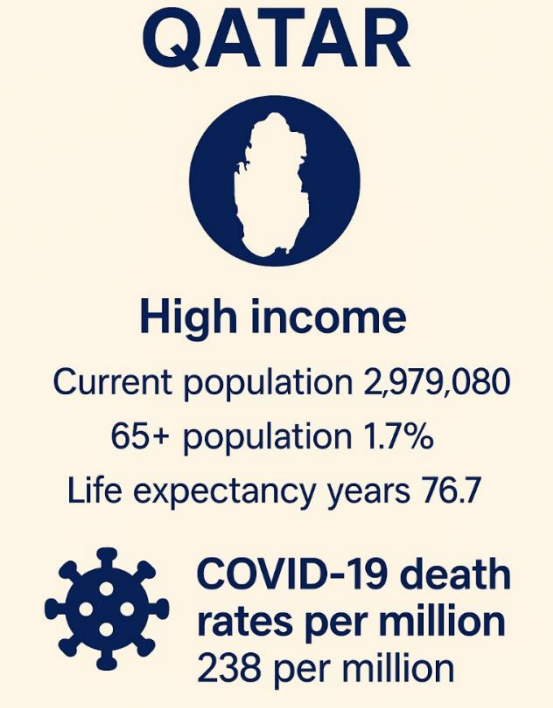
This study documents older adults' lived experiences of COVID-19 in Marikina City, highlighting indirect impacts—stress, depression, loneliness, isolation, and anxiety. Emotional distress was often unacknowledged, reflecting cultural norms that discourage open discussion of psychological suffering. Strong family ties shielded many from loneliness, yet confinement and digital exclusion created isolation. Stress and anxiety were most acute among the economically disadvantaged and those with caregiving burdens—an overlooked issue in a society where family caregiving predominates. Some respondents, however, noted strengthened kinship and increased health awareness.

At national and local levels, pandemic responses prioritized physical health and economic survival over mental well-being. Faith-based efforts such as online masses provided partial psychosocial support, but findings underscore the urgent need for integrated mental health care during crises. Psychosocial interventions should complement material aid, combining cash or food assistance with accessible counselling and telehealth services *(58, 59)*. Evidence shows that telehealth can reduce logistical barriers in dispersed populations, provided digital literacy and stigma are addressed *(59)*. Strengthening community capacity—through trained barangay health workers, coordination with BOSCA, and partnerships with church and civic groups—remains essential to protect older Filipinos' mental health in future emergencies.

E. Qatar

General Description of the Site

Qatar is a high-income country located on the Arabian Peninsula, with an estimated population of 2.7 million people**,** of whom about 90% are expatriates *(60)*. Older adults aged 60 years and above comprise roughly 3% of the population, but this share is expected to rise as life expectancy increases, and the national health system continues to expand. The country's wealth is largely derived from oil and natural gas, which account for most of its GDP, export earnings, and government revenue, making Qatar one of the world's richest nations on a per capita basis.



Source:*(17, 24, 25, 29)*

Qatar's health system is undergoing rapid modernization, supported by extensive public investment, universal coverage, and coordinated governance under the Ministry of Public Health (MoPH). The Primary Health Care Corporation (PHCC) and Hamad Medical Corporation (HMC) serve as the main providers of preventive, primary, and tertiary care, respectively. Cultural characteristics—religiosity, strong family cohesion, and multigenerational households—influence both vulnerability and resilience among older adults. The national mental-health landscape, summarized in the Mental Health Atlas 2020 profile, demonstrates the country's strong policy framework and service infrastructure, though age-specific data remain limited, highlighting the need for targeted interventions for seniors *(61)*.

When the COVID-19 pandemic emerged, Qatar acted early to curb transmission. On 9 March 2020, the government announced the closure of all schools and universities until further notice and imposed a travel ban affecting several countries to prevent the spread of infection *(62)*. These measures were part of a comprehensive national response that also included testing expansion, digital contact tracing, and phased restrictions on public gatherings. The rapid adoption of these controls, alongside investment in telehealth and community outreach, shaped Qatar's relatively successful containment of the early waves. Regionally, comprehensive mental-health frameworks such as Lebanon's National Mental Health Program illustrate the value of integrated prevention, promotion, and treatment strategies during crises *(63)*.

Measures to Counter COVID-19

Qatar implemented a comprehensive and multi-layered response to mitigate the health and psychosocial impacts of COVID-19 on older adults, combining public health measures, service adaptation, and targeted support. As the central authority for health policy, the Ministry of Public Health (MoPH) coordinated national preparedness and response efforts, including vaccination campaigns and mental health support, both of which were critical for protecting vulnerable groups such as older adults *(60)*. Qatar's mental health system, as profiled in the Mental Health Atlas 2020, already benefitted from established policy frameworks and treatment facilities; however, the lack of age-disaggregated data highlighted the need for interventions tailored to the specific needs of older adults during public health emergencies *(61)*.

