

# Research Status of Self-care Ability, Quality of Life, and Community Home Healthcare Needs of the Elderly with Type 2 Diabetes Mellitus

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## Abstract

As global population aging intensifies, diabetes has become a widespread and recurring health issue worldwide. Notably, the incidence of type 2 diabetes mellitus (T2DM) among older adults is increasing, posing significant risks to their health. Elderly individuals suffering from diabetes often face challenges such as diminished quality of life and reduced self-care abilities due to the chronic nature of their condition and its various complications. In light of China's rapidly aging population, community home healthcare has emerged as an essential approach for promoting independence among seniors. This paper primarily reviews existing research on elderly T2DM elderlys' self-care skills, quality of life, and community home care needs while examining various multi-faceted strategies including comprehensive health education, emotional support, safe living environment development, resource integration within communities, and improved care for diabetic seniors. Additionally, this article analyzes the current state regarding these elderlys' self-care capabilities and overall well-being. Enhancing the quality of life for the elderly can alleviate burdens on families and society at large. This research holds considerable significance and can serve as a valuable reference for community healthcare practitioners in formulating targeted intervention strategies related to quality of life and other pertinent studies.

**Keywords:** Self-care Ability, Quality of Life; Community Home Healthcare Needs; Type 2 Diabetes Mellitus; Elderly;

## Introduction

Diabetes Mellitus (DM) ranks among the leading causes behind blindness, amputations, heart disease, lung cancer, and premature mortality. It severely impacts the elderly health with serious consequences that can even lead to death due to complications (Fan Rui et al., 2020). Recently improved social living standards have led to an increase in diabetes cases among China's elderly population—turning it into a pressing societal concern. As one of the largest countries affected by diabetes globally with deep-rooted traditions in elder home healthcare services integrated into its system—there exists heightened risk concerning self-care abilities amongst the elderly who often lack thorough knowledge about managing their condition while facing inadequacies in community nursing models where nurses play limited roles in prevention or rehabilitation efforts (Liu Zhai, 2022). Given that the elderly require special attention regarding their health status, and considering pressures on service systems, the advancement of community home healthcare services aligns with both traditional practices and national strengths make it particularly

suitable for Chinese residents (Liang, 2019). Focusing research efforts towards common diseases like type 2 diabetes affecting senior citizens is crucial not only for enhancing their quality of life but also reducing familial/societal burdens.

## **2. Status of Nursing Care for the Elderly with Type 2 Diabetes in China**

In China, Diabetes mellitus encompasses diverse disorders characterized by hyperglycemia along with impaired glucose regulation mainly categorized into type 1 (T1DM) & type two variants(T2DM)—the latter being more prevalent .Over time ,elderlys develop complications such as nephropathy ,diabetic foot issues ,and eye diseases which significantly compromise overall wellbeing(Li Ge, 2020).

### **2.1 Self-care Ability**

Self-care ability refers specifically to one's capacity independently perform basic daily activities—including fundamental tasks like eating,dressing,toileting,bathing(ADLS),as well some complex instrumental activities(IADLS).For diabetics,this capability hinges upon numerous factors encompassing illness severity/complications/coexisting conditions/social support networks(Shan Liangliang, 2024). A decline here adversely affects day-to-day functioning whilst exacerbating disease progression thereby imposing substantial caregiving demands/economic strains onto families/society alike.Given prolonged durations associated with managing diabetes alongside high disability rates(Leng Yao, 2020),home-based management becomes imperative yet many aged diabetics struggle lacking requisite knowledge/skills resulting poor complication control/lower qualities-of-life(Chen Xu , 2019 ).Fang Meili's work identified physiological function declines amongst seniors contribute directly advancing complexities surrounding diabetic management ultimately diminishing individual capacities further.Zhang Shuang et al.(2022)'s findings indicate cognitive deterioration negatively influences effective self-management especially pronounced within those diagnosed specifically T2DM .

