

Lived Experiences of Ageing and Wellbeing Among Older Adults Living in the Rural Maldives: A Phenomenological Study

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HIGHLIGHTS

- Ageing-in-place is shaped by cultural identity, autonomy, and island rootedness.
- Structural inequities limit rural elders' access to dignified ageing supports.
- Traditional filial care norms clash with emerging demographic realities.
- Emotional labour and caregiver fatigue remain invisible in rural contexts.
- Calls for context-sensitive ageing policy grounded in lived experience.

ABSTRACT

Ageing in place is integral to achieving the United Nations Sustainable Development Goal 3 (Good Health and Wellbeing) and aligns with environmental, social, and governance (ESG) principles. This phenomenological study explores the lived experiences of fifteen older adults, aged sixty-five to eighty-one, residing in a small rural island community in the northern region of the Maldives. Data were collected through semi-structured interviews, and a thematic analysis was conducted to identify the enablers, barriers, and concerns associated with ageing in place. Key enablers for ageing well in place included a sense of autonomy and competence, as well as strong connections to the island, the community, family, and the natural environment. Conversely, barriers identified were inadequate housing, poor nutrition, challenges related to functional and sensory disabilities, and the presence of multiple chronic health conditions. Difficulties in accessing transport and health infrastructure—both within the island and the atoll—and the necessity of travelling to Malé for tertiary healthcare further hindered the ability to age in place. Recurring concerns included the lack of respite care to ease spousal caregiver burden, fear of becoming a burden on others, and anxieties related to medication management. The psychological needs of older adults, particularly those experiencing social isolation and loneliness, require attention through sustainable development strategies tailored to island communities. This study also challenges the prevailing socio-cultural expectation that elderly individuals will be cared for by family members—particularly offspring and spouses. Notably, two of the fifteen interviewees had no immediate family caregivers, and one was a disabled elderly person. As life expectancy continues to rise, the need for proximal residential care facilities integrated with healthcare infrastructure will become increasingly critical in island settings to ensure the provision of long-term care. The findings of this study are relevant to older adults, their families, and island communities, as well as to policymakers, healthcare and social service professionals, and civil society organisations. They highlight the importance of promoting health, wellbeing, and dignity for older individuals residing in remote rural islands.

KEYWORDS

Older adults
Health and well-being
Social isolation
Long-term care
Ageing in place
Rural health services

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INTRODUCTION

The proportion of older adults aged sixty-five and above in the Maldives is currently small, comprising approximately five per cent of the total population of 382,639. This equates to 20,553 individuals, reflecting a ten per cent increase since the 2014 Census. In line with global trends in rising life expectancy, the elderly population density in the Maldives is steadily increasing. Life expectancy has risen from 70 years in 2000 to 80 years in 2022 (Maldives Bureau of Statistics, 2023). Projections indicate that the number of older adults will reach 40,000 by 2054, with an estimated one-eighth of the population aged sixty-five or older within the next twenty-five years (Maldives Bureau of Statistics, 2014, 2018, 2022).

Maldivian policy on ageing is relatively nascent, with the first national policy introduced in 2017. The National Ageing Policy outlines core principles aimed at enabling older adults to thrive within their island communities. These include promoting ageing in place, creating age-friendly communities, supporting family caregivers, ensuring digital empowerment and lifelong learning for older adults, and safeguarding their rights, dignity, independence, and participation in community life (Ministry of Social and Family Development, 10 September 2024). The policy aligns with the World Health Organization's (WHO) Integrated Care for Older People (ICOPE) model (WHO, 2019a), which emphasises the development of age-friendly environments through attention to: (1) outdoor spaces and buildings; (2) accessible public transportation; (3) age-appropriate housing; (4) respect and social inclusion; (5) social participation and active citizenship; (6) employment and civic engagement; (7) communication and information; and (8) community support and health services (WHO, 2007).

Universal health insurance in the Maldives, known as 'Husnuvaa Aasandha', is fully funded by the state and provides comprehensive coverage to all Maldivians without a ceiling limit. This includes inpatient and outpatient care, prescribed medications, travel costs for emergency healthcare, and medical expenses for individuals with terminal illnesses or disabilities. In addition, the National Social Protection Agency (NSPA) manages a medical welfare fund that offers supplementary assistance for services such as private hospital care, overseas treatment, and assistive devices. The Old Age Basic Pension Scheme provides a universal monthly pension of MVR 5,000 to all Maldivians aged sixty-five and above, unless their existing pension income exceeds twice the value of the basic allowance. This pension amount is comparable to the national minimum monthly wage of MVR 7,000.

Rapid urbanisation and internal migration have

resulted in forty-three per cent of the population residing in Malé, with sixty per cent of Maldivians living in rented housing in urban areas. This urban concentration is projected to rise, with sixty-four per cent expected to live in Malé by 2054. Notably, significant population declines have already been observed in regions such as Huvadhoo Atoll and Fuvahmulah in the south. National fertility rates have also declined from 2.45 in 2014 to 1.7 in 2022 (Maldives Bureau of Statistics, 2022). Coupled with increased outmigration of the working-age population to Malé and resort islands in the central region, these demographic shifts necessitate exploration into how older adults can age safely and meaningfully in their home communities across the atolls. Furthermore, declining fertility rates may lead to a shortage of family caregivers to support elderly relatives, highlighting the urgency of identifying appropriate interventions and support mechanisms to promote healthy ageing in place.

