



BUILDING NURSING HOMES FOR HIGH-INCOME INDIVIDUALS/ FAMILIES IN VIETNAM

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ARTICLE INFO	ABSTRACT
<p>DOI: 10.52932/jfm.vi2.508</p> <p><i>Received:</i> March 02, 2024</p> <p><i>Accepted:</i> March 20, 2024</p> <p><i>Published:</i> March 25, 2024</p> <p>Keywords: Nursing home; High income; Vietnam.</p>	<p>This study employs a Bayes model to examine the impact of income groups on the Nursing home usage costs across 10 provinces and cities in Vietnam: Ha Noi, Vinh Phuc, Bac Ninh, Hai Phong, Nam Dinh, Da Nang, Ho Chi Minh City, Can Tho, Dong Nai, and Binh Duong. The study utilizes 8 variables: Average population (DSTB), Average income (TNTB), Income group 1 (TN1), Income group 2 (TN2), Income group 3 (IG3), Income group 4 (TN4), Income group 5 (TN5), Cost of using nursing home (CP), with data collected annually from 2012 to 2022. The results indicate that major cities attract larger populations and a higher proportion of elderly individuals, thus attracting more investment in various forms of nursing homes, thereby improving their competitiveness. Among income groups of residents in provinces and cities, income group 5 has the highest income and shows a positive correlation with cost of using nursing home, which aligns well with reality. In recent years, affluent families have shown a preference for high-end nursing homes offering the best care services, albeit at higher costs than standard ones. However, fundamentally, Vietnamese individuals have not prioritized the choice of living in nursing homes during their elderly years. Research results show that it is necessary to focus on the quality of nursing home services because of increasing demand and the aging population trend of Vietnam in the future.</p>

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1. Introduction

The traditional elderly care approach in Vietnam relies on family members to provide support in all aspects of elderly care, reflecting the country's traditional values of filial piety. Due to the limited availability of formal elderly care services, many elderly individuals primarily rely on support from their family members, particularly in rural areas. Vietnam faces limited resources to establish comprehensive facilities and services to meet the increasing needs of the elderly population. However, community-based services and care are recognized as attractive supplements to family care. Factors such as aging population, decreasing family size, economic pressures under market mechanisms, younger family members moving away from parents, increasing number of elderly individuals without children, and low financial income of the population have contributed to the growing development of nursing homes.

The aging population has presented an unprecedented global challenge: the estimated number of elderly individuals is projected to increase from around 524 million in 2010 to nearly 1.5 billion by 2050, with the majority of this increase occurring in low- and middle-income countries (LMICs) (World Health Organization, 2015). Vietnam is no exception, and the healthcare and welfare of the elderly pose significant challenges for the government and the population, given the modest income levels. Vietnam is considered to be among the world's fastest aging populations, transitioning into an aging population phase from 2011 and into an aged population by 2038. The proportion of elderly individuals in Vietnam was 12% in 2022 and is projected to reach 28% by 2050. While Australia took 72 years, Vietnam took only 16 years to transition from a country with an aging population to an aged one (increasing proportion of the population aged over 65) (General Statistics Office of Vietnam, 2020).

The income of individuals is a crucial factor influencing the decision to choose a type of welfare service. The standard of living and the needs of the people will determine the scale and cost of investment in nursing homes. Recognizing the magnitude of the issue and the significant financial impact of constructing and operating a sufficient number of high-quality nursing homes, the government is currently encouraging private companies, foreign corporations, and non-governmental charitable organizations to build and operate nursing homes. This will be the policy direction in the near future.

Due to the significant financial scale of constructing and operating all nursing homes with government funding in the coming years, current policies emphasize community and home-based care. Furthermore, most elderly individuals in Vietnam prefer to live in their own homes rather than in nursing homes. Therefore, high-quality home care services could reduce the demand for elderly individuals to reside in nursing homes in Vietnam. However, nursing home care for the elderly remains appropriate given the current realities in Vietnam.

A rapidly aging society poses significant challenges for elderly care facilities. Confronted with a growing population of seniors and increasingly complex care needs, nursing homes must address several issues. These include maintaining residents' quality of life and care standards, integrating healthcare and social care service provision, optimizing management of their interactions with hospitals to prevent avoidable admissions and facilitate early discharge, and leveraging new technologies cost-effectively.

