



MULTIMORBIDITY IN CHILEAN OLDER ADULTS: CHALLENGES FOR PRIMARY HEALTH CARE

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ABSTRACT

Introduction: Multimorbidity represents a growing problem among older adults and poses a challenge to health systems due to the coexistence of multiple chronic diseases, therapeutic complexity, and the need for continuous and integrated care. In Chile, population aging and the high burden of chronic diseases make its management within Primary Health Care particularly relevant.

Objective: To describe the main characteristics of multimorbidity among older adults in Chile, the main challenges it poses for Primary Health Care, and strategies aimed at providing comprehensive and person-centered care.

Methods: A narrative review of the literature published mainly between 2015 and 2026 was conducted. PubMed/MEDLINE, SciELO, and Google Scholar were searched, complemented by a review of official documents from the Chilean Ministry of Health. Studies conducted in the Chilean population addressing multimorbidity, chronic diseases, polypharmacy, continuity of care, and integrated care models were prioritized.

Results: The reviewed evidence indicates a high coexistence of chronic diseases in the Chilean population, with particular relevance among older adults, and an associated increase in the complexity of healthcare needs. The main challenges for Primary Health Care include fragmentation of care, polypharmacy, the need for coordination between different levels of care, and the incorporation of functional and quality-of-life outcomes. Person-centered care models, risk stratification, multidisciplinary teamwork, medication review, and continuity of care represent relevant strategies for improving the management of this population.

Conclusions: Multimorbidity requires moving beyond a healthcare model focused exclusively on individual diseases toward comprehensive, coordinated, and person-centered care. Primary Health Care represents a fundamental setting for implementing these strategies and strengthening continuity of care within the Chilean healthcare system.

KEYWORDS: Multimorbidity; Older adults; Primary Health Care; Chronic diseases; Polypharmacy; Chile.

INTRODUCTION

Aging and Chronic Diseases

Population aging represents one of the main challenges for health systems in Chile. The progressive increase in the older population is accompanied by a higher prevalence of noncommunicable chronic diseases, generating increasing demand for healthcare, longitudinal follow-up, and care aimed at preserving functional capacity and quality of life. The 2016–2017 National Health Survey demonstrated a high burden of chronic health problems in the Chilean population, reinforcing the need for health strategies adapted to this epidemiological transition(1).

In this context, multimorbidity, defined as the coexistence of two or more chronic conditions in the same individual, becomes particularly relevant. In Chile, analysis of the 2016–2017 National Health Survey has shown that

multimorbidity is a frequent phenomenon in the adult population and that chronic diseases tend to occur in clusters, resulting in patterns of disease that may increase the complexity of care. This situation is particularly relevant among older adults, in whom the accumulation of diseases may be associated with functional decline and greater healthcare needs(2).

Multimorbidity represents a particular challenge for Primary Health Care (PHC), as traditional disease-specific healthcare models may contribute to fragmentation of care, multiple clinical appointments, and polypharmacy. In Chile, comprehensive person-centered care strategies have been developed for patients with multimorbidity, aiming to improve service coordination, prioritize individual needs, and promote continuity of care. The Chilean experience with an integrated care model for people with high-risk multimorbidity demonstrated the feasibility of implementing this strategy



within the public healthcare system and was associated with lower healthcare utilization and mortality(3–5).

METHODS

A narrative review of the literature on multimorbidity among older adults in Chile and its implications for Primary Health Care was conducted. A bibliographic search was performed in PubMed/MEDLINE, SciELO, and Google Scholar, complemented by a review of official documents and publications from the Chilean Ministry of Health. The search terms used, in Spanish and English, included combinations of the following keywords: “multimorbilidad,” “adultos mayores,” “personas mayores,” “Atención Primaria de Salud,” “Chile,” “multimorbidity,” “older adults,” and “primary health care.”

Studies published between January 2015 and September 2026 were prioritized, particularly research conducted in the Chilean population and studies addressing multimorbidity, chronic diseases, polypharmacy, continuity of care, and person-centered care models. Earlier references were also included when considered relevant for conceptual contextualization. Studies not involving the Chilean population or not directly related to the management of multimorbidity and Primary Health Care were not prioritized.

The literature was selected through review of titles, abstracts, and, when necessary, full-text articles. Observational studies, clinical trials, implementation studies, and relevant reviews were prioritized, together with official documents related to Chilean health policies. The findings were organized narratively into four main areas: magnitude and characteristics of multimorbidity, major challenges for Primary Health Care, comprehensive care strategies, and perspectives for the Chilean healthcare system.