LITERATURE REVIEW

Healthy Ageing

Ageing is defined as the progressive structural and functional decline that begins around the time of reproductive maturity. Physiological changes accompanying advancing age increase the risk of undernutrition, which can lead to physical and cognitive impairments (WHO, 2019b). Healthy ageing is described as the process of developing and maintaining the functional ability that enables wellbeing in later life (WHO, 2015). Interventions promoting active ageing include food and nutrition support and physical activity to enhance "health span" through improved immune function, stress resilience, mobility, and cognition. Specific strategies supporting ageing in place include training in daily living activities, cognitive stimulation, health screenings, medication reviews, and nutritional and exercise support (Crocker et al., 2024).

Life expectancy in the Maldives currently stands at 80 years, well above the Southeast Asian regional average of 68 years. However, projections indicate a decline of 6,900 in the number of Maldivians expected to live a healthy life by 2025 compared to 2018 (Maldives Bureau of Statistics, 2020). Health expenditure accounts for 10% of the national GDP, with MVR 7,486.6 million spent on health services compared to MVR 5,343 million for education. Obesity and hypertension are increasingly prevalent across age groups. Stroke, ischaemic heart disease, and chronic obstructive pulmonary disease are among the leading causes of death for both men and women. Without timely interventions to improve health behaviours and promote lifestyle changes from an earlier

age, the increasing burden of chronic illnesses such as cardiovascular and pulmonary diseases, diabetes, kidney disease, and dementia will strain health systems (WHO, 2025).

Disabilities related to communication and self-care are less common in the atolls than in Malé, while impairments related to vision and mobility are significant in both regions (Census, 2022). As the population ages, issues such as frailty, falls, and incontinence will increasingly affect functional independence. For older adults experiencing functional decline or disability, access to safe housing with mobility support, nearby access to groceries, healthcare services, and a secure neighbourhood environment becomes critical (Van Dijk, Cramm, Van Exel, & Nieboer, 2015).

Living conditions on rural islands significantly impact mental health among older adults, particularly those requiring specialised care. Many elderly residents experience social isolation and limited interaction, with financial stress exacerbating feelings of anxiety and depression (Maldives Health Ministry, 2023). Economic hardship also affects access to healthcare and participation in social and community activities, contributing to a diminished sense of security and wellbeing (Reich et al., 2020). The burden of managing chronic illnesses increases psychological stress and dependency (WHO, 2022).

Efforts to promote healthy ageing require a coordinated approach that enhances the intrinsic capacity of individuals, families, communities, and healthcare providers. Creating environments that support healthy ageing—including appropriate policies, training, and community-level awareness—can allow older adults to remain engaged and active, with benefits for themselves, their families, and wider island communities (Nazra, 2018; Abdul Azeez, Imad, & Suzana, 2020).

Understanding Ageing in Place in Small Island Contexts

Ageing in place within the Maldivian context is defined in social policy as the ability of individuals to live independently in their own homes and communities as they age, with access to necessary services and support. This policy is backed by research that shows older adults prefer to remain in familiar environments and that attachment to neighbourhoods and homes enhances wellbeing and social connectedness (Wiles et al., 2012). Van Dijk et al. (2015) emphasise the need to consider both physical and social environments, as personal identity is shaped by ongoing interactions with one's surroundings.

For island residents, ageing in place also implies a deep emotional and cultural connection to one's home island, rooted in kinship ties, ancestry, and the natural

ecosystem. This connection to place, described by Basso (1996) as integral to identity and belonging, is particularly profound in geographically finite settings. The concept of "islandness" captures this unique experience—a sense of place shaped by physical isolation, proximity to nature, and socio-cultural bonds (Conkling, 2007). While islands are not isolated systems—given the regular movement of people and goods—the lived experiences of older adults are shaped by changing life circumstances, the physical and social environment, and proximity to centres of governance (Baldacchino, 2003, 2020).

Cultural Values and Caregiving in Ageing

In the Maldives, where Islam shapes both spiritual and cultural life, ageing is traditionally viewed through a lens of reverence and communal responsibility. Islamic teachings regard older adults as sources of wisdom (sheikh), while also acknowledging the physical and cognitive frailty associated with old age (al-ajuz). These values are embedded in Maldivian terminology, such as 'israhveheen' (respected elders) and 'balikashi' (weak-boned), reflecting both honour and the vulnerabilities of ageing.

Historically, health and wellbeing practices in the Maldives—shaped by Islamic, Ayurvedic, and seafaring traditions—emphasised holistic self-care, social participation, and intergenerational engagement. Daily rituals such as sea bathing, prayer, herbal remedies, communal walking, and intermittent fasting were practised across the lifespan. Elders played vital roles in society as caregivers, storytellers, and cultural custodians, promoting not only physical wellbeing but also emotional and spiritual balance (Taheri & Slahpoosh, 2023).