In line with international and regional best practice—such as Lebanon's National Mental Health Program, which emphasises integrated prevention, promotion, and treatment during crises *(63)*—Qatar expanded its mental health and geriatric services early in the pandemic. The National Alzheimer's and Memory Services Helpline (RAHA), launched in May 2020, provided telephone-based cognitive and emotional support and recorded more than 5,000 interactions over two years, proving vital for older adults experiencing isolation and memory-related concerns *(64)*. Complementary virtual geriatric care initiatives, including dedicated helplines, tele-pharmacy, and reassurance services, improved service accessibility, reduced hospitalisations, and enhanced satisfaction among older adults, although connectivity barriers persisted for some users *(65)*. Hamad Medical Corporation's Home Health Care Services further strengthened continuity of care by delivering multidisciplinary medical support directly to older adults' homes, mitigating disruptions caused by pandemic restrictions *(66)*.

In addition to healthcare adaptation, Qatar delivered a rapid and effective vaccination programme, achieving 97% coverage among adults aged 60+ by June 2021, one of the highest rates in the Gulf region *(67)*. These measures contributed to lower levels of psychological distress among older adults compared with regional and global trends, despite heightened risk for those with non-communicable diseases *(68)*. Nonetheless, digital exclusion remained a barrier for some older adults, particularly expatriates, reflecting a pattern also observed across the Gulf *(11)*.

Taken together, Qatar's response was comparatively robust within the Gulf Cooperation Council region, integrating public health protection with mental health and geriatric service innovations that helped reduce the indirect impacts of the pandemic on older adults.

Results

Desk Review

Evidence from Qatar indicates that older adults experienced indirect psychological effects during COVID-19, though prevalence levels were generally lower than global averages, suggesting cultural and systemic protective factors. Depressive symptoms were reported during quarantine (16.4%) but did not differ significantly from matched controls *(69)*; institutional quarantine showed 12% prevalence, with age increasing risk *(70)*. Among clinically diagnosed older adults, gender and nationality shaped depression risk, particularly for expatriates *(71)*. Pre-pandemic prevalence was 6.6%, and post-first-wave rates remained stable at 6.5%, showing no sustained increase (12,13). Loneliness (OR=1.91), prior psychiatric history (OR=1.80), and social-media-related worry (OR=1.72) heightened depression–anxiety risk *(72)*, yet Qatar's rate remained below global estimates of 25–30%, likely moderated by religiosity and family cohesion *(69)*.

Anxiety during quarantine reached 20.9–25.9%, driven by uncertainty and infection fears *(70)*. Female gender (OR=2.34) and confirmed/suspected infection (OR=7.21) elevated risk *(73)*. Anxiety declined to 5.1% post-first-wave, below pre-pandemic levels (3.6%), and well under global averages of 35–40% *(69, 74)*.

Stress affected 10.4% of quarantined older adults, with higher levels among older participants, women, and those with lower resilience *(69, 74)*. Broader data show high stress nationally during the first wave, with over half reporting at least mild symptoms *(67)*.

Loneliness and social isolation intensified, especially among expatriates, while multigenerational living buffered effects (25–27). Digital exclusion remained a key barrier to tele-health due to low digital literacy, cognitive/sensory limitations, and language challenges; ICT training and tele-pharmacy helped but gaps persist for non-Arabic speakers *(11, 68, 72, 75, 76)*.

Older Adults' Experiences

Older adults reported five main indirect impacts of the pandemic. Depression and emotional distress were common, particularly after infection and due to confinement. One Qatari woman described "*being stuck within four walls… we had to use plastic plates and cups during that time*", while another shared, "*After I got COVID, I was very sad, and I used to cry a lot*"). Stress and anxiety were fuelled by global media coverage and uncertainty: "*Our lives during COVID-19 were full of anxiety and stress. You didn't know how it would end*".

Loneliness was experienced even in multigenerational households, as "*even older adults living with family members experienced profound loneliness*." Social isolation was universal under movement restrictions; one man reflected, "*It was like being in jail… during the 'red zone' period*".

Despite this, many demonstrated resilience and positive adaptation, reframing lockdown as a period of reflection and family bonding. "*I saw it as an opportunity to reorganize my life and reflect*"; another noted, "*COVID actually brought the family closer together… we even prayed in congregation at home*".

Community Response

Support evolved gradually. Early mental health services were insufficient; "*the existing mental health infrastructure was not prepared for the surge*," and the psychological hotline was "*under-*

resourced during peak periods." NGOs reported a 40% rise in emotional-support requests, expanding limited home-visit counselling mainly in urban areas.