DEVELOPMENT

MULTIMORBIDITY IN CHILEAN OLDER ADULTS

Multimorbidity is a frequent phenomenon in the Chilean population and becomes particularly important with increasing age. Analysis of the 2016–2017 National Health Survey identified different patterns of chronic disease clustering among the Chilean population aged 15 years and older, demonstrating that chronic conditions tend to coexist rather than occur in isolation. This phenomenon is particularly relevant among older adults because the accumulation of diseases increases the complexity of healthcare needs and makes strategies focused exclusively on individual diseases more difficult to apply(2).

Among the chronic conditions that coexist in the Chilean population, clusters of cardiovascular, metabolic, and other chronic conditions have been identified, resulting in patterns of multimorbidity that increase the complexity of care. Analysis of the 2016–2017 National Health Survey showed that chronic diseases are not distributed independently but tend to cluster into specific patterns, reinforcing the need to consider different health conditions simultaneously when planning care for people with multimorbidity. In Primary Health Care settings, a high frequency of physical and psychiatric comorbidity has also been documented among people with depression, highlighting the clinical complexity that may be encountered at this level of care(2,6).

The simultaneous presence of multiple diseases may also affect functional capacity and quality of life. Among community-dwelling Chilean older adults with controlled multimorbidity, interventions aimed at improving physical condition and biopsychosocial well-being have been studied, highlighting the importance of incorporating functional and quality-of-life outcomes into the comprehensive management of these individuals(7).

Importance for Primary Health Care

The management of older adults with multimorbidity represents a challenge for Primary Health Care because healthcare systems have traditionally been organized around specific diseases and programs. In Chile, an integrated care model for people with high-risk multimorbidity has been developed within the public healthcare system, aiming to overcome fragmentation through person-centered care, greater coordination among healthcare professionals, and the definition of therapeutic goals according to individual needs(5).

MAIN CHALLENGES FOR PRIMARY HEALTH CARE

Fragmentation of care

One of the main challenges associated with multimorbidity is fragmentation of healthcare. The traditional approach to chronic diseases through disease-specific programs may result in multiple appointments, independent therapeutic recommendations, and difficulties in establishing common clinical priorities. In Chile, this disease-centered approach has been identified as potentially inconsistent with the principles of comprehensiveness, continuity, and person-centeredness promoted by the Family and Community Comprehensive Health Care Model(3).

Polypharmacy and treatment safety

Polypharmacy represents another important challenge among older adults with multimorbidity because the simultaneous use of multiple medications may increase therapeutic complexity and make adherence more difficult. In a clinical trial conducted among older adults with polypharmacy attending public Primary Health Care centers in Chile, a medication review strategy with follow-up improved the control of cardiovascular risk factors and treatment adherence. These findings support the incorporation of systematic medication review as part of the multidisciplinary management of older adults with multimorbidity(8).

Person-centered care

In response to these challenges, the management of multimorbidity requires a shift from a model focused exclusively on diseases toward person-centered care. In Chile, Primary Health Care professionals have identified that this approach allows healthcare to be adapted to individual needs, strengthens patient participation, and promotes the integration of the different components of the Family and Community Comprehensive Health Care Model(4).

Continuity and coordination of care

Coordination between different levels of care is another fundamental component in the management of people with multimorbidity. In the Chilean public healthcare system,



implementation of a person-centered care model has incorporated elements such as risk stratification, self-management, patient participation, case management, and continuity of care throughout the healthcare network. Implementation studies conducted in Chile have demonstrated the feasibility of incorporating these components into Primary Health Care, although their consolidation requires organizational adaptation and coordination among the different actors involved in the healthcare system(9).

STRATEGIES TO IMPROVE THE MANAGEMENT OF MULTIMORBIDITY IN PRIMARY HEALTH CARE

Person-centered care and risk stratification

The management of multimorbidity requires a transition from a model focused on individual diseases toward comprehensive care based on each person's needs, preferences, and goals. In Chile, the Person-Centered Care Model for Multimorbidity proposes stratifying patients according to their level of complexity and adapting interventions to their individual needs, incorporating elements such as self-management, patient participation, shared responsibility, and case management. This approach aims to reduce fragmentation of care and promote more coordinated care within Primary Health Care(9).

Multidisciplinary care and pharmacological optimization

The participation of different healthcare professionals may contribute to addressing the needs of older adults with multimorbidity in a more comprehensive manner. Periodic medication review is particularly important in patients with polypharmacy because it allows healthcare professionals to identify medication-related problems and assess whether specific treatments should be maintained, modified, or simplified. A clinical trial conducted in public Primary Health Care centers in Chile evaluated medication review with follow-up among older adults with polypharmacy and demonstrated the usefulness of incorporating pharmaceutical interventions into the management of these patients(8).