Strong filial norms continue to underpin eldercare in Maldivian society, in line with broader Asian and Islamic traditions. Adult children are typically expected to care for their ageing parents, often through co-residence in extended family households. While 55% of households still follow this structure, shifting demographics—including declining fertility, rising life expectancy, and youth migration—are weakening traditional caregiving systems (Maldives Bureau of Statistics, 2022). Research shows that although older adults may prefer independent living due to generational differences and evolving family dynamics, many remain reliant on familial support in the absence of institutional alternatives (Zhou et al., 2015; Emery, Dykstra, & Djundeva, 2019).

As caregiving capacity diminishes and formal aged care options remain limited, older adults may experience a loss of autonomy, social connectedness, and emotional security. These unmet needs can contribute to loneliness, depression, and psychological distress (Cray & Vahia,

2022). Understanding and preserving the positive aspects of cultural caregiving practices—while strengthening institutional support—are essential for promoting dignity, wellbeing, and ageing in place for older Maldivians.

Abuse, Bullying and Mistreatment

Elder abuse in the Maldives is often viewed in parallel with domestic violence and child abuse but is not formally documented in a systematic manner. However, 83 cases of elder abuse were reported to the Ministry of Social and Family Development in 2019 (PSM News, 15 June 2020). As abuse is frequently perpetrated by trusted individuals, it undermines the sense of safety that is essential for ageing well.

Although typically associated with younger populations, peer bullying also affects older adults. Bullying can manifest physically—through hitting or kicking—or verbally, via name-calling or malicious teasing. Other forms include social exclusion, ridicule, and exploitation, all of which compromise wellbeing and contribute to social isolation (Ruiz-Esteban et al., 2023). Older adults may be targeted due to perceived loss of agency, diminished decision-making capacity, reduced physical attractiveness, financial vulnerability, limited social engagement, or stereotypes related to asexuality (von Humboldt, Ribeiro-Gonçalves, & Leal, 2022). Additionally, the mental health conditions of older adults can themselves be a cause for stigmatisation and bullying (Ramsey-Klawnsnik, 2000). Identifying and addressing abuse, mistreatment, and bullying of the elderly requires comprehensive strategies that encompass prevention, early detection, and support systems to promote overall health and wellbeing.

Social Inclusion

The national policy framework for older persons in the Maldives promotes social inclusion by valuing the roles of grandparents and elders in family and community life. Intergenerational engagement is encouraged through initiatives that invite elders to share their wisdom, stories, and cultural knowledge with younger generations. In some communities, elders are invited to schools to teach local poetry, songs, art, and traditional dance. Civil society organisations and youth centres on several islands have introduced programmes that facilitate intergenerational learning through traditional music, dance, craft, and storytelling. Nationally, *'Kaafo aai Maama Dhuvas'* (Grandparents' Day) is celebrated to recognise and honour the contributions of grandparents to familial and community life (Jameel, 2023). In Malé, the active ageing hub *'Israhvehinge Naadhee'* offers various activities for older adults, including music, creative writing, photography, horticulture, culinary arts, and cultural outings. These are typically organised based on volunteer availability.

Social connectedness—particularly to family—has a significant positive impact on the wellbeing of older adults. Research by Moosa (2019) found that older adults in island communities maintained close ties with five or more family members and one to four friends within their neighbourhoods. As family and friends migrate to other

islands, many older adults form new support networks and friendships within their communities. While relationships with both family and friends contribute to wellbeing, family contact frequency and shared social activities are more strongly associated with higher life satisfaction in older age. Friendships also contribute meaningfully to wellbeing, though to a slightly lesser extent.

Nevertheless, irregular and infrequent organised social activities in many island communities limit broader social interaction for older adults. Affordable and accessible activities and dedicated spaces for social interaction are essential to support ageing in place (WHO, 2007). As mobility decreases with age, the presence of a safe and supportive neighbourhood becomes increasingly important (Van Dijk, Cramm, Van Exel, & Nieboer, 2015). Improving the overall wellbeing of older adults—including their living conditions, functional ability, and psychological, spiritual, and emotional health—requires coordinated action. This includes ensuring access to affordable and timely healthcare, robust social support networks, adequate housing, reliable transportation, and opportunities for knowledge-sharing. Achieving this vision demands a strong partnership between national government, local councils, civil society organisations, and older adults themselves, working collaboratively to identify priorities and implement solutions (WHO, 2023).

Socio-Ecological Framework

Socio-ecological models offer a comprehensive framework for understanding the relationship between individuals and their environments, particularly in the context of ageing in place within isolated small island communities. These models examine interactions across micro- and macro-level systems—from immediate surroundings to broader influences such as community structures, healthcare services, and demographic changes resulting from outmigration (Eriksson, Ghazinour, & Hammarström, 2018). Accordingly, a socio-ecological perspective was applied in this study to explore the interconnectedness of individual experiences and wider contextual factors, especially the unique socio-ecological dynamics of rural islands that influence the health and wellbeing of elderly Maldivians.

