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ORIGINAL



Designing a Social Prescribing Model to Enhance the Holistic Well-Being of Older Adults in Indonesia

Diseño de un modelo de prescripción social para mejorar el bienestar integral de las personas mayores en Indonesia

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ABSTRACT

Introduction: population aging is accelerating worldwide, including in Indonesia, where older adults face a high burden of chronic diseases, loneliness, and social isolation. Healthcare remain heavily medical and curative, leaving psychosocial needs unmet. Social prescribing, successful in Western countries, has not been explored in lower-middle-income contexts such as Indonesia, where strong social capital and cultural values could support its adaptation.

Objective: to identify domains and indicators of a contextually adapted social prescribing model for older adults in Makassar City, Indonesia.

Method: a qualitative phenomenological design was employed. Data were collected through in-depth interviews and focus group discussions with 14 stakeholders, including older adults, caregivers, health workers, social workers, psychologists, religious leaders, community cadres, and policymakers. Thematic analysisusing NVivo Pro 12 generated locally relevant domains and indicators .

Results: eight domains emerged: (1) physical health, (2) mental and emotional well-being, (3) cognitive function, (4) spiritual well-being, (5) social and community support, (6) arts and creativity, (7) environment, and (8) culture. Spirituality was central, reflecting Indonesia's socio-cultural and religious context. Environmental barriers and stigma portraying the elderly as an economic burden were key challenges.

Conclusion: this study provides the first context-specific evidence for social prescribing in Indonesia. Integrating cultural and spiritual resources, strengthening community-based supports, and addressing stigma and structural barriers may enable feasible, sustainable interventions. Findings informslocal policy and contribute to global discourse on adapting social prescribing to diverse socio-cultural and economic settings.

Keywords: Social Prescribing; Older Adults; Qualitative Study; Indonesia; Local Context.

RESUMEN

Introducción: el envejecimiento de la población se está acelerando en todo el mundo, incluso en Indonesia, donde las personas mayores se enfrentan a una elevada carga de enfermedades crónicas, soledad y aislamiento social. Los servicios sanitarios actuales siguen siendo muy médicos y curativos, lo que deja un vacío en el tratamiento de las necesidades psicosociales. La prescripción social, que ha demostrado su eficacia en los países occidentales, aún no se ha explorado de forma sistemática en contextos de ingresos medios-bajos como Indonesia, donde el fuerte capital social y los valores culturales podrían sentar las bases para su adaptación.

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Objetivo: este estudio tiene como objetivo identificar los ámbitos e indicadores de un modelo de prescripción social adaptado al contexto para las personas mayores en la ciudad de Makassar, Indonesia.

Método: se empleó un diseño cualitativo con orientación fenomenológica. Los datos se recopilaron mediante entrevistas en profundidad y grupos de discusión con 14 partes interesadas, entre las que se encontraban personas mayores, cuidadores, trabajadores sanitarios, trabajadores sociales, psicólogos, líderes religiosos, cuadros comunitarios y responsables políticos. Los datos se analizaron temáticamente utilizando NVivo Pro 12 para generar ámbitos e indicadores de prescripción social relevantes para el contexto local.

Resultados: surgieron ocho ámbitos: (1) salud física, (2) bienestar mental y emocional, (3) función cognitiva, (4) bienestar espiritual, (5) apoyo social y comunitario, (6) artes y creatividad, (7) medio ambiente y (8) cultura. Los resultados destacan la espiritualidad como un ámbito central en Makassar, lo que refleja el contexto sociocultural y religioso de Indonesia, mientras que las barreras ambientales y el estigma que retrata a las personas mayores como una carga económica se identificaron como retos clave.