Initially, public communication increased anxiety due to generic messaging, but by August 2020 age-specific materials, simplified Arabic guidance, and faith-based coping resources reached an estimated 15,000 older adults.

To address loneliness, community centres launched virtual social activities and telephone befriending; one NGO "*trained 50 volunteers to make daily check-in calls*," though digital reliance limited reach, especially for non-Arabic speakers.

Social-isolation responses focused first on essential needs—service closures left older adults without alternatives, and "*transportation services… were completely halted*." By June 2020, 12 organisations offered grocery deliveries, yet officials acknowledged that "*older adults needed human contact, not just material support*."

Healthcare access showed the strongest adaptation: tele-consultations launched within three weeks; geriatric services handled 3,000+ virtual appointments in the first month; home care expanded by 60%, supported by mobile units. Still, "*technology barriers prevented about 30%*" of older adults from effective access.

Faith-based groups, libraries, media and NGOs strengthened positive coping, expanding digital resources, cultural programming, prayer materials and virtual religious gatherings.

Conclusion

This study delineates the multifaceted indirect impacts of COVID-19 on older adults in

Qatar, spanning isolation, emotional distress, and adaptive resilience, and documents a coordinated suite of community and policy responses that mitigated these harms. Proactive telehealth, multiagency wellness checks, and family-centred interventions served as critical pillars of support, complementing individual coping strategies and faith-based solidarity. Embedding age-friendly mental-health protocols in disaster planning, training caregivers for virtual engagement, and expanding community partnerships will enhance preparedness for

future crises. Longitudinal and comparative research is essential to evaluate

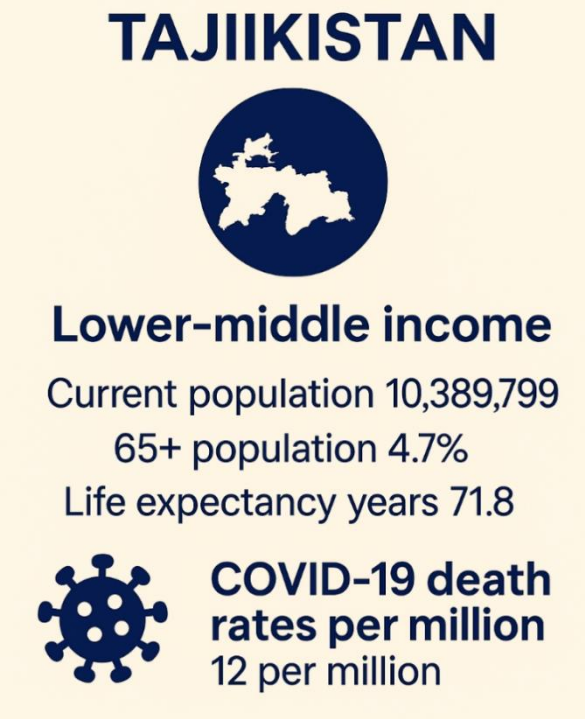
the durability of these interventions and generalize insights across diverse ageing societies.

F. Tajikistan

General description of the site

Tajikistan, a former Soviet republic in Central Asia, became independent in 1991. After a civil war (1991–1997), it achieved political stability and some economic growth, though it remains the poorest country in the WHO European Region, with a 2022 GDP per capita of US$ 1,055. The mountainous nation has 10.5 million people, 72% in rural areas, with a young age profile. Health outcomes improved after early declines, yet life expectancy is only 71.8 years *(77)*.

Dushanbe, the capital city in which this study was conducted, has a population of 1.2 million and lies in the Gissar Valley at an altitude of 750–930 meters above sea level. The city is highly seismic. It is the only city in Tajikistan with district-level governance. Dushanbe is divided into four districts, each managed by its own Hukumat (administration): Sino, Ferdowsi, Shokhmansur and and Ismoili Somoni.



Source: *(17, 24, 25, 29)*

Measure to counter COVID-19, including vaccinations

COVID-19 reached Tajikistan officially in April 2020, after the World Health Organization declared a pandemic in March. As a completely new disease, it posed challenges for government institutions, health services, and social structures. To coordinate national responses, a Republican Headquarters was created under the Prime Minister, including health officials, NGOs, and international representatives. It managed actions at republican, regional, and district levels, mandating vaccination for doctors and older people, strengthening laboratory controls, and establishing hotlines. Preventive measures included home quarantine, mask-wearing, and social distancing. Schools, preschools, mosques, and mass gatherings were closed, reflecting comprehensive national efforts to contain the spread of the pandemic.