RESEARCH CONTEXT

This study was conducted in Makunudhoo, a geographically remote island community in South Thiladhunmathi Atoll. As of the end of 2024, the island's population was recorded at 1,967 residents. Among them, 62 women and 64 men were aged 65 and above, with only two women and one man, aged 80 and above. Forty-seven individuals on the island receive state-funded financial aid for disability support (Island Council, 31 December 2024). Among older adults aged 65 and above, seven require ongoing care for stroke, two for rheumatoid arthritis, four for cancer, and one for dementia (personal data obtained from the Makunudhoo Healthcare Centre).

Makunudhoo hosts a state-funded healthcare centre equipped with six beds, staffed by two doctors, eight nurses, one family healthcare worker, and one community

health worker. The centre is managed by a community health officer. Regular home visits are conducted by healthcare workers to monitor bedridden patients, and weekly medication reviews are provided for older adults who experience difficulty managing their prescriptions independently.

The nearest tertiary healthcare facility is located in Kulhudhuffushi, approximately 46.7 km from Makunudhoo. Travel to the hospital takes around two hours by speedboat and about three hours via the traditional dhoani ferry. While public transport is free for individuals aged 65 and over, a return ferry trip costs approximately MVR 200 for younger accompanying caregivers. Due to the speedboat servicing three islands en route to Kulhudhuffushi, obtaining a seat is often difficult. The ferry operates four days a week, excluding two weekdays and Fridays.

The wider region, South Thiladhunmathi Dhekunuburi (Haa Dhaalu) Atoll, where Makunudhoo is located, recorded the highest resident population increase among the atolls over the past decade. The population grew from 18,531 in 2014 to 20,284 in 2022, marking an increase of 1,715 across thirteen inhabited islands and a growth rate of 1.1%. Of this population, 11,094 were women and 9,190 were men, with 1,303 individuals aged 65 and above. Makunudhoo is geographically isolated from the remaining inhabited island communities as shown in the map.



Figure 1: South Thiladhunmathi Dhekunuburi Atoll (Source: One Map Maldives)

Makunudhoo lacks traditional ‘holhuashi’ (communal area) structures for sociocultural gatherings, as well as formal parks or public spaces where adults can meet and socialise.

Although public health service providers continue to carry out traditional home visits to monitor the health and wellbeing of community members, the increasing bureaucratisation of healthcare services has shifted much of their time towards administrative tasks, particularly data entry at the healthcare centre, rather than direct community engagement. In extremely isolated island communities such as Makunudhoo, the current service delivery model requires critical review. A redesigned approach, informed by the WHO’s Integrated Care for Older People (ICOPE) model, is needed to better support ageing in place in these unique socio-geographic settings.

METHODOLOGY

An interpretive phenomenological approach was adopted to explore and understand the lived experiences of older adults residing in a rural island community. Phenomenology seeks to uncover the essence of human experiences, focusing on how individuals interpret and ascribe meaning to their lived realities (Moustakas, 1994). This approach was well suited to the study’s objectives, which included examining subjective perceptions, emotions, and the challenges associated with ageing in place. The study aimed to identify enablers and barriers to ageing well, along with necessary adaptations to the physical environment (e.g., infrastructure, transport, and housing) and social conditions (e.g., civic participation, neighbourhood support, and community care).

Fifteen participants aged 65 and above—eight females and seven males—were randomly selected from a pool of 109 elders capable of oral communication. The oldest participant was aged 81; therefore, this study does not represent the perspectives of the “oldest old” demographic, typically classified as individuals aged 85 and above (Lee et al., 2018). In-depth semi-structured interviews were conducted to explore participants’ experiences of ageing within the context of rural island life. Particular emphasis was placed on trust and familiarity in the interview process. The researcher, being a native of Makunudhoo, was able to establish a strong rapport with participants, facilitating ease and openness during conversations. Respect for elders was demonstrated through active listening and allowing participants to share their narratives at their own pace and in their preferred manner. Each interview lasted between 60 and 90 minutes and was designed to be informal, conversational, and supportive, providing a safe space for participants to reflect on and discuss their experiences related to ageing in place.

Key discussion areas included participants’ perceptions of health and wellbeing, coping strategies, social support networks, and challenges such as loneliness, access to healthcare, and prevailing societal attitudes toward ageing. Participants were also encouraged to share how cultural and environmental factors influenced their ability to age well. Interview transcripts were meticulously reviewed to identify recurring themes that captured the essence of participants’ health and wellbeing experiences. Emerging themes included social connections and social loneliness, environmental conditions and living arrangements, ideological beliefs about ageing and health, and access to healthcare. Both shared patterns and individual differences were analysed to develop a nuanced understanding of the wellbeing challenges facing older adults in this rural island setting.