For long-term health and care of the elderly, the current challenge is to establish a comprehensive care system for the elderly. Home care for the elderly is an essential care model for older adults with health issues in

Vietnam, mostly funded by the Vietnamese government with contributions from some non-governmental organizations and private investors. Domestically, long-term care services provided by nursing homes vary greatly between rural and urban areas, as well as among different economically developing regions. In urban and more developed areas, there are many types of services available; however, in rural and less developed areas, the scope of services remains limited. While the number of nursing homes is still insufficient and there is an issue of mismatch between supply and demand, the quality of care in most nursing homes is suboptimal. Current research is mainly aimed at understanding the service quality of nursing homes or towards understanding people's evaluation of the service quality of nursing homes. In Vietnam, this type has not received much attention, mainly state-owned nursing homes tend to support elderly people in difficult circumstances. However, people's increasing income and increasing demand for good quality nursing homes are the motivation to conduct this research to fill the research gap. Based on practical experience and existing experimental studies, this research examines the construction of nursing homes for high-income families/individuals in Vietnam. In the following section, the study presents related experimental studies. Section 3 outlines the experimental approach of the research model. Specifically, the study employs a Bayes model. Subsequently, the estimated results are presented and discussed in Section 4. Finally, Section 5 provides some conclusions.

2. Experimental studies on constructing nursing homes for the elderly worldwide.

Bos et al. (2020) analyzed the characteristics of for-profit nursing homes emerging in the Netherlands and identified a set of interrelated factors (context, trends, and industry conditions) contributing to the industry's growth. Until recently, the nursing home

sector in the Netherlands largely relied on non-profit providers. Although profit distribution within nursing home care activities remains prohibited, the for-profit nursing home sector is expanding. The study utilizes economic theories of non-profit organizations and mixed markets to understand this expansion. Legal framework changes have unlocked the potential of the for-profit nursing home sector, allowing for-profit nursing homes to circumvent the profit prohibition order. The expansion of the for-profit sector is primarily driven by the low responsiveness of the non-profit sector to increasing and changing demands. For-profit providers have capitalized on this gap. Moreover, they leverage market surface potential and utilize a broader care system to reduce labor costs by relying on outsourced expert care services. Another key motivation is the ability to access financial capital from private investors.

Widely acknowledged is the imperative for quality service provision within eldercare, emphasizing the centrality of human-centric care tailored to the needs of elderly residents in nursing homes (Molony et al., 2018; Coulter & Oldham, 2016; Corazzini et al., 2016). Transitioning into nursing homes significantly impacts the elderly, whose expectations for minor life changes often conflict with organizational needs (Vaismoradi et al., 2016). Discrepancies between service delivery and user expectations perpetuate long-term dissatisfaction. While studies assessing the satisfaction of elderly nursing home residents may not always capture care quality and life quality, the differential between expectations and reality significantly contributes to resident discontent.

On the other hand, public feedback is rarely considered in developing content for satisfaction surveys in nursing homes (Gerritsen, 2007; Spangler et al., 2019; Castle et al., 2005). However,

surveying public satisfaction can be a vital tool to systematically understand current trends in nursing home services and how to enhance them. Elderly residents living in nursing homes offer experiences that can help pinpoint exact gaps in the nursing home care service system, which conventional survey investigations may never fully recognize (Reader et al., 2014). Williams et al. (2016) observe that the CMS five-star rating system, while indicative of healthcare quality indices, does not fully reflect what matters most to elderly nursing home residents from their perspective. While it is expected that higher-rated nursing homes in the comparison system will have higher consumer satisfaction scores, results find minimal correlation between the two. Many five-star-rated nursing homes exhibit low consumer satisfaction scores, whereas some one-star-rated homes show high consumer satisfaction levels (Williams et al., 2016). Although higher scores on health inspections, clinical care quality, and staffing can predict consumer satisfaction levels, such measures do not substitute for consumer input. There is a notion that the year-round nursing home rating calculation processes may not fully reflect nursing home activities and need improvement to include more evaluations from elderly nursing home residents (Williams et al., 2016).