Tajikistan's COVID-19 vaccination began in May 2021, prioritizing health workers and older people. Despite strong child immunization traditions, adult uptake faced cultural and logistical barriers. Training, awareness campaigns, and volunteer immunity trials supported progress, though remote areas struggled compared to cities. Testing capacity was expanded to 12 million annually, and by late 2021, 93% of Dushanbe residents were fully vaccinated and by the end of 2023, 56% of the Tajik population had received at least one dose of the COVID-19 vaccine (see Table 1).

Results

Interviews – lived experience of indirect impacts of COVID-19

Fear of Death and Healthcare Access

Fear of death was reported by 5 of the seven interviewees, largely due to limited access to timely healthcare. Respondents described delays in medical response: one woman from Shohmansur district reported high fever and severe illness but was told to visit a clinic herself when calling a helpline. Later vaccinated, she experienced blood clots in her legs, attributed not to the vaccine but to complications of COVID-19. The lack of reliable healthcare access amplified fear, especially in households where multiple deaths occurred simultaneously.

Ageism and Dependence

COVID-19 deepened feelings of ageism, reported in four cases. Older participants noted humiliation and diminished dignity when their needs were overlooked. Dependence on others rose, creating frustration and loss of autonomy. Many older people struggled with reliance on external support for essentials and care, which intensified psychological vulnerability.

Loneliness and Social Isolation

Loneliness six of the seven interviewees. Social ties weakened sharply, particularly for single individuals without family. The closure of social clubs for nearly two years deprived many of their main source of interaction and support. Interviewees emphasized that this prolonged isolation aggravated depression and left them feeling forgotten and abandoned.

Stress and Psychological Burden

Stress was reported by half of the interviewees, rooted in isolation, community deaths, and insufficient information. One respondent noted heightened fear after six residents in her building died within a short time. While psychologists' helplines were introduced, access was inconsistent, leaving gaps in psychological support. Nonetheless, experts stressed that such services remain essential for addressing the long-term emotional toll.

Desk review and focus group – responses to the indirect effects of COVID-19

Anxiety and Depression

Before COVID-19, anxiety rates among older people living in families were 9%, and 10.9% among those living alone. Depression affected 12.8% of older people in families and 33.3% of singles. During the pandemic, high anxiety surged to 50%, with medium and low anxiety levels at 30% and 20%. Depression also worsened: 40% experienced high levels, and 30% medium or low levels. Testing confirmed a sharp deterioration in psycho-emotional health, directly linked to isolation, stress, and uncertainty *(78)*.

Support from Caregivers

Tajikistan lacks dedicated legislation for the social support of older people, but services were delivered through existing structures. Seven social institutions, four sanatoriums, and 58 day centres supported older people and people with disability. Social workers in 68 cities and districts provided home-based assistance, ensuring older people care, supplies, and psychological support during lockdowns. Field interviews noted particularly effective work in the Firdavsi area. These efforts were critical in addressing loneliness and ensuring continuity of care.

Income and Social Support

Tajikistan's economy relies heavily on remittances, which make up over 30% of GDP. With border closures, remittances fell sharply from $2.6 billion in 2019 to $1.7 billion in 2020. This crisis led to food shortages, inability to pay utilities, and rising poverty. By May 2020, 41% of households had reduced food intake, while the proportion of households without savings increased from 29% to 41%. To mitigate these shocks, the government and the World Bank provided targeted social assistance, distributing 500 Somoni (equivalent to approximately USD 54) each to 50,000 low-income families. People with disability received 400 Somoni (USD 43) and poor households 800 Somoni (USD 86) Somoni in one-time aid.

Access to Healthcare

During the pandemic, 22 laboratories, including 9 in Dushanbe, offered free COVID-19 testing. In the capital, 14 clinics ran 24-hour helplines, complemented by hotlines in the prosecutor's office and the Hukumat. In total, 5,756 beds were prepared in Dushanbe for patients. However, the desk review revealed contradictions: while care was declared free, patients often paid for treatment or medicines. Hotline services, particularly in the prosecutor's office, played an important role in protecting patient rights, including those of older people.

Access to Social Services

Despite the crisis, pensions continued without disruption. Social workers provided masks, gloves, and hygiene items to vulnerable elderly. Humanitarian aid supplemented government support, and social institutions maintained services. These measures helped reduce isolation and protect the dignity of older people, while highlighting gaps in formal care policy for older people.

Analysis of gaps

Local policies to protect the target population were planned relatively well, but gaps remained in addressing the indirect impacts of COVID-19. One-time financial aid for people with disabilities and low-income families was inadequate, failing to meet basic nutritional needs. In a poor country where remittance income from Russia dropped by 65.3%, repeated support was essential. Access to healthcare proved limited: doctors were unprepared for the pandemic, workloads on medical and nursing staff were overwhelming, and shortages of specialists worsened the strain. Social support from caregivers was also inconsistent, hindered by insufficient training of social workers and their heavy workload.