Ethical standards were strictly adhered to throughout the study. Pseudonyms were used for all participants, and identifying information was omitted to ensure confidentiality. Sensitive details with the potential to stigmatise participants or expose personal vulnerabilities were excluded from reporting. All participants were fully informed of the study’s purpose, procedures, and their rights, including the right to withdraw at any point. Both verbal and written informed consent were obtained before participation.

RESULTS

Emergent codes and themes were organised and categorised using the DocTools Add-in in Microsoft Word and Excel. The thematic analysis revealed five main themes: (1) attachment to place, family, and community; (2) Impact of social disconnection and social loneliness; (3) ideological beliefs; (4) environmental factors and living conditions; and (5) physical health and chronic diseases.

Attachment to Place, Family, and Community

The loss of a spouse or close friend had a marked effect on participants' psychological wellbeing. One female participant poignantly described the emotional loneliness following her husband's death: *"I am very sad after my husband died. My children watch with tears in their eyes."* (INT 1, female). This narrative illustrates the deep emotional toll of bereavement on elderly individuals and their families, particularly in the absence of formal grief support services and traditional community-based systems of consolation and care.

Participants also expressed a strong desire for consistent engagement with close family members. The frequency and quality of family visits were seen as critical to maintaining emotional wellbeing and reducing feelings of isolation. One participant shared that her family visits her only on Fridays, underscoring both the importance of that time and the emotional void left in its absence. *"Family visits are the highlight of my week. When they leave, I feel a sense of emptiness."* (INT 1, female).

In rural island communities, co-residing children often assume caregiving responsibilities for ageing parents. However, the data indicates that emotional presence, beyond physical proximity, is critical for enhancing the emotional wellbeing and social connectedness of older adults. As one participant explained: *"I live here with my husband, while all my children have migrated to Malé, except my younger son, who is taking care of us now. However, he is very busy with his job."* (INT 3, female).

While filial care remains the cornerstone of elderly support in the Maldives, participants expressed a range of views on co-residence. Some noted that they did not expect to live with their children, particularly in Malé, where the living environment was perceived as stressful or burdensome. One participant reflected on the discomfort of relying on her children during necessary medical visits: *"I have to go to the capital city every three months for medical treatment, and I feel I am disturbing my children by going to stay with them for treatment."* (INT 2, female). Others conveyed feelings of loneliness and a conflicting desire to avoid burdening their families: *"I'm very sad to live alone and tired of life. But there is no other way. I want to live without bothering my children after my husband has passed away."* (INT 12, female).

With adult children often migrating to Malé for employment or education, older adults increasingly rely on neighbours and community members for daily support. As one male participant shared: *"No one is there for me except one neighbour who brings meals for me."* (INT 10, male).

These narratives underscore the importance of

strengthening community-based support systems to complement traditional family care, especially in geographically isolated settings where intergenerational co-residence is no longer guaranteed.

Impact of Social Disconnection and Social Loneliness

Analysis of participants' narratives reveals that social isolation among older adults in rural island communities cannot be fully understood through personal circumstances alone; it must also be viewed through the lens of systemic and environmental influences. Many elderly individuals expressed feelings of disconnection, describing difficulties in giving or receiving emotional support, as well as limited opportunities to engage in meaningful social activities. This disconnection often contributes to a gradual decline in social engagement and wellbeing.

A key barrier to participation for some is the absence of caregiving support, particularly for those responsible for a disabled spouse. One participant shared: *"I did not participate much in gatherings and activities on the island because I did not have enough time to get involved in more activities. My husband is a disabled person."* (INT 9, female).

For others, the challenge lies in their diminishing physical capacity or the absence of opportunities to contribute to the care of others, factors that can diminish a sense of purpose and community value: *"Very lonely. There is no one to care for. Most of the time I don't have the strength to go out."* (INT 11, male). A broader concern expressed was the shift in social dynamics and the perceived loss of interpersonal communication in the community: *"Sometimes there seems to be no one to talk to. All are busy with their phones."* (INT 8, female).

These accounts highlight a persistent gap in both formal and informal social support systems. Without adequate community infrastructure, accessible caregiving support, and inclusive opportunities for social participation, older adults in isolated island settings face compounded challenges in maintaining their social and emotional wellbeing.

Ideological Beliefs

Most participants expressed a strong desire to remain in their lifelong homes until the end of their lives, despite experiencing feelings of loneliness, particularly during periods of illness. *"Children married and went. We are living here in the old house. And we don't want to leave here until the end of my life."* (INT 3, male).

To cope with isolation, some older adults adopted strategies such as forming friendships with younger community members, engaging in communal spiritual or religious activities, and creating personal remembrances. Participants without debilitating health conditions or caregiving responsibilities also reported maintaining friendships as a way to alleviate loneliness and offer mutual emotional, financial, and physical support.