Presently, administrative and frontline staff in nursing homes receive minimal training in eldercare. There is a pressing need for a structured, high-quality training program on long-term care for all staff members. Furthermore, quality care standards, including the establishment, assessment, and monitoring of standards, constitute a crucial issue requiring significant improvement in Chinese nursing homes. Currently, 1.5% of the elderly population resides in nursing homes and senior living communities. The Chinese government recognizes that expansion in this sector relying solely on governmental resources is financially unsustainable. Current policy aims to encourage

private investors and foreign entities to engage in nursing home business ventures in China (Fahey et al., 2003).

Chu and Chi (2008) illustrate that China is poised to undergo a profound transition from a youthful society to an aged one within the next 30 to 40 years. In the year 2000, there were 88,110,000 individuals aged 65 and above, comprising 7% of the population. This proportion is projected to escalate to 23% by the year 2050. Regarding health and long-term care for the elderly, the current challenge lies in establishing a comprehensive care system for the elderly. Nursing home care is an essential care model for frail elderly individuals in China, primarily sponsored by the Chinese government with contributions from some non-governmental organizations and private investors.

This assessment considers evidence from around the world on how home care facilities can evolve to meet these challenges, with the discussion primarily applicable to the United Kingdom. Evidence of innovative approaches to achieving these goals is steadily increasing, albeit slowly. The potential of new technologies to sustain quality and reduce costs remains largely untapped (Szczepura, 2011).

Elderly individuals residing in nursing homes and assisted living facilities spend a significant portion of their time within the confines of these buildings and may rely on the environment to compensate for their physical or cognitive vulnerabilities. The design of care facilities impacts the quality of life of the building users. Parker et al. (2004) conducted a study titled *Design in the Care Environment (DICE)*, which collected data on building design and quality of life in 38 nursing homes in and around Sheffield, Yorkshire. Quality of life was assessed using methods that included all residents regardless of their health status, and staff morale was also evaluated. The physical environment was measured across 11

user-relevant domains using a new tool, the Sheffield Care Environment Assessment Matrix (SCEAM). The study found a significant positive relationship between certain aspects of the built environment and residents’ quality of life. There is evidence suggesting that an emphasis on safety and health requirements may result in a risk-averse environment, impacting quality of life, particularly for the frailest residents. Staff morale is more closely linked to the attributes of a non-institutional environment for residents rather than the physical facilities provided for staff.

Jenkins and Robert (2020) addressed an issue in the United States where an increasing number of elderly individuals struggle to find affordable housing that can adapt to their changing needs. The study reveals that access to affordable housing is a significant barrier to reducing nursing home admissions. This is an experimental study examining whether the burden of housing costs is associated with older adults transitioning to nursing homes. The data included older adults living in low and moderate-income communities (N = 3,403). A multinomial logistic regression model tested whether individuals renting affordable housing moved to nursing homes within 3 years (2015-2018) or not.

3. Methodology and data

Bayesian model

The Bayesian model generates data revolving around the core parameters r_i , η_i , ϕ_i , and μ_i . Prior parameterization describes the distribution characteristics for each parameter:

- r_i , the curvature of individual i ’s utility function;
- η_i , one of the parameters of individual i ’s probability weight function;
- ϕ_i , the remaining parameter of individual i ’s probability weight function; and

- μ_i , the Fechner noise parameter of individual i .

When transitioning to specific prior distributions assumed, clarity is crucial with hierarchical Bayesian models. Specifically, it is important to be explicit about the assumption that r_i is characterized by the prior:

$$r_i \sim N(m_r, \sigma_r^2) \tag{1}$$

In which m_r :

$$m_r \sim N(0,100) \tag{2}$$

And σ_r^2 is determined.:

$$\sigma_r^2 \sim IG(\sigma_r, 0.001, 0.001) \tag{3}$$

The relationship between the weights is determined as follows:

$$r_i | m_r, \sigma_r^2 \sim N(m_r, \sigma_r^2) \tag{4}$$

If we know the mean and variance of the prior, we will have more information about the individual values of r_i .