Conclusion

Compared with many countries, Tajikistan experienced relatively low levels of morbidity and mortality during the COVID-19 pandemic, with 125 officially reported deaths. The timely introduction of vaccines significantly reduced severe cases, underscoring the critical role of immunization. However, gaps remained due to vaccine availability, mistrust, and the absence of a strong culture of adult vaccination.

Beyond direct health effects, the pandemic's indirect impacts were far more profound. A study of the psycho-emotional state of older people revealed important increases in depression, anxiety, stress, and fear of death. These outcomes were particularly severe among single older people deprived of social contact. Isolation, uncertainty, and limited access to healthcare services worsened their condition. In some areas of Dushanbe, delayed or inadequate medical responses deepened fear and mistrust. While helplines were established, the absence of psychological support services left older people without crucial mental health care. This points to the need for integrated doctor and psychologist hotlines in future crises.

Economic impacts were also severe. Remittance inflows from Russia—representing over 30% of GDP—fell by 65%, pushing many families into food insecurity. By May 2020, over 41% of the population had reduced food intake, with households without savings rising sharply. One-time financial aid was insufficient given the pandemic's two-year duration, highlighting the need for repeated, targeted social assistance.

Despite these challenges, social services functioned reliably: pensions were paid on time, people with disability received aid, and social workers provided hygiene products and support to isolated elderly. The Republican Headquarters under the Prime Minister played an important coordinating role across national and local levels, but the experience revealed systemic weaknesses in healthcare preparedness, social protection, and psychological support. Addressing these indirect impacts will be essential for strengthening resilience in future emergencies

5. Integrated overview

Country	Indirect effects	Main responses	Gaps & conclusion
Brazil	• Depression • Stress • Anxiety • Loneliness	• Strong community mobilisation • Donation and food distribution centres • Remote monitoring systems • Home-delivery support. • Video calls transformative	Gaps • Fragile primary care and disrupted chronic care • Lack of policies supporting caregivers • Digital exclusion deepened inequalities • Communication often unclear and fear-inducing Conclusions • Older adults faced loneliness, fear, and depression, partly due to isolation and loss of bonds • Coping through solidarity, spirituality, and technology • Local services adapted with donations and remote support • Structural weaknesses in health, social care. digital inclusion exposed • Call for age-responsive crisis planning and better communication • Need resilient, inclusive, age-friendly systems for the future
Italy	• Loneliness • Social isolation • Stress • Depression • Anxiety + others (e.g., sleep disorders, fear of infection, treatment avoidance)	• Resilience & creativity: Writing, crafts, physical routines. • Digital tools: Phones/WhatsApp helped, but gaps and misinformation remained. • Support initiatives: 53 programs tackled loneliness, frailty, anxiety. • Social innovation: Improved life, built collaborations, adapted services. • Union & community aid: Meals, training, intergenerational projects, neighbour support. • Healthcare measures: Service reorganisation, housing, in-home drug delivery. • Neighbourhoods vital: mutual aid (shopping, medicine, emotional support).	Gaps • Initiatives focused on loneliness, anxiety, depression, not sleep issues • Digital literacy emerged as key, requiring training, devices, internet access, and reliable info • Experts called for sustained innovation, service reorganisation, and stronger social–healthcare integration Conclusions • Loneliness, depression, anxiety, and stress were major indirect effects • Pandemic catalyst for innovation, particularly in digital area • Isolation harmed wellbeing, though coping strategies were developed • Initiatives addressed loneliness but lacked broad awareness and reach • Future systems must build resilience, digital inclusion, and active community roles for older adults
Kyrgyzstan	• Social isolation • Loneliness • Depression • Stress • Anxiety • Access to medical care • + others (e.g., psychosomatic	• Government response: Protocols, PPE, home care, procurement, NGO cooperation, food, vaccines, and medical aid • Volunteer support: Local initiatives seen as most effective • Mental health programs: Backed by national plan, projects, and public messaging	Gaps • State aid seen as insufficient • Need for better care, medicines, information • 70% wanted clearer communication • Services fragmented, weak coordination, poor cooperation • Funding scarce, heavy reliance on limited donors • Mental health initiatives small, isolated, unsustainable • Roles unclear, collaboration across sectors hindered