Conclusión: este estudio proporciona la primera evidencia específica del contexto para la prescripción social en Indonesia. Al integrar los recursos culturales y espirituales, fortalecer los apoyos comunitarios y abordar el estigma y las barreras estructurales, la prescripción social puede servir como un enfoque viable y sostenible para mejorar el bienestar holístico de las personas mayores en Indonesia. Estas ideas contribuyen no solo a las políticas y prácticas locales, sino también al discurso global sobre la adaptación de la prescripción social a diversos entornos socioculturales y económicos.

Palabras clave: Prescripción Social; Personas Mayores; Estudio Cualitativo; Indonesia; Contexto Local.

INTRODUCTION

Population aging is a global issue that significantly impacts societies worldwide. (1) As highlighted in various sources, including reports from the United Nations and the National Institute on Aging, population aging presents a plethora of challenges and opportunities. (2) The rapid growth of the elderly population on a global scale, with projections indicating a doubling of this demographic by 2050, necessitates a thorough reevaluation of social, economic, and healthcare systems to effectively address the evolving needs of the aging population. (3)

Over the past decade, public health concerns, such as mental health issues, particularly loneliness, have become increasingly prevalent among elderly individuals. (4) According to the World Health Organization, the elderly population is particularly susceptible to mental disorders due to factors such as reduced mobility, chronic pain, dementia, or other health conditions necessitating long-term care, all of which can significantly improve mental well-being. (5)

More than 20 % of individuals aged 55 years and older experience some form of mental health issues, necessitating specialized attention. (6) Several factors contribute to mental disorders in the elderly, including biological changes, social shifts, and somatic diseases, all of which can exacerbate symptoms of medical conditions. Consequently, this contributes to increased demand for nursing resources and healthcare costs. (7)

Depression and loneliness are prevalent mental disorders among the elderly, with approximately 22 % of elderly men and 28 % of elderly women exhibiting symptoms of depression and loneliness. However a staggering 85 % of elderly individuals experiencing mental disorders do not receive assistance. (8) This underscores the imperative to enhance awareness, diagnosis, and treatment of mental health issues among the elderly. Adequate support and resources from organizations such as the Mental Health Foundation are crucial to addressing the mental health needs of elderly individuals. (9) Mental well-being is characterized by individuals' ability to maximize their potential in life, work productively and creatively, foster meaningful relationships, and contribute to society. (10) Over the past three decades, England's population has undergone rapid aging, with the population aged 65 years and older increasing by nearly half. The burden of mental disorders among the elderly significantly impacts their quality of life, as well as the health and well-being of both themselves and society as a whole. Addressing mental health issues in the elderly necessitates comprehensive approach that encompasses prevention, diagnosis, and appropriate interventions over an extended period. (11) Long-term interventions are crucial for effectively addressing mental disorders among the elderly. (12) Building social relationships plays a crucial role in reducing mental health issues among elderly individuals, enhancing their satisfaction and quality of life, and mitigating symptoms of depression. Social integration and support represent integral components of long-term care for the elderly, emphasizing the tangible support individuals receive directly from their social networks during difficult times. (13)

The increase in the number of elderly people in Indonesia poses challenges not only in terms of physical health, but also in social and psychological dimensions. (14) In Indonesia, especially in Makassar city, many elderly people experience loneliness, social isolation, and chronic diseases, creating a gap between their actual needs and the available health services. However, current solutions still focus primarily on a medical approach to

health care. The healthcare system in Indonesia remains burdened by infectious and chronic diseases. Therefore, the social psychology issues of the elderly tend to be neglected in healthcare practices. In this context, social prescribing has emerged as a holistic non-medical approach.