These estimates must be made jointly, the Bayesian model is estimated for pooled data assuming priors, and then estimates the joint posterior distribution. The joint distribution is a product of conditional distribution and marginal distribution. In this way, two objectives need to be achieved. First, it restricts the parameters of individual distributions. Second, it indicates that those distributions have a diffusive prior nature.

The remaining distributions are all similarly performed and can be explained in a similar manner. It is important to ensure that the core parameters η_i , ϕ_i , and μ_i are all non-negative.

$$\ln(\eta_i) \sim N(m_{ln\eta}, \sigma_{ln\eta}^2) \tag{5}$$

In which $m_{ln\eta}$ is determined:

$$m_{ln\eta} \sim N(0,100) \tag{6}$$

and the prior coefficient $\sigma_{ln\eta}^2$ in the range:

$$\sigma_{ln\eta}^2 \sim IG(\sigma_{ln\eta}, 0.001, 0.001) \tag{7}$$

The correlation coefficient φ_i of the prior coefficients:

$$\ln(\varphi_i) \sim N(m_{\ln\varphi}, \sigma^2_{\ln\varphi}) \tag{8}$$

Where $m_{\ln\varphi}$ is within the range:

$$m_{\ln\varphi} \sim N(0,100) \tag{9}$$

and $\sigma^2_{\ln\varphi}$ is determined:

$$\sigma^2_{\ln\varphi} \sim IG(\sigma_{\ln\varphi\mu}, 0.001,0.001) \tag{10}$$

Finally, the combined coefficient μ_i of the priors:

$$\ln(\mu_i) \sim N(m_{\ln\mu}, \sigma^2_{\ln\mu}) \tag{11}$$

Where $m_{\ln\mu}$ is within the range:

$$m_{\ln\mu} \sim N(0,100) \tag{12}$$

and $\sigma^2_{\ln\mu}$ is determined:

$$\sigma^2_{\ln\mu} \sim IG(\sigma_{\ln\mu}, 0.001,0.001) \tag{13}$$

So the pooled sample data determines the subsequent distribution for the representative agent, which is then used as the prior distribution for the sample data for each individual entity. The main significance of these preceding parts is collectively presented, followed by the overall estimation of the latter part compared to the risk preferences of the representative agent and N individual agents, being the estimation of the latter part for the representative agent a priori.

Description of model variables

This study is based on the studies Bos et al. (2020), Williams et al., 2016 showing that increased income and needs of the people along with the aging of the population have promoted the development of service quality of nursing homes for the elderly. The study focuses on examining the impact of income groups on nursing home construction costs in 10 provinces and cities: Ha Noi, Vinh Phuc, Bac Ninh, Hai Phong, Nam Dinh, Da Nang, Ho Chi Minh City, Can Tho, Dong Nai, and Binh Duong. Eight variables are used in the study: Average population (DSTB), Average income (TNBQ), Income group 1 (TN1), Income group 2 (TN2), Income group 3 (TN3), Income group 4 (TN4), Income group 5 (TN5), Cost of using nursing home (CP), data are collected annually from 2012 to 2022. The average population (DSTB), Average income (TNTB), Income group 1 (TN1), Income group 2 (TN2), Income group 3 (TN3), Income group 4 (TN4), Income group 5 (TN5), Cost of using nursing home (CP) are logged to fit a normal distribution, suitable for the model input. Data are sourced from the General Statistics Office of Vietnam (<http://portal.thongke.gov.vn/KhodulieuMS/>).

4. Results and Discussion

Table 1. The results of bayesian factor analysis and prior testing

(1) Parameters are elements of the linear form xb_CP .	
{CP:TN1 TN2 TN3 TN4 TN5 DS TNTB} ~ normal(0,10000)	{sigma2} ~ igamma(.01,.01)
Bayesian linear regression	MCMC iterations= 12,500
	Burn-in = 2,500 MCMC sample size = 10,000
	Number of obs = 110
	Acceptance rate = .3447
	Efficiency: min = .006454
Random-walk Metropolis–Hastings sampling	avg = .05729
Log marginal-likelihood = -147.21387	max = .2011