Environmental Factors and Living Conditions

Housing Quality. Traditional homes in the Maldives were designed with under-roof ventilation and strategically

placed air gaps to allow for cross ventilation and air circulation. Doors and windows were typically oriented towards the north or south to minimise exposure to direct sunlight. However, the wellbeing of elderly individuals is increasingly compromised by the poor quality of many newly constructed indoor living spaces. Several participants reported inadequate ventilation and high indoor temperatures, which contributed to discomfort and psychological distress: *"The living conditions here are tough. Sometimes, it gets really hot, and we don't have proper ventilation. It affects my mood."* (INT 15, female). As local knowledge of traditional building practices declines, many families now seal off all sources of ventilation, further deteriorating indoor air quality and thermal comfort.

Another significant barrier to improving living conditions is the rising cost of building materials, which restricts the ability of older adults to modify their homes to meet age-friendly standards. One participant expressed his frustration: *"Building materials are so expensive. How can I build a new house? I am not capable of it."* (INT 8, male).

This concern highlights the broader affordability challenges faced by elderly individuals, especially those living on rural islands. Many older adults have returned to their home islands after extended periods of caregiving in urban areas or after receiving medical care in tertiary hospitals, often with emerging handicaps. These issues are often compounded by the limited financial capacity of their adult children, who may be unable to construct or upgrade homes for their ageing parents due to economic hardship or competing priorities.

Importance of Outdoor Spaces and Connection to Nature. For elderly individuals living alone, easy access to the natural environment serves as a vital source of comfort, solace, and emotional resilience. One participant, who is disabled, described the importance of spending time outdoors: *"As I am a disabled person, I spend most of my time under this big tree."* (INT 10, male).

Participants generally recognised the value of staying physically active and socially engaged for maintaining cognitive function and emotional wellbeing. However, many voiced concerns over the lack of outdoor spaces or age-friendly infrastructure on the island that would support such activities. The absence of parks or designated gathering spaces was seen as a barrier to healthy ageing. One participant highlighted the limited attention given to the needs of older adults in island development planning: *"Even though I am above 65 years, Alhamdulillah, I am fine and active. I need to go to do some exercise or some healthy activities. But what to do? We don't have any park or special place for us (to meet and do things together)."* (INT 13, female).

Designing parks and public spaces that cater to the mobility, social, and recreational needs of older adults, while also encouraging intergenerational interaction, has the potential to promote active lifestyles, enhance emotional wellbeing, and reduce the risk of cognitive decline in ageing populations.

Access to Healthcare and Transportation. Several elderly participants highlighted the stress and challenges associated with accessing healthcare services, both within the island community and when travelling to other islands

for tertiary care. As health declines with age, the effort required to seek medical assistance becomes increasingly burdensome, contributing to heightened anxiety and emotional distress. *"When I'm unwell and there's no one nearby, it affects my mood. I worry a lot... Accessing medical help is a challenge as I become frailer. It adds to the stress, especially as we age."* (INT 7, male). Another participant highlighted, *"We need better access to basic services. It's stressful when we have to travel far for medical help."* (INT 2, female).

In addition to healthcare, participants reported difficulties in accessing everyday services due to the lack of age-friendly public transportation. The distance to shops and the absence of nearby services compounded their sense of isolation and frailty. As one participant explained: *"This area is a difficult place to live. There are many difficulties in getting services. For example, there is no shop nearby, and I have to walk a long distance to get groceries."* (INT 4, female).

These narratives reflect the urgent need for improved local infrastructure and transport systems to support older adults in maintaining independence and accessing essential services with dignity.

Physical Health and Chronic Health Conditions.

Many participants reported living with at least one chronic illness, with several experiencing side effects from their prescribed medications. These health challenges often resulted in difficulties managing medications and growing concerns about their deteriorating health. One participant described her experience of managing multiple chronic conditions: *"I have hypertension and diabetes. I have to take regular medication every day. It's too difficult to manage the medication, and I am facing side effects like general weakness. I also have rheumatoid arthritis."* (INT 2, female).

Visual impairments further complicated medication adherence, with many participants finding it difficult to read dosage instructions. Although some pill sheets include instructions in Dhivehi, the small font size presents a barrier for those with poor eyesight. Participants also reported challenges in understanding English-language medicine labels, highlighting the added burden of language barriers. As one participant noted: *"Always taking medication is difficult, and I often forget as my age is above eighty. The medicine labels are in English, so I separated them by colour."* (INT 1, female).

These findings indicate the need for pharmacists and healthcare providers to better accommodate the needs of older adults. Recommendations include providing clear dosage instructions in large Dhivehi font, explaining medications clearly, offering written guidance on potential side effects and contact details for follow-up, and packaging medications by dosage. Including the patient's name, issue date, and medication condition, on instruction sheets can also minimise medication errors.

For those with hearing impairments, verbal instructions from healthcare providers can be difficult to process and retain. Participants suggested that the involvement of neighbours or regular visits from community health workers could ease stress and ensure medication adherence. However, participants noted a lack of age-sensitive support services at pharmacies or

healthcare centres, particularly for individuals with visual and hearing impairments.

Mobility and sensory disabilities further hindered access to essential health services, particularly for those living alone or without regular support: *"I have difficulty travelling for medications."* (INT 10, male).