Social prescribing was first introduced and implemented in the United Kingdom in 1990, with sports and arts communities serving as the primary reference points at that time. The UK's National Health Service (NHS) initiated a program in 2016 aimed at alleviating the burden on general practitioners in treating depression and loneliness among the British public, known as social prescribing.⁽¹⁵⁾

Since the turn of the century, social prescribing has evolved into a more comprehensive intervention encompassing a wide range of activities and discoveries. It involves referring patients to various non-clinical services facilitated by doctors and professionals in primary healthcare. (16)

Currently, social prescribing has been implemented in several countries, including Canada, the United States, Sweden, Norway, Denmark, and Korea. Social prescribing integrates various factors such as social, economic, and environmental factors, fostering a more holistic approach to healthcare services. (17)

The use of social prescribing bears resemblance to connection prescription or community referral, which facilitates connections with social action outlets and involves not only healthcare providers but also third-party entities, such as local nonprofit organizations (e.g., social service organizations, schools, recreational facilities, environmental groups). This approach represents a holistic strategy for addressing disparities, particularly those affecting the elderly.⁽¹⁸⁾

A study conducted by using a controlled trial method and conducted over one and four months on a population experiencing psychosocial issues demonstrated significant changes in anxiety levels, improved ability to perform daily activities, and improved quality of life. (19) The application of social prescribing in Europe targets populations grappling with issues such as obesity, diabetes, literacy, and treatment adherence. In Barcelona, social prescribing is integrated into primary healthcare, yielding significant improvements in emotional well-being and social support among a sample of 85 individuals. (20) Numerous studies have highlighted the benefits of social prescribing in enhancing patients' self- esteem, self-efficacy, self-confidence, and Mood. (21)

In Torbay and South Devon, the Integrated Care Organization, a healthcare provider, commissioned several voluntary social services to be integrated into five primary healthcare services and social community services. Initially, patients are interviewed and guided to determine the appropriate approach for addressing their issues, whether through short-term or long- term interventions. (22) Findings from this study indicate that social prescribing not only improves patients' conditions but also aids in better self-management of their health and mental well-being, potentially leading to reduced demand for primary and acute healthcare services and social services. This study underscores that the level of patient activation, particularly among elderly patients, affects the utilization and costs of healthcare services. (23)

Although it has shown positive impact, its effectiveness of social prescribing is highly dependent on the local context, including cultural norms, the availability of community resources, and the prevailing health system. To date, there is no evidence or proven implementation model in middle-income countries with different socio-cultural characteristics, such as Indonesia. However, Indonesia has unique dynamics: a healthcare system still focuses on curative services, limited resources, but on the other hand, is rich in community-based and religious social capital. This condition highlights a knowledge gap and an urgent need to develop a social prescribing model that is relevant and appropriate to the Indonesian context. Therefore, this study aims to design a culturally and contextually adapted social prescribing model to improve the well-being of older adults in Makassar City.

METHOD

Study Design

This study used a qualitative approach with an exploratory orientation to explore the needs and perceptions of older adults, families, and stakeholders regarding the social prescription model. Participants were selected using purposive sampling techniques. This method allowed for the collection of various perspectives from a number of informants, namely elderly people aged 60-70 years who resided in Makassar City, who did not experience severe cognitive impairment, and were able to communicate verbally. Additional information was also obtained from families and health cadres who focus on the welfare of the elderly in Makassar City. Participants were asked to explain how and what is needed to realize the social prescription model in Makassar. This activity was facilitated by researchers in collaboration with the National Population and Family Planning Agency as well as the Faculty of Public Health, Hasanuddin University. To ensure the representativeness, o this study applied a targeted outreach approach, provided multilingual materials, flexible scheduling, collaboration with local organizations, pilot interviews, and gave incentives to participants who needed to travel long distances and dedicate significant time. The informants represented diverse professional and community roles. Their demographic data (age and gender) are described in detail in table 1.