Equal-tailed						
	Mean	Std. dev.	MCSE	Median	[95% cred. interval]	
CP						
TN1	.8516227	.6729682	.083771	.8185922	-.4098072	2.252402
TN2	-1.473994	1.341405	.119697	-1.446641	-4.146665	1.171051
TN3	3.071	2.02629	.117094	3.054347	-.8192279	7.078055
TN4	2.653515	1.427255	.061808	2.647982	-.1035441	5.387156
TN5	6.740472	1.941794	.178514	6.738192	3.076786	10.81571
DS	-.0594208	.0866263	.005025	-.0592357	-.2237529	.1169265
TNTB	-9.013757	4.642751	.412564	-9.022836	-18.06742	-.4605266
sigma2	.4012009	.0559494	.001407	.3970965	.3038236	.5226343
score_cons	8.87007	584.3105	13.0298	24.18447	-942.2569	953.1918

The simulation results in Table 1 demonstrate a suitable level of prior information and meet the criteria for conducting Bayesian regression, followed by Bayes Factors analysis and posterior Bayes testing (Bayestest Model). The results indicate that the Acceptance rate = .3447 > 0.1 and Efficiency: min = .006454 > 0.01 serve as indicators for selecting simulations with robust

and appropriate prior information. Moreover, MCSE < Std. dev. and the correlation coefficients fall within acceptable confidence intervals, suggesting that, fundamentally, the Bayes factor effectively balances the likelihood of similar prior information against the likelihood of a hypothesis.

Table 2. Parameters are elements of the linear form CP

CP ~ regress(xb_CP,{sigma2})	
Priors:{CP:TN1 TN2 TN3 TN4 TN5 DS TNTB} ~ normal(0,10000)	
{sigma2} ~ igamma(.01,.01)	
{score:_cons} ~ uniform(-1000,1000)	
Bayesian linear regression	Number of chains = 5
	Per MCMC chain:
	Iterations = 12,500
	Burn-in = 2,500
	Sample size = 10,000
	Number of obs = 110
	Avg acceptance rate = 0.3397
	Avg efficiency: min = 0.01509
	avg = 0.05473
Random-walk Metropolis–Hastings sampling	max = 0.226
Avg log marginal-likelihood = -147.45164	Max Gelman–Rubin Rc = 1.091

The posterior Bayes test in Table 2 facilitates the comparison of prior probabilities among simulations with varying prior information. The test results indicate that the Max Gelman-Rubin $R_c = 1.091 < 1.1$, suggesting that,

based on the research data combined with prior information, the simulation exhibits favorable posterior probability and meets the requirements of Bayesian analysis.

Table 3. Gelman–Rubin convergence diagnostic

Number of chains = 5	
MCMC size, per chain = 10,000	
Max Gelman–Rubin $R_c = 1.09094$	
CP	R_c
TN1	1.016116
TN2	1.011646
TN3	1.064787
TN4	1.006342
TN5	1.083671
DS	1.004076
TNTB	1.09094
sigma2	1.000438
score_cons	1.000394

Furthermore, to ensure the posterior Bayesian model results are robust and reliable, the study conducted Gelman-Rubin convergence diagnostic in Table 3. The results demonstrate that the R_c coefficient for all variables satisfies the convergence rule: $R_c < 1.1$. Therefore, after constructing simulations with prior information and conducting Bayesian factor analysis and posterior Bayesian testing, it aids in selecting simulations with appropriate prior information.

The Bayesian analysis is simulated through Markov chain Monte Carlo (MCMC) in Table 4. A Bayesian model is considered robust when MCMC stops. The diagnostic plot of MCMC chain convergence includes Trace

Plot, Histogram, Autocorrelation Plot, and Density Plot. Figure 1 shows that the trace plot fluctuates around the mean value, indicating the MCMC chain meets convergence criteria. Additionally, the autocorrelation plot in the graphs oscillates around the level below 0.02, demonstrating conformity with the simulated distribution density and reflecting all delays within effective bounds. Furthermore, the posterior distribution plot and density estimation reveal that the shapes of the plots tend towards that of a normal distribution, demonstrating consistency. Therefore, the results from Figure 1 indicate that the MCMC chain meets convergence criteria.