Country	Indirect effects	Main responses	Gaps & conclusion
	disorders, cognitive decline, etc.)	• Community support: 35 self-help groups, WhatsApp, and helplines offered counselling and reassurance	• Lack of research on prevalence and outcomes Conclusions • Need interagency group and updated regulations • Scale up proven models like Multidisciplinary Teams, mhGAP • Expand community support, awareness, digital tools, telemedicine
Philippines	• Stress • Depression • Loneliness • Isolation • Anxiety	• Containment: Lockdowns and military-enforced "hamletting" restricted movement • Food aid: Barangays stockpiled rice and later noodles for households • National relief: Cash aid promised, but many poor families received less or none • Barangay Office for Senior Citizens' Affairs (BOSCA) role: Senior citizens' offices unique to Marikina supported tracking and outreach • Vaccination & welfare: BOSCA networks aided distribution despite suspended activities	Gaps • Mental health receiving minimal attention, sidelined in favour of infection control and aid • No national guidance, psychosocial care not institutionalized • Faith-based initiatives like online masses offered support • Need for systematic communication and clear information • Older people relied on younger family for guidance Conclusions • Older adults faced stress, depression, loneliness, and anxiety • Emotional suffering often unacknowledged due to cultural norms • Family ties reduced loneliness but digital exclusion caused isolation • Stress highest among the poor and family caregivers • Some noted stronger kinship and better health awareness • Responses prioritized physical and economic needs over mental health • Future support should combine material aid, counselling, telehealth, and community capacity; urgent need for integrated mental health care during crises
Qatar	• Anxiety • Stress • Loneliness • Social isolation	• Mental health: Hotline under-resourced; NGOs saw 40% rise in support requests, expanded home visits in cities • Communication: Early messaging raised anxiety; later age-specific, simplified Arabic, and faith-based resources reached 15,000 older adults • Social connection: Virtual activities and volunteer check-in calls eased loneliness, but digital gaps limited access • Essential needs: Service closures hurt; 12 groups offered grocery deliveries • Healthcare: Tele-consults launched fast, 3,000+ virtual visits, home care up 60%, though 30% excluded by tech barriers	Gaps • Hotline under-resourced • Digital gaps • Insufficient human connection to services offered. Conclusion • Older adults faced isolation, distress, but showed resilience • Telehealth, wellness checks, and family support eased impacts • Coping strategies and faith-based solidarity complemented services • Age-friendly mental health, caregiver training, and partnerships needed for future crises • More research required to assess long-term effectiveness and wider relevance

Country	Indirect effects	Main responses	Gaps & conclusion
		• Coping resources: Faith groups, libraries, and media expanded digital, cultural, and religious support	
Tajikistan	• Anxiety • Depression • Fear of death • Healthcare access • Ageism • Dependence • Loneliness • Isolation • Stress and psychological burden	• Support from caregivers: Services delivered via institutions, day centres, and social workers; home-based care and psychological support reduced loneliness. • Income and social support: Remittances dropped sharply; poverty rose; government and World Bank gave one-time cash aid to low-income and households with people with disability. • Access to healthcare: Free testing, hotlines, and hospital beds expanded, though patients often paid despite official claims of free care. • Access to social services: Pensions continued, social workers provided hygiene supplies, and humanitarian aid reduced isolation but exposed policy gaps.	Gaps • Indirect impacts not fully addressed • One-time aid insufficient to cover basic needs amid remittance drop • Healthcare access limited, staff overworked, specialist shortages • Caregiver support inconsistent due to lack of training and high workload Conclusions • COVID-19 mortality low with 125 deaths; vaccines reduced severe cases but mistrust and supply gaps remained • Depression, anxiety, stress, and fear rose, among isolated older adults • Limited healthcare access, delayed responses deepened mistrust and fear • Helplines existed but lacked psychological support services • Remittances fell 65%, causing food insecurity and rising poverty • One-time aid was inadequate; repeated assistance needed • Pensions and social services continued, but systemic gaps in health, protection, and mental health were exposed

6. Discussion

The COVID-19 pandemic revealed a global gap between biomedical preparedness and psychosocial resilience, highlighting that while many countries had developed systems for disease surveillance, testing, and treatment, far fewer were equipped to address the widespread psychological, social, and economic stresses that accompanied the crisis (Webb et al 2022). Across Brazil, Italy, Kyrgyzstan, the Philippines, Qatar, and Tajikistan, empirical data and first-hand testimonies converge on a stark conclusion: the pandemic was not only a public health crisis but also a profound psychological and social event that reshaped the experience of ageing.

Lived experiences: The emotional landscape of ageing under isolation

Older adults described the pandemic as a period of fear, stillness, and emotional erosion. Many recalled long months "locked inside," where the line between safety and solitude blurred. In Brazil's Paraná region, participants spoke of "living in silence," "being punished for surviving," and "watching the days dissolve." While fear of contagion was constant, loneliness—rather than infection—emerged as the dominant source of anguish. Daily routines collapsed, and activities that sustained psychological balance—church gatherings, visits from grandchildren, community meals—were suspended indefinitely.