Table 1. Respondent Characteristics		
Participant Category	Role in the study	Number
Older Adults	Providing life experiences and necessities	5
General Practitioner (GP)	Providing experiences about barriers to prescribing social activities, their perceptions of older adults' involvement in the community, and their views on how cross-sector collaboration can be strengthened.	1
Social Worker	Providing insight into existing social support and community-based services, and explaining structural barriers experienced by the older adults (e.g. access to social assistance, community programs).	1
Psychologist	Providing perspective on mental health issues among older adults (depression, loneliness, anxiety).	1
Religious Leader	Providing information about the role of religious activities as a means of social inclusion and moral and spiritual support for the elderly.	1
Academic	Providing theory-based analysis and scientific evidence related to social prescribing practices in global and local contexts	1
Caregiver (Family Member)	Providing perspectives on the daily experience of caring for older adults, explaining their needs, barriers, and motivations for participating in community activities	2
Community Health Cadre	Providing information about the condition of older adults at the community level	2
Total		14

Data collection

To ensure data confidentiality, data collection was conducted in one subdistrict in Makassar City, namely in the Hall of the National Population and Family Planning Agency (BKKBN Office) in Makassar City. The location was chosen to provide comfort and privacy so that no one outside the participants were present during the interview process. Data was collected through in-depth interviews and Focus Group Discussions conducted from July to September 2024. Before the interviews were conducted, the researchers provided guidance on informed consent to the participants. The researchers prepared interview guidelines that included additional material and open-ended questions, which two experts tested to ensure clarity and cultural relevance. The interviews lasted 20-30 minutes and focused on the dimensions of an age-friendly environment and indicators of a age-friendly climate in Makassar City. We did not conduct follow-up interviews with participants, but if we needed clarification of information, we would contact the participants by telephone. Our research team ensured accurate communication and transcription results, as well as additional field notes to reveal nonverbal cues and contextual details to enhance the richness of the data.

Data Analysis

Data were analyzed using Nvivo Pro 12 to perform thematic analysis due to its ability to manage qualitative data, support complex coding, develop themes, and ensure a reliable and transparent analysis.

Ethical Consideration

This study has received ethical approval from the Faculty of Public Health, Hasanuddin University, with protocol number (10325105002) and letter number 151/UN4.14.1/TP.01.02/2024. Before the activity began, all participants were given a consent form. All participants were guaranteed confidentiality of data and voluntary participation in our research. Seeing their interest in participating in social groups, especially those related to the elderly, the researchers adopted a reflective approach to reduce bias during data collection. One member of the research team has extensive experience with qualitative methods. Before the research began, the researchers explained the objectives and purpose of the research to ensure transparency.

Interview outline and semi-structured interview

The interview guide was designed to gather meaningful insights related to the dimensions and indicators of the Social Prescribing Model in the local context of Makassar City. Semi-structured interviews were conducted to provide flexibility while maintaining consistency in the discussion. Open-ended questions also offered space for reflection to gain in-depth insights. All sessions were recorded and transcribed verbatim to ensure accuracy. This approach allowed for collecting rich qualitative data, covering both general trends and unique individual perspectives. The following is the interview guide used:

Table 2. Interview Guide			
Participants Type	Interview Questions		
Focus Group Discussion (FGD)			
Frequently asked questions for all participants	What is your view on social prescribing? What challenges do elderly people face in their daily lives?		
In-depth Interview			
Elderly & Caregivers	In your opinion, what community activities are most beneficial to you?		
Social Services, Health, Public Works, Housing, and Regional Development Planning Agencies	In your opinion, what are the indicators for creating a social prescribing? What role do families, communities, or local organizations play in supporting the social health of older adults? In your opinion, how can community health centers or health services collaborate with communities to support the well-being of older adults?		

RESULTS

Our research analysis revealed eight key domains, namely physical health, spiritual well-being, mental and emotional, social and community support, cognitive function, art and creativity, environment, and culture.

The physical, spiritual, mental and emotional dimensions, as well as cognitive function, are intrapersonal aspects that occur in older adults in our research results. This emphasizes the importance of maintaining physical health and mobility, as well as overcoming mental health challenges such as loneliness, anxiety, and depression. Cognitive capacity and lifelong learning are also considered important, while spirituality emerges as a strong source of resilience, with religious practices seen as providing meaning and support in later life.

