

Summary

As the population ages and the number of people with non-communicable and chronic diseases continues to grow, health and ageing needs will become more complex, and older adults will have a stronger need for care services and home-based care. The growth of ageing affects the viability of the urban physical environment, including demographics and size, housing needs, transport, public facilities and care facilities.

Using a systemic design approach, this research identifies key factors and designs innovative care models that promote healthy and active ageing. This thesis compares the community care models and practices for older adults in the A.S.L. TO3 Turin and the Jing'an community in Shanghai. It identifies the factors influencing their effectiveness and sustainability. In the meantime, it defines and designs new models. Through identified factors, models can be designed that promote healthy and active ageing.

This research adopts a mixed approach, combining qualitative and quantitative methods to conduct a comparative case study. Data were collected from multiple sources, including literature reviews, semi-structured interviews, surveys, observations and co-design workshops, and analysed across cases from a systemic design perspective. The objective was to identify the strengths, weaknesses and gaps in the Jing'an District community care systems in Shanghai, China, and A.S.L. TO3 in Turin, Italy, aiming to develop a more effective and sustainable care model.

The outcomes of this research are the design of a new 'Five-bed Linkage' Integrating Medical and Social Care Model and a new list of services models for the new 'Five-bed Linkage' Care Model for older adults in different stages of illness in the Jing'an community of Shanghai, to construct a more complete, efficient and human-oriented integrated community care service system. As of April 2024, the project had completed the renovation of 43 pension institutions (8,113 nursing beds), provided 4,039 home visits, served 3,262 residents and 106,041 older adults, added 673 home hospital beds, completed 1,972 physical examinations, 2,578 critical medical procedures, and provided referral services for 266 older adult patients.

Through these efforts, the project has significantly enhanced the integration of healthcare and social services for older adults, setting a new standard for comprehensive care within the community. Implementing the Five-bed Linkage model significantly improves the quality of care for older adults, improving the satisfaction of service staff and providers. The project has expanded its impact by incorporating broader silver economy initiatives and sustainable development goals, thereby enhancing the scalability and sustainability of older adult care services across the region and the country.

This research uses a systemic design approach to facilitate a holistic analysis of two urban communities and to reveal potential linkages and their impacts on the ageing service system through cross-analysis of cross-geographical elements. The systemic design approach enhances the structured and comparable nature of the urban analyses and expands their application to complex community care systems, providing a framework that can be built upon for subsequent research. In addition, the research systematically sorted out the relationships between multiple stakeholders through visualisation tools such as stakeholder maps, revealing potential collaboration opportunities and providing an analytical path for policymakers, city managers and researchers. This method deepens the understanding of the ageing service system and provides theoretical support and practical guidance for the optimisation and innovation of future urban governance and community care models.

Thesis Structure

Chapter 1 sets the stage for the research, highlighting its background, Scope, gaps, goals and questions. These elements are crucial in understanding the context and importance of research.

Chapter 2 provides an in-depth exploration of the current state of ageing care globally and demonstrates the practical application of the design field in sustainable ageing care. The core issues of this research are further elucidated by highlighting the progress of sustainable development and healthcare policies in China and Italy and summarising the gaps in current research.

Chapter 3 introduces the design and methodology of this research. The conceptual framework of the research consists of four dimensions, focusing on the national, city, community and older adult dimensions in two high-density cities:

Shanghai and Turin. First, the definition and core principles of sustainable community care are described, and the systemic design perspective is used to explore how to address the challenges in community care. Finally, the data collection and analysis methods used in this research are introduced, including qualitative and quantitative research, and the ethical considerations are explained.

Chapter 4 provides a comprehensive analysis of the A.S.L TO3 community in Turin, Italy and the Jing'an community in Shanghai, China, based on the three steps and four key points of the Systemic Design methodology. First, examining the territorial context in which the two communities are located is examined through Holistic Diagnosis. Next, the Cross-scale model, which is the operational process of the community care system, is analysed in depth. Finally, the main challenges faced by the two communities in terms of care services are identified and discussed. The analysis aims to provide a more holistic perspective for the next stage of co-design workshops.

Chapter 5 provides an in-depth exploration of the current situation of the community care model through a comparative analysis of the pain points of various stakeholders in the two cases. Combining the co-design workshops between the Tongji University designer team and the managers and doctors of the Linfen Community Health Service Center in Jing'an District, the main barriers and leverage points in the current community care model were identified. This process provided a key reference for the subsequent proposal of an innovative care model.

Chapter 6 designs a new systemic innovation roadmap based on the research results of Chapters 4 and 5. The roadmap includes an innovative 'Five-bed Linkage' model integrating medical and social care, a stakeholder map of the new 'Five-bed Linkage' model of care, and a list of new services and pricing models under this model.

Chapter 7 describes the results after implementing the new systemic innovation model of integrating medical and social care and provides a detailed analysis of the actual results and impacts brought about by the model's application.

Chapter 8 summarizes the main contributions of this research and analyses the current research's limitations. Furthermore, recommendations and implications for future community care practice and the field of systemic Design are proposed, while potential directions for future research are indicated.