### **2.2 Quality of Life**

Quality of life is a vital indicator for evaluating the health status of older adults with diabetes. Findings from Wenjing Zhao (2023) reveal that elderly elderlys with type 2 diabetes mellitus (T2DM) typically experience a lower quality of life compared to their non-diabetic counterparts in the same age bracket. Various factors, including disease duration, complications, dietary practices, glycemic management, frequency of physical activity, and fasting blood glucose levels, have a significant impact on the quality of life for these elderlys. Daniele (2013) and Andersson (2023) note that the symptoms and manifestations related to type 2 diabetes are closely associated with elderlys' overall quality of life. The condition frequently leads to limitations in daily activities, intense bodily discomfort, and irregular eating habits, all adversely affecting well-being. Additionally, mental health is an essential factor influencing the quality of life among elderly individuals managing diabetes (Liu Yingjie, 2023). For example, excessive psychological pressure leads to depression and anxiety, and medication is not taken according to medical advice, which seriously affects the quality of life. Song Xiaoling (2023) believed that giving elderlys intensive psychological intervention, eliminating negative emotions, and promoting elderlys to master a healthy lifestyle by giving elderlys diet care, exercise care, medication guidance and psychological intervention are of positive significance for improving elderlys' clinical efficacy.

### **2.3 Status of Community Home Healthcare Needs**

Community home healthcare service is a kind of elderly medical service mode that combines the advantages of family healthcare and institutional healthcare. It is a kind of elderly care mode based on family and relying on community resources. And the community provides basic life healthcare, medical care, spiritual comfort and other services for the elderly (Liang Haiyan, 2019). Compared with the

traditional nursing home model, community home healthcare service is a kind of elderly medical service mode that combines the advantages of family medical care and institutional medical care. It enables the elderly to live in a familiar environment and enjoy the medical treatment, nursing and other services provided by the community. So it is accepted and chosen by more and more elderly people and their families. Feng Chunmei (2018) showed that the elderly with diabetic' demand for community home healthcare services mainly focused on medical care, daily life care, psychological support and social participation. The elderly with diabetes are particularly in need of health management and medical services provided by the community due to their mobility difficulties, high medical needs and frequent complications (Gong Yachi, 2020). However, community home healthcare services still have deficiencies in personnel training, service content, resource allocation and other aspects, which is difficult to meet the diverse needs of elderly people with diabetes. According to the study of He Xuwen (2022), the needs of home healthcare are concentrated in the aspects of health promotion and rehabilitation guidance nursing service needs, basic medical care service needs, psychological care service needs, social support service needs, life care service needs, etc. There are not enough professional nursing staff for the elderly health care. And the prevailing infrastructure remains inadequate failing meet multifaceted expectations posed today's growing demographic trends.

### **3. Relevant Countermeasures**

Through the research on self-care ability, quality of life and nursing needs of elderly people with type 2 diabetes in communities, it can be found that relevant research topics have attracted more attention, and have developed from the overall research to different dimensions of various factors, including physiological, psychological, social and environmental research. Combing through the relevant research results, it can be seen that the self-care ability of elderly people with diabetes is not optimistic, and the disease symptoms are closely related to the lifestyle, characterized by long incubation period, long course of disease, and high medical costs (Zhang Yuhui, 2021). The older the age, the higher the demand for home care, and the importance of community home care continues to increase.

#### **3.1 Carry Out Health Education and Psychological Counseling.**

Delivering suitable health education and guidance is an essential approach to facilitating home care for diabetic elderly, enhancing their quality of life and meeting the objectives of home management. Zhu Fenghua's educational programs for elderly diabetes elderly resulted in greater disease awareness, improved cooperation regarding treatment and dietary choices, and significant advancements in blood glucose regulation (Zhu Fenghua, 2010). Wang Xianyu et al. indicate that social support correlates with quality of life, particularly among older adults living independently. Community nursing efforts tailored to smaller settings encourage interaction among seniors, boost psychological well-being through counseling services, enhance adherence to treatment plans, and positively influence glycemic control while postponing complications (Wang Xianyu, 2015).