Social and community support, art and creativity, and cultural activities are interpersonal and community aspects. Older adults describe the importance of staying connected with family, peers, and neighbors, as well as appreciating opportunities to engage in creative and cultural activities. However, the most striking finding is the existence of negative stigma, where older adults are sometimes perceived as passive or even as an economic burden on their families. This perception affects their self-esteem and level of involvement in community activities.

The environmental dimension includes structural aspects. Older adults highlight the need for inclusive social spaces, integrated health and social services, and policy support to sustainably implement social prescriptions. At the same time, gaps in formal services are still evident, especially in bridging the medical and social needs of older adults. Overall, these findings indicate that developing a Social Prescription model in Makassar requires an approach that emphasizes physical health and psychosocial support, cultural and spiritual values, and stigma reduction. More detailed dimensions and indicators from this study are presented in table 3.

	Table 3. Domains, Indicators, Examples of Codes		
Domain	Indicators	Examples of codes	
Physical	Participation in sports or fitness activities (I.6, I.8, I.1).	One of them is that for a healthy heart, there is something called Binansia—and the program is called the elderly heart exercise, the majority of its members are likely in Mattoanging (I.6, I.8, I.11).	
	nutritional needs (I.12).	Regarding balanced nutrition, it means there's a certain composition, so how can the nutritional intake for the elderly be balanced (I.12)	
	Potential risks of cardiovascular diseases (I.2).	With all sorts of elderly ailments (I.2).	
	Physical health screenings for the elderly (I.11).	At the Community Health Center itself, there is a service called the elderly integrated service post, which conducts health screenings for the elderly (I.11).	
	Elderly's need for physical services (I.1, I.4, I.5).	The elderly only need such a range of physical services in terms of physical health (I.1, I.4, I.5).	

Ī	Spiritual	Clear life goals and deep meaning in life (I.1).	Neither too fast nor too slow, will greatly
	JPII Ituat	cical the goals and deep meaning in the (iii).	impact us when we reach old age, determining how we will become and behave as the elderly, as we are self-aware (I.1, I.2).
		Feeling inner peace, experiencing tranquility,	Ensuring that the elderly pass through this
		and finding happiness in life (I.3, I.10, I.14).	stage feeling fulfilled and free from depression is crucial (I.3, I.10, I.14).
	Mental and Emotional Health	The elderly feeling sufficiently supported emotionally by those around them (I.1, I.10).	Perhaps they have experienced various things, so what may be perceived positively by children
			might be perceived negatively by the elderly (I.1, I.10).
		Ability to cope with stress and life challenges effectively (I.6, I.14).	They lean more towards psychological aspects, so they may need someone to confide in at their age; they need more friends for sharing and companionship (I.6, I.14).
		Recognition of hobbies or enjoyable activities for the elderly (I.3, I.10).	In our program at the Elderly School, we ask them to write down hobbies or enjoyable activities for themselves (I.3, I.10).
		Increased productivity among the elderly (I.6, $I.14$).	The elderly in Makassar city are already very productive (I.6, I.14).
		Integrated counseling with other health services, such as medical care or social services (1.3).	We also provide counseling services for the elderly (1.3).
	Social and Community Support	Engagement in social activities and support groups (I.2, I.3, I.10).	I'd like to share a bit about our experience in handling the elderly. Since BKL in the 80s, there have been drivers and motivators for social issues in Indonesia (I.2, I.3, I.10).
		Frequency and quality of positive social interactions (I.1).	The most important requirement is their willingness to listen and understand (I.1).
		Families caring for the needs and well-being of the elderly (I.1, I.10, I.12).	Regarding family treatment and actions taken, the main goal is usually to ensure the health of the elderly, as they may have been exhausted for a long time, but this isn't always well received by them (I.1, I.10, I.12).
		Existence of negative stigma towards the elderly (1.2) .	So, the negative stigma towards the elderly needs to be eliminated (I.2).
		Community institutions focus on the elderly so that they and the community can play an active role in their environment (I.4).	There hasn't been any community institution that focuses on elderly issues (I.4).
			Recently, there's been the establishment of Cefas (Central for Family of Ageing), a center for family and elderly studies. It's not just a center; it's officially recognized and serves as a promotional hub (I.2, I.3, I.4, I.11).
		Lack of interest in community involvement (I.13).	Inviting them to join Elderly Schools, especially those with lower education, is more challenging as they often cite many responsibilities and lack of time. On the other hand, inviting those with above-average education levels is much easier. The obstacles we face are different when inviting the average educated individuals (I.13).
	Cognitive Function	Vision and hearing functions (I.1, I.2).	Good ear and eye health (I.1, I.2).
		The elderly's ability to remember information, events, and experiences well (I.1, I.2, I.8).	The prayers uttered by parents and all loved ones around us are still remembered, from the first birthday to the milestone ones (I.1, I.2, I.8).
		Limitations in independence (I.1, I.2, I.5).	Elderly individuals are divided into two categories: potential elderly individuals who receive training, and non-potential elderly individuals who only receive social assistance funds (I.1, I.2, I.5).