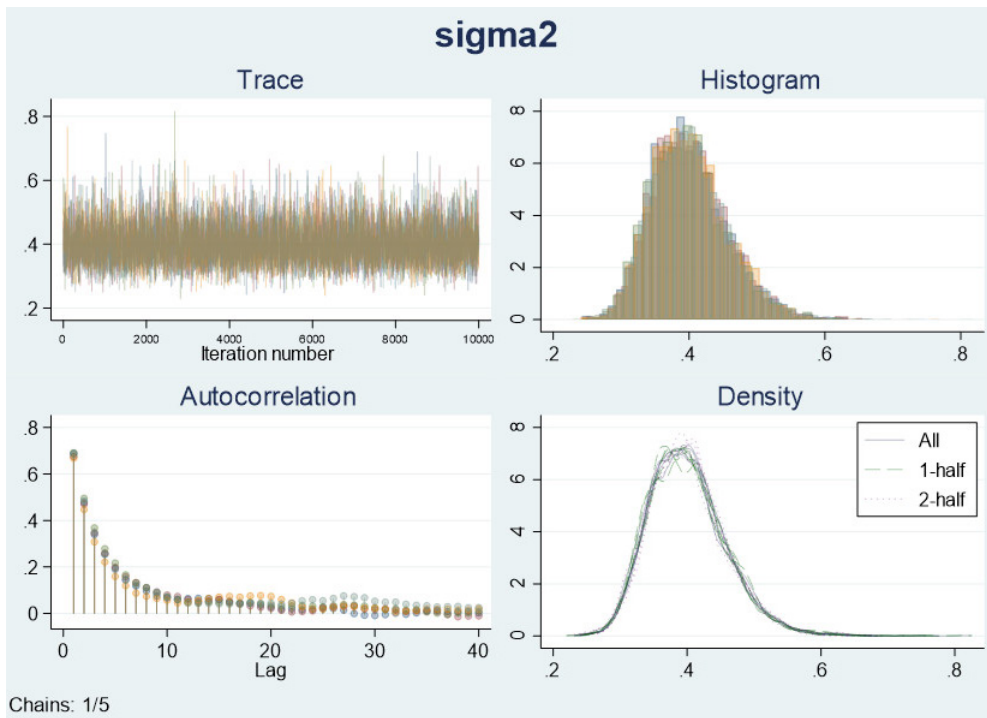


Figure 1. Markov Chain Monte Carlo Convergence Diagnostic Plot

Table 4. The Results of Bayesian Regression

Equal-tailed	Mean	Std. dev.	MCSE	Median	[95% cred. interval]	
CP						
TN1	.7942541	.6551551	.023181	.7930003	-.519084	2.059318
TN2	-1.42942	1.399612	.041996	-1.39813	-4.153911	1.36136
TN3	3.177402	1.893217	.064909	3.302708	-.8618655	6.535469
TN4	2.634244	1.395214	.041195	2.646649	-.1535521	5.288837
TN5	6.713578	1.820896	.065979	6.816412	3.036111	10.12315
DS	-.0584281	.0914468	.00251	-.0587784	-.2369344	.1216088
TNTB	-9.060376	4.373668	.159208	-9.381828	-16.94511	-.1688083
sigma2	.400479	.0575257	.000709	.3955173	.3045369	.5282199
score_cons	3.213563	575.1607	5.41023	6.085811	-947.9405	950.0491

The results of the posterior Bayesian regression analysis in Table 4 exhibit considerable similarity to the prior simulation outcomes. All MCSE coefficients are smaller than the standard deviation, ensuring model stability. Additionally, the correlation coefficients among variables lie within permissible

confidence intervals. Notably, the population (DS) exhibits the strongest correlation and a negative correlation coefficient with nursing home expenses. This could be attributed to the concentration of populations in major cities, where the proportion of elderly individuals is higher, thus attracting more investment

into various forms of eldercare facilities and improving their competitive edge. Among the income groups of residents, the highest-income group (Group 5) shows a positive correlation with nursing home expenses, aligning well with reality. In recent years, affluent families have shown a preference for high-end nursing homes offering superior care but at higher costs than standard facilities. However, the average