#### **3.2 Improve the Exercise and Activity Level of the Elderly.**

Exercise therapy is an important treatment for diabetic elderly. According to the bad habits of the elderly, such as sedentary and less active, insufficient amount of exercise, and disorderly exercise, the elderly should be guided to choose moderate exercise methods, cultivate the habit of long-term exercise, inform precautions, and prevent accidents such as hypoglycemia (Geng Yan, 2013). Self-management of diabetes is the key to the treatment and care of diabetes elderly. Full consideration should be given to the physical condition of the elderly, awareness of self-management should be enhanced, basic life skills should be trained, facilities should be friendly to the elderly, daily self-care needs should be met, and reasonable

activities should be adopted to improve the immune capacity of the body (Zhang Jinxia, 2019), from passive to active. To reduce the harm of the disease and help the elderly improve their quality of life.

### **3.3 Establish Family Health Records.**

Diabetes is closely related to life habits, and is mainly a metabolic disease caused by obesity, mental stimulation, reduced amount of exercise and overwork caused by unreasonable diet (Liao Qianli, 2024). Diabetes mainly affects the feelings, life, emotions and activities of the quality of life of elderly elderlys, involving elderlys' age, disease course, complications, diet and exercise frequency, etc. (Zheng Chunfang, 2013), elderlys with diabetes should not only be actively treated, but also implement effective nursing measures, and extend clinical nursing measures to the community and family. Jia Qiao and Du Wanhong et al. established health records for diabetes elderlys, explained disease knowledge, conducted regular follow-up visits, timely assessment, strengthened blood glucose detection, helped elderlys master the use of blood glucose meters, corrected bad living habits, carried out comprehensive intervention, and achieved good results (Jia Qiao, 2011).

### **3.4 Build a Home Nursing Service System for the Aged.**

Research conducted by Fang Lei (2012) demonstrates that community nursing intercessions can profoundly enhance therapeutic outcomes and the quality of life for elderly elderlys afflicted with diabetes. Community nursing encompasses a gamut of services, such as preventive care, health sustenance, rehabilitation, and other forms of support beyond conventional medical milieus; however, the extant community health resources in China are deficient to address the requirements of the elderly population adequately. Wu Jialin (2013) posits that augmenting community nursing resources, establishing professional home care squads, and concentrating on follow-up treatment requisites are pivotal strategies for efficaciously meeting the diverse healthcare exigencies and upgrading the quality of life. To fortify the home care framework for senior individuals with diabetes, it is imperative for the government to warrant access to fundamental geriatric services, escalate primary healthcare benchmarks, distribute community nursing facilities proficiently, train proficient personnel, expand emotional support channels, formulate individualized care plans, stimulate volunteer endeavors within communities, manage chronic disorders efficaciously, and ultimately enhance the quality of life of senior citizens (Liu Zhai, 2022).

## **4. Conclusion**

As China's population demographics evolve and the demands of its aging citizens increase, a novel approach to eldercare is emerging. The role of families and communities is crucial in providing social support and integrating professional care services into the daily lives of elderly individuals with diabetes. To effectively address the challenges associated with an aging society and achieve eldercare goals, it is essential to create a collaborative relationship between home-based care and institutional services, ensuring a balanced supply-demand dynamic while establishing a strong community-oriented framework for home healthcare. Furthermore, leveraging social capital is important for evaluating the health status of diabetic elderlys according to their unique characteristics. Regular health education programs should be introduced to combat unhealthy habits and dietary issues, encourage self-management techniques, improve exercise routines, and offer continuous monitoring to establish accessible healthcare pathways that enhance medical capabilities. This strategy not only improves the quality of community home healthcare service but also increases efficiency and satisfaction. In summary, the elderly living with type 2 diabetes in China face significant challenges related to self-care abilities, quality of life, and access to community home healthcare support. As the trend toward an older population accelerates, it has become imperative to enhance these elderlys' quality of life while improving their self-care skills and refining

community home healthcare services—a pressing challenge that needs urgent attention. Future initiatives will require collaboration among government bodies, societal organizations, and families to create a comprehensive system that integrates medical assistance with nursing care specifically designed for the elderly with diabetes .

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