	find appropriate solutions (I.14). The elderly's ability to communicate clearly	I have gained a wealth of knowledge, especially in spiritual matters, which brings me joy (I.14). In the Training of Trainers (TOT) on resilient elderly, social prescribing, particularly in Indonesia, consists of seven dimensions (I.2, I.11).
	The elderly's ability to recognize time, place, and people around them (I.2).	As people age, atrophy becomes more prominent (I.2).
	The elderly still being an economic burden on families (I.2, I.7, I.8, I.10, I.12).	About 50 % of the elderly population is employed. Therefore, they need to be categorized, especially concerning low-income elderly individuals. For those with education and pensions, health issues may not be a concern, but it might be for those in economic hardship (I.2, I.7, I.8, I.10, I.12).
Arts and Creativity	Elderly's involvement in artistic activities such as painting, drawing, or crafting (I.10).	Some elderly individuals remain active due to hobbies like art, sports, or other activities that bring them joy, making their hearts blossom when engaged in them (I.10).
Environment	The Elderly's living environment is safe, comfortable, and easily accessible (I.2).	It's common to feel uneasy at home sometimes due to conflicts with children or vice versa (1.2).
	The elderly having access to elderly-friendly public facilities (I.1, I.3, I.4, I.5).	It would be beneficial to have services like elderly homes within the community, staffed with counselors. If the elderly feel lonely, they can visit these homes for companionship (I.3).
	· · ·	Elderly individuals are sometimes viewed as burdens, although some do not see them that way (I.2).
Culture	Forming relationships with others through shared cultural interests (I.14).	We are delighted because, in our Elderly School, we can converse with friends in the Makassar language (I.14).
	Interacting with individuals from various cultural backgrounds (I.1).	In our Elderly School, we welcome people from various ethnic backgrounds (I.1).

Table 2 presents the findings based on the results of the Focus Group Discussion and In-depth Interview, revealing 8 domains and 32 indicators identified for the development of social prescribing for the elderly in Makassar City. These eight domains encompass:

Physical

Good physical condition is a crucial component in improving the overall health and well-being of elderly individuals. The physical changes experienced by the elderly, including decreases in cell count and alterations in organ structure and function, can significantly impact their quality of lifeand ability to perform daily activities. (24)

Spiritual

The spiritual dimension, encompassing beliefs, values, and the meaning of life holds significant importance for the elderly. This dimension can aid them in coping with life's problems/challenges. By acknowledging the spiritual dimension, greater connections can be fostered with the elderly through religious practices, meditation, introspection, or alignment with the universe. These practices can assist in addressing mental health issues such as stress, anxiety, and depression, consequently affecting overall quality of life. (25)