Despite these challenges, participants demonstrated remarkable resilience. Many relied on coping strategies rooted in community participation, cultural traditions, and intergenerational friendships. These practices provided emotional strength, a sense of belonging, and continuity in daily life. The findings highlight the enduring social and cultural capital within the island community, which serves as a protective buffer against the adversities of ageing.

DISCUSSION AND CONCLUSION

Social Connections and Social Loneliness

Many elderly individuals in the study reported experiencing social loneliness, particularly in relation to chronic pain and illness, which significantly hindered their ability to engage with family and the broader community. The findings of this study affirm that loneliness among elderly individuals in rural island communities is a multidimensional experience shaped by physical, emotional, and structural factors. Consistent with Reich et al. (2020), participants attributed their sense of isolation to chronic pain, declining health, limited mobility, and the absence of social support. While these individual factors are significant, the broader community environment—marked by limited infrastructure and changing intergenerational dynamics—played a critical role in exacerbating social disconnection.

Participants' accounts of feeling emotionally distant from family members and neighbours reflect Wiles et al.'s (2012) assertion that attachment to place and social connectedness are crucial to wellbeing in later life. Gender and educational differences further influenced these experiences; women who continued caregiving faced higher emotional burdens, while men were less expressive about their loneliness, echoing findings by von Humboldt et al. (2022) on the internalisation of distress in older adults. The association between socioeconomic status and social capital aligns with the work of Szydluk (2008), who emphasised how disparities in access to social networks and community engagement contribute to unequal ageing experiences. However, the narratives also revealed the resilience fostered through cultural and religious norms.

In Maldivian Islamic culture, visiting the elderly, the sick, and persons with disabilities is a moral and spiritual practice. The value placed on visiting elders as a spiritual and social obligation is well established in Islamic traditions, reinforcing findings by Taheri and Slahpoosh (2023) and Moosa (2019) on the role of intergenerational solidarity in enhancing wellbeing. The significance of these moral duties underscores the importance of designing social programmes that are culturally congruent, spiritually enriching, and inclusive of persons with physical or mental disabilities (Cray & Vahia, 2022).

Some rural island communities in the Maldives

exemplify models of healthy ageing through active community participation. Older adults in these communities have engaged in constructing parks, walking tracks, swimming areas, rest spaces, and beach changing rooms, often in collaboration with island councils and civil society organisations. These councils have embraced the principles of active ageing, encouraging volunteering and social engagement among older residents. At the individual level, older adults contributed in meaningful ways, such as sweeping leaves from streets, maintaining mosques, and teaching traditional skills—including cooking, fishing, fish-net making, handicrafts, storytelling, traditional music, dance, and poetry—to younger generations and school children. Their actions align with Islamic values of service and intergenerational solidarity. In some areas, older women have even led the construction of women-only mosques, providing spaces for spiritual and educational engagement. Additionally, many older adults played key caregiving roles, including looking after grandchildren and offering financial support to their families through the state-provided basic pension. These examples highlight the significant potential of structured community activities and intergenerational engagement to reduce isolation, foster inclusion, and strengthen social cohesion.

Environmental Stressors and the Need for Community-Driven Solutions

Environmental stressors such as inadequate housing, poor indoor ventilation, and limited access to green or communal spaces emerged as key barriers to healthy ageing in place. These findings echo the WHO (2007) call for the development of age-friendly cities and communities that consider environmental and infrastructural needs. Participants' struggles with thermal discomfort and rising construction costs reflect broader challenges in achieving sustainable housing for older adults in low-resource island settings (Van Dijk et al., 2015).

The absence of parks, shaded outdoor spaces, and walkable paths was identified as a major impediment to physical activity, social interaction, and mental wellbeing. While the natural environment offers therapeutic potential, its benefits are often underutilised due to infrastructural neglect. This disconnect between potential and lived reality supports the argument by Nazra (2018) and the WHO (2023) that active ageing must be supported by deliberate policy and design interventions that are locally contextualised.

Examples of community-led efforts—such as elders engaging in public works or intergenerational activities—demonstrate how place-based, culturally informed initiatives can promote a sense of purpose and emotional resilience. These findings also resonate with Conkling's (2007) concept of "islandness" as a deeply rooted sense of belonging shaped by physical space, nature, and sociocultural identity.

Strengthening Health Systems for Ageing in Place

Participants expressed both appreciation for local healthcare services and concern over gaps in infrastructure and access. Regular home visits and medication reviews

were viewed positively, aligning with WHO's (2017, 2019a) ICOPE framework that advocate for integrated, community-level care. However, challenges in medication adherence due to visual impairments, language barriers, and inadequate pharmacist guidance underscore the need for clearer communication, as highlighted in WHO (2019b).

The stress associated with travelling to Malé or regional hubs for specialist care illustrates a systemic issue of centralised healthcare access, which is particularly burdensome for frail older adults. The findings confirm Van Dijk et al.'s (2015) assertion that access to essential services and age-sensitive public transport is integral to maintaining functional independence. The suggestions made by participants for enhanced local services—such as palliative care, respite centres, and community health workers trained in age-friendly practices—are in line with WHO (2018) and Eriksson et al.'s (2018) recommendations for age-responsive, decentralised healthcare systems.