These accounts align with broader evidence identifying loneliness as a prevalent feature of ageing and a risk factor for cognitive deterioration. Social isolation and the loss of cognitively engaging activities elevate the risk of decline and dementia; population-based studies link isolation to reduced gray-matter volume and higher dementia incidence *(79)*, and meta-analytic evidence shows loneliness increases dementia risk *(80, 81)*. Longitudinal studies further suggest bidirectional links between isolation and cognitive decline *(82)*. The experiences described here—marked by confinement and emotional withdrawal—mirror these mechanisms, indicating that pandemic-related isolation likely amplified neurocognitive vulnerability among older adults.

Depression, anxiety, and chronic stress dominated the emotional register of older participants. Many reported persistent sadness, exhaustion, or loss of purpose. As one Brazilian participant described: *"I survived COVID, but I lost the reason to get up in the morning."* The interruption of mourning rituals—wakes, funerals, family farewells further deepened trauma. Similar accounts appeared in Italy, where older people spoke of "mourning without closure" and "empty homes filled with ghosts." These experiences mirror international findings showing that social isolation and disrupted mourning significantly intensified depressive and post-traumatic symptoms among older adults *(8, 35)*.

Anxiety was frequently linked to the *infodemic*—the excessive and often misleading flow of pandemic-related information. Participants reported that "the news killed before the virus did," reflecting how communication amplified fear rather than mitigating it. Empirical research supports these observations: excessive exposure to COVID-19 news, particularly through social media, has been associated with heightened anxiety, stress, and depressive symptoms among older adults *(83, 84)*. The interaction between media saturation and social isolation likely intensified anticipatory grief—a sustained expectation of loss—documented as a distinct emotional response during the pandemic *(85)*.

Cross-national variations in psychosocial impact

While the previous narratives on lives experiences illuminate the deeply personal and emotional toll of the pandemic on older adults, it is impossible to isolate them from broader social, cultural, and institutional contexts. These lived experiences unfolded within markedly different public-

health responses, welfare systems, and community structures (see Table 1 for further details), which produced distinct patterns of vulnerability and resilience across countries.

Among the studied countries, Brazil and Italy, displayed the high death toll (3,344 and 3,329 per million, respectively). In both contexts, older adults endured long lockdowns and recurrent waves of loss. Italy's advanced ageing (26 % aged 65+) and prevalence of solitary living amplified depression, as social rituals; funerals, Mass, community gatherings, were suspended. Participants described mourning "without bodies, without words, without closure." In Brazil, where inequality (Gini = 51.6) and social fragmentation exacerbated vulnerability, older adults from low-income areas faced dual stressors: economic precarity and emotional isolation. Yet, paradoxically, Brazil also exhibited strong grassroots solidarity. Neighbours, churches, and local NGOs organised donation drives and check-in visits. These acts of reciprocity—described by one participant as *"small pieces of light in a dark time"*—became vital psychological buffers.

In Kyrgyzstan and Tajikistan, both the smallest countries in the study by population, official COVID-19 mortality rates were comparatively low official (147 and 12 per million). This figures, likely reflect under-reporting *(86)* rather than limited impact, as qualitative evidence indicates significant psychological distress among older individuals. In these contexts, multigenerational households protected against physical isolation but intensified caregiver strain, especially among women. Religious and family structures provided emotional anchoring, yet mental health services were virtually absent, and stigma around psychological suffering prevented open discussion. Older adults reported feelings of "invisible exhaustion" and "unshared sadness," revealing how suffering persisted in silence.

The Philippines experienced protracted lockdowns (one of the world's longest) that deeply affected older adults' social and spiritual life. Churches, a primary source of belonging, closed for months, while digital divides excluded many elders from online Mass or family contact. Participants recalled feeling "cut off from God and from people." Although strong family ties and community-based networks offered some relief, the lack of institutional mental-health support left older adults reliant on faith and endurance *(87)*.

In Qatar, where only 2.7 % of the population is aged 65+, the psychosocial landscape was distinct. High vaccination coverage (99 %) and abundant healthcare resources prevented widespread panic, but expatriate families suffered separation across borders. Older adults expressed quiet forms of melancholy rather than overt anxiety "a sadness that had no audience," as one participant put it. This case highlights that wealth and medical capacity alone do not guarantee emotional security; psychosocial wellbeing depends on connection, not only protection.

Gaps and future research

Taken together, these cross-national findings reveal not only common emotional and social challenges, but also clear structural gaps that constrained countries' ability to protect older adults from the indirect effects of COVID-19.The most significant gap across all countries - except Italy and, to some extent, Qatar - was the lack of responses specifically targeting the indirect effects of COVID-19, which are the focus of this research. Most initiatives addressed the direct health impacts of the pandemic or indirect effects in general, but not the specific issues of depression, loneliness, stress, etc. For example, in Brazil, responses included donation centres and food delivery; in Kyrgyzstan, PPE, food, vaccines, and medical aid; and in the Philippines, food and cash aid, vaccinations, and welfare programs.