Mental and Emotional Health

The process of aging is an inevitable aspect of human life, accompanied by gradual physical, social, and psychological changes that can lead to health issues among the elderly. Common mental health conditions experienced by elderly individuals include anxiety, sadness, and frustration, alongside complexities in relationships and physical limitations. (26)

Social and community support

Social support, social participation, and involvement/engagement in community activities are vital dimensions for the well-being of the elderly. Social support plays a pivotal role in assisting elderly individuals in confronting various physical and psychological problems. (27)

Participation in social activities enables elderly individuals to maintain a sense of purpose in lif and feel valuable to society. Involvement in community activities further facilitates elderly individuals in remaining connected to society and strengthening their social bonds. An environment characterized by robust social support mechanisms contributes to increased life expectancy among elderly individuals and reduces the risk of depression and other mental health disorders. (28)

Cognitive Function

Cognitive function in the elderly refers to the mental capacity to process information, think critically, and perform daily activities. It encompasses various aspects: attention, which pertains to the ability to focus and concentrate on information; memory, which pertains to the capacity to store and recall information; language, which pertains to communication and speech abilities; and executive function, pertains to the capacity to organize and execute actions. (29)

Arts and Creativity

The involvement/engagement of elderly individuals in arts and creative activities holds significant importance in improving their quality of life. Participation in artistic and cultural activities has been shown to improve seniors' overall health. Creativity expressed through art can encourage the development of skills, and problemsolving abilities, and foster feelings of joy, satisfaction, and happiness among the elderly. (31) Furthermore, Art and creativity also can help elderly individuals in realizing their potential, fostering traits such as refinement, perseverance, patience, openness, and cooperation. Additionally, it provides opportunities for the release of mental tension. (31)

Environment

Environmental problems experienced by the elderly encompass factors that can significantly affect their quality of life. These include inadequate housing, accessibility issues such as the need for wheelchair accommodations, poor sanitation, and an inhospitable environment. Such environmental factors can adversely affect both the physical and mental health of the elderly population, increasing the risk of depression and anxiety among them.

Culture

Cultural issues in social prescribing for the elderly encompass a range of factors that affect the lifestyle and habits of elderly individuals. These may include dietary habits, clothing preferences, and adherence to cultural customs specific to the elderly population's cultural background or community.

DISCUSSION

Determining domains in social prescribing interventions is crucial for measuring program effectiveness and evaluating its impact in a targeted manner. Research conducted, particularly considering the local context of Makassar City, Indonesia, aligns closely with widely researched domains, including physical, mental, and emotional health, cognitive function, arts and creativity, and social and community support. Studies indicate that communities engaging in activities such as singing have experienced significant improvements in both physical and mental health, including enhanced breathing, reduced pain, decreased anxiety, and improved mood, alongside increased social inclusion. (32)

Moreover, among the elderly population, participation in art-based activities has been linked to improvements in social engagement and cognitive function, particularly in tasks requiring attention and concentration. In addition to these insights, several reviews have been conducted to assess the evidence supporting social prescribing interventions for the elderly. Despite existing limitations, the accumulated evidence suggests that social prescribing offers significant benefits for elderly individuals, particularly in mitigating the adverse effects of social isolation and loneliness.

Furthermore, our findings underscore the significance of social support for elderly individuals in improving their mental health and overall well-being. Social support plays a critical role in helping elderly individuals navigate stress stemming from physical health issues, thereby aiding in the prevention of depression and anxiety.

One of the most important findings of our research is the central role of the spiritual domain in shaping the well-being of older adults in Makassar City. This reflects the broader Indonesian cultural context, where religion and spirituality are deeply embedded in everyday life. Participation in religious practices is not only a source of personal meaning, but also functions as a mechanism for social inclusion that provides a sense of community and reduces feelings of loneliness. (33) These findings suggest that social prescription models in Indonesia need to integrate religious and spiritual activities as key components, which may differ from models in Western countries that tend to place less emphasis on these aspects.