Continuity of care and network coordination

Continuity of care is particularly important for older adults with complex healthcare needs. In a sample of 247 older adults who were Primary Health Care users in Santiago, Chile, a higher prevalence of depressive symptoms was associated with lower satisfaction with continuity of care, even after adjustment for sociodemographic characteristics and health status. These findings highlight the importance of strengthening continuity and coordination of care within integrated care models, although the results should be interpreted considering that the study involved a localized convenience sample(10).

Chilean experience with integrated care

The Chilean experience also demonstrates that integrated care models can be implemented within the public healthcare system. A study conducted in the Servicio de Salud Metropolitano Sur Oriente evaluated a model targeting people with high-risk multimorbidity based on care coordination, case management, self-management, and follow-up. The authors concluded that the intervention was feasible to implement under

real-world healthcare system conditions and that the experience could contribute to scaling up similar strategies(5).

CONCLUSIONS

Multimorbidity represents a growing challenge for the care of older adults in Chile due to the coexistence of multiple chronic diseases, treatment complexity, and the need for continuous and coordinated care. A healthcare approach focused exclusively on individual diseases is insufficient to adequately address the needs of this population. Therefore, Primary Health Care should strengthen strategies based on person-centered care, risk stratification, multidisciplinary teamwork, medication review, self-management, and coordination between different levels of care. The Chilean experience demonstrates the feasibility of advancing toward more comprehensive care models centered on the needs of older adults with multimorbidity.

REFERENCES

1. Margozzini P, Passi Á. Encuesta Nacional de Salud, ENS 2016-2017: un aporte a la planificación sanitaria y políticas públicas en Chile. *ARS Med.* 2018;43(1):30-34. doi:10.11565/arsmed.v43i1.1354. DOI
2. Sarmiento LL. Patrones de multimorbilidad en la población chilena mayor de 15 años: análisis de datos epidemiológicos de la Encuesta Nacional de Salud 2016-2017. *Rev Med Clin Condes.* 2022;33(1):75-89. doi:10.1016/j.rmclc.2021.12.007. DOI
3. Vargas I, Barros X, Fernández MJ, Mayol M. Rediseño en el abordaje de personas con multimorbilidad crónica: desde la fragmentación al cuidado integral centrado en las personas. *Rev Med Clin Condes.* 2021;32(4):400-413. doi:10.1016/j.rmclc.2021.05.003. DOI
4. Martínez M, Sapag JC, Zamorano P, Muñoz P, Varela T, Téllez Á. Contribución de una estrategia de atención centrada en la persona con multimorbilidad al Modelo de Atención Integral de Salud Familiar y Comunitario en Chile. *Rev Med Chile.* 2022;150(6):782-787. doi:10.4067/S0034-98872022000600782. DOI
5. Zamorano P, Muñoz P, Espinoza M, Tellez A, Varela T, Suarez F, et al. Impact of a high-risk multimorbidity integrated care implemented at the public health system in Chile. *PLoS One.* 2022;17(1):e0261953. doi:10.1371/journal.pone.0261953. DOI
6. Martínez P, Rojas G, Fritsch R, Martínez V, Vöhringer PA, Castro A. Comorbilidad en personas con depresión que consultan en centros de la atención primaria de salud en Santiago, Chile. *Rev Med Chile.* 2017;145(1):25-32. doi:10.4067/S0034-98872017000100004. DOI
7. Pizarro-Mena R, Duran-Aguero S, Parra-Soto S, Vargas-Silva F, Bello-Lepe S, Fuentes-Alburquenque M. Effects of a structured multicomponent physical exercise intervention on quality of life and biopsychosocial health among Chilean older adults from the community with controlled multimorbidity: a pre-post design. *Int J Environ Res Public Health.* 2022;19(23):15842. doi:10.3390/ijerph192315842. DOI
8. Martínez-Mardones F, Benrimoj SI, Ahumada-Canale A, Plaza-Plaza JC, Garcia-Cardenas V. Clinical impact of medication reviews with follow-up in cardiovascular older patients in primary care: a cluster-randomized controlled trial. *Br J Clin Pharmacol.* 2023;89(7):2131-2143. doi:10.1111/bcp.15682. DOI



9. Sapag JC, Pérez MAM, Zamorano P, Varela T, Muñoz P, Seguel R, et al. An innovative multimorbidity patient-centered care model in Chile: implementation evaluation results. *Arch Public Health*. 2025;83:127. doi:10.1186/s13690-025-01516-4. DOI
10. Moreno X, Cornejo N. Satisfaction with continuity of care from the perspective of older adults who are primary care users and its association with depressive symptoms in Santiago, Chile. *Front Med*. 2025;12:1615842. doi:10.3389/fmed.2025.1615842. DOI

Declaration of Conflict of Interest

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