The scarcity of responses specifically targeted at the indirect impacts of interest may have at least two explanations. First, such measures may have been limited or absent in many countries studied, most of which - like Brazil, Kyrgyzstan, the Philippines, and Tajikistan - are middle-income countries with limited resources. Second, the concept of indirect psychosocial

responses may have been unfamiliar to research teams and informants, not part of their mental templated, making it less likely that they identified relevant initiatives. Supporting this view, the international coordinating team repeatedly emphasized to national teams that the research should focus on specific indirect psychosocial impacts, yet this was not consistently reflected in the country reports.

Nonetheless, across countries, several recurring gaps in responses to COVID-19's more general indirect impacts on older adults were identified. Primary healthcare was fragile, with disrupted chronic care and limited caregiver support. Mental health often received minimal attention, with small, isolated, and unsustainable initiatives, often sidelined in favour of infection control and economic aid. Communication was another weak point: messaging was unclear, fear-inducing, or insufficient. Digital exclusion and low literacy deepened inequalities, restricting access to telehealth and online services, and exacerbating social disconnection. Social and healthcare systems were fragmented, underfunded, and poorly coordinated, with unclear roles and little research to guide action. State aid and support were inadequate, while services often lacked human connection, leaving older people vulnerable and underserved.

Addressing these shortcomings requires targeted policy action and renewed focus on the psychosocial dimensions of preparedness for future health emergencies.

Furthermore, focus groups across several countries highlighted that the pandemic period was not only one of crisis but also of innovation—marked by creative individual coping strategies and inventive responses to its many indirect effects. It will be essential to systematically identify and document these innovations, and to assess their value both for future pandemic preparedness and for addressing psychosocial challenges in everyday, non-pandemic contexts.

Policy implications

To strengthen preparedness and protect older adults in future crises, policy responses must move beyond biomedical capacity to intentionally cultivate psychosocial resilience and social protection. Most countries lacked responses tailored to the indirect effects of COVID-19—particularly loneliness, stress, depression, and weakened social connections among older people. Policies should also tackle broader weaknesses: fragmented and poorly coordinated services, inadequate or fear-inducing communication, digital exclusion, and the absence of strong evidence to guide action. Crucially, older people must be directly involved in policy design so their experiences, needs, and priorities are fully reflected.

More generally policies should give far greater priority to the mental health and psychosocial impacts of pandemics and likely measures to contain them. Ensuring that indirect mental health and psychosocial impacts to not get overshadowed by more immediate physical health and economic concerns, may, however, require some sustained awareness raising among policy makers and as a prerequisite for future policy implementation.

Ideally, before deciding whether to give greater priority to mental health and psychosocial impacts such as loneliness and depression in pandemic preparedness policies, more research is required on the burden – including severity, urgency, and cost – of these issues, compared to direct impacts and other indirect impacts *(88, 89)* and the effectiveness and cost-effectiveness of interventions.

Strengths and limitations

This study offers valuable insights, yet its scope and methodology bring both strengths and limitations that should inform interpretation of the findings. Its first strength is that it is among the first studies to examine the indirect psychosocial impacts of COVID-19 across multiple countries that differ markedly in income level, geography, culture, and degree of impact from

the pandemic. Second, this qualitative study employed three distinct methods – in-depth interviews with older people, a desk review, and a focus group of key informants – to collect data and explore both the lived experience of indirect psychosocial effects and the responses to them. This produced fine-grained, triangulated, and therefore more valid, findings on these indirect effects on older people. Third, both an international coordinating team and local research teams in six countries conducted the study, yielding a more complete picture that balances context-rich local knowledge with a wider-angled global perspective, allowing for stronger comparability.

This study also, however, has several weaknesses. Chief among these is the difficulty research teams had in maintaining focus on the five indirect effects of interest and the specific responses to them. As noted, this may be due to the absence of such responses in many countries or to limited familiarity with the concept of indirect psychosocial effects. Another weakness lies in what turned out to be the limited expertise of several research teams in using qualitative, phenomenological methods, which led to a less rich exploration of how interviewees perceived, felt, and made sense of their experiences during the pandemic.

Conclusion

Ultimately, the pandemic revealed that the true measure of preparedness lies not only in hospital capacity or vaccination coverage but in the *emotional infrastructure* of societies—the networks of trust, reciprocity, and meaning that sustain life in isolation. Across all six countries, older adults proved not merely vulnerable but profoundly resourceful. They created new ways of connecting, caring, and enduring.

Future ageing policy must learn from these lived experiences. It should treat mental health as a public good, nurture community solidarity as a protective factor, and reimagine ageing not as dependency but as interdependence. Only through this integrated vision can societies transform the painful lessons of COVID-19 into a foundation for equitable, compassionate, and age-inclusive resilience.

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