The environmental domain also presents unique challenges in the urban context of Indonesia. Unlike the United Kingdom or other high-income countries with well-established elderly-friendly infrastructure, Makassar still faces limitations in public transportation, accessibility to open spaces, and housing affordability. These structural limitations emphasize the importance of adapting social prescriptions by utilizing community-based resources, rather than relying solely on formal infrastructure.

Another important finding concerns the perception of older adults as an economic burden on their families. This stigma affects older adults' self-esteem and limits their participation in community activities. For social prescriptions to be realistically implemented in Indonesia, interventions need to be designed to be low-cost, culturally appropriate, and able to alleviate, rather than add to, the burden on families. Utilizing existing community networks, religious organizations, and local volunteer groups can be practical strategies for overcoming these challenges while ensuring the sustainability of social inclusion. In addition to the aforementioned domains, findings from the Focus Group Discussion (FGD) have revealed insights into the cultural domain. While studies on this domain remain relatively scarce, studies are investigating the relationship between regional cultural values and the acceptance and efficacy of social prescribing programs. Furthermore, efforts are underway to analyze how social prescribing can be tailored to align with regional cultural values, norms, and traditions, thereby fostering positive outcomes for the health and well-being of the elderly population.

The significance of social prescribing for the elderly lies in its ability to address the root causes of their health and well-being issues, rather than merely treating symptoms. Social prescribing is recognized for its potential to alleviate strain on the healthcare system and improve the mental well-being of elderly individuals. It serves as a therapeutic pathway for disease prevention and offers clinical and long-term interventions.⁽³⁴⁾

However, this study has several limitations that need to be acknowledged. First, the sample size was relatively small, involving 20 participants in interviews and FGDs. While this number is acceptable for qualitative research, it may not fully capture the diversity of perspectives, and data saturation may not have been completely achieved. The study was conducted in a single city, Makassar. Although Makassar represents a rapidly urbanizing area with a growing elderly population, the findings may not be generalizable to other regions of Indonesia, particularly rural or less urbanized settings where social and cultural structures differ significantly. The use of a qualitative design allowed for the identification of key themes and indicators but does not provide evidence of effectiveness or allow for quantifying the relative weight of each domain. Future studies could employ mixed-method or longitudinal approaches to measure outcomes and strengthen the evidence base for social prescribing in Indonesia. Finally, while efforts were made to minimize bias through reflexivity and researcher triangulation, the involvement of researchers as facilitators may have influenced the responses of participants. These limitations highlight the need for further research with larger, more diverse samples, multi-site comparisons, and methodological triangulation to refine and validate the proposed model of social prescribing.

CONCLUSIONS

This study is one of the initial empirical explorations of social prescriptions in Indonesia, providing valuable insights from the context of a lower-middle-income country that has rarely been addressed in global literature. The findings reveal that, in addition to the commonly mentioned physical and social dimensions, spirituality plays a central role in the well-being of older adults in Makassar. This confirms the need to integrate religious and cultural resources into the social prescription model, which has implications for its application in other communities oriented towards religious values. This study also reveals the limitations of infrastructure and the perception of the elderly as an economic burden, which is rarely discussed in the Western context where social prescriptions developed. These findings emphasize that interventions need to be low-cost, culturally based, and community-driven to be feasible and sustainable in resource-constrained settings. By presenting evidence from Indonesia, this study broadens the global understanding of how social prescriptions should be adapted to diverse social, cultural, and economic contexts. The insights generated are not only useful for local policy and practice in Makassar, but also contribute to the international discourse on more inclusive and context-sensitive approaches to improving the well-being of older adults worldwide. This study is an important first step toward developing a culturally and contextually based model of social prescriptions in Indonesia, which can provide valuable lessons for other countries with similar demographic and social challenges.

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CONFLICT OF INTEREST

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