Furthermore, this study adds weight to the call for increased investment in training and retaining community health workers and family health staff. Their potential role in ICOPE screening, health education, and social facilitation could bridge the current service gaps and align health systems with the lived realities of elderly residents in remote islands.

Socio-Cultural Context and the Imperative for Holistic Ageing Support

The socio-cultural expectations surrounding familial caregiving remain deeply embedded in Maldivian society, as reflected in the participants' narratives. However, shifting demographic patterns—such as declining fertility and increased youth outmigration—are weakening the sustainability of traditional caregiving systems (Maldives Bureau of Statistics, 2022; Zhou et al., 2015). These findings reaffirm the observations of Emery et al. (2019) and Di and Yihong (2023) on the tensions between filial piety and the realities of family capacity in rapidly changing societies. Despite strong cultural norms, many participants expressed discomfort with being perceived as a burden, underscoring the need to balance cultural reverence with institutional support mechanisms. The emotional and physical toll of caregiving on spouses or co-residing children—often unacknowledged—calls for policies that provide training, respite, and financial support for family caregivers. Such measures are essential for preventing caregiver burnout and ensuring dignified ageing for both carers and care recipients.

Participants frequently noted that their wellbeing was influenced not only by family support, but also by the availability of age-friendly social infrastructure and community resources. The absence of accessible public spaces—such as parks or gathering areas—was seen as limiting opportunities for social interaction and engagement in health-promoting activities such as walking, light exercise, and socialisation. This aligns with WHO's (2007) framework on age-friendly cities, which emphasises the importance of accessible outdoor spaces, buildings, and public transport in promoting active ageing. Van Dijk et al. (2015) similarly highlight

that environmental features such as walkability, safe neighbourhoods, and access to community spaces significantly affect older adults' ability to age in place. Some participants expressed challenges in maintaining a sense of social value or in navigating intergenerational relationships, especially in a rapidly changing social landscape. These findings are consistent with Moosa (2019), who observed that the social connectedness of older adults in island communities is deeply tied to both family contact and neighbourhood friendships. The study underscores the importance of addressing environmental and structural barriers in the community and developing context-specific interventions—such as improving access to physical spaces and implementing programmes that foster mutual respect and cooperation across generations (Jameel, 2023).

This study highlights the interdependent nature of environmental, cultural, psychological, and institutional factors that shape the experience of ageing in place in rural Maldives. While the resilience of older adults and their communities is evident, their wellbeing remains vulnerable to systemic gaps in infrastructure, healthcare access, and social support. Addressing these challenges requires a multisectoral approach grounded in the socio-ecological realities of small island communities (Eriksson et al., 2018; Baldacchino, 2020).

The lived experiences of participants underscore the potential of locally driven, culturally grounded strategies to transform ageing into a meaningful, supported, and inclusive phase of life. Building on the cultural strengths of intergenerational caregiving, faith-based practices, and community solidarity—while investing in age-friendly infrastructure and decentralised services—can foster environments where older adults not only live longer but thrive with dignity and purpose.

FUTURE RESEARCH AND POLICIES

The findings of this study highlight several critical areas for future research and policy action to support the ageing in place needs of elderly residents in rural island settings. Improving living conditions—including enhanced housing design, age-friendly public transport, and access to safe outdoor spaces, shaded areas, and indoor community facilities—requires meaningful partnership with older adults to ensure relevance and usability.

Equally important is the provision of affordable, reliable, and timely healthcare, along with nutritional and mobility support services. These must be underpinned by national-level policies, knowledge exchange platforms, and active involvement from civil society organisations. The absence of essential services, coupled with persistent social isolation, continues to exacerbate the health and wellbeing challenges faced by elderly populations in rural areas.

Future participatory action research could explore the impact of infrastructure improvements, expanded healthcare access, and strengthened social support systems on the health and wellbeing of older adults, particularly those in highly vulnerable island communities. For instance, data from an unpublished national ageing survey suggests that 19% of elderly respondents did not

receive the basic pension. Moreover, Census 2022 data indicates this exclusion is more prevalent among older women, pointing to the urgent need for community-based monitoring, targeted support, and consistent follow-up visits for the most at-risk individuals.

Addressing these priorities through culturally informed, evidence-based strategies can contribute to developing resilient communities that value their older members. A collaborative, multisectoral approach—one that aligns with local contexts and incorporates older adults' voices—will help design sustainable, inclusive interventions that enhance the quality of life for elderly residents across the Maldives' rural islands.

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INSTITUTIONAL REVIEW BOARD STATEMENT

This study was conducted in accordance with the ethical guidelines outlined in the Villa College Research Policy and the National Health Research Council (NHRC) regulations for research involving human participants. Ethical approval was granted by the relevant authorities in December 2023.

DATA AVAILABILITY STATEMENT

The data presented in this study are available on request from the corresponding author due to privacy and institutional restrictions.

DISCLOSURE STATEMENT

The authors declare no conflict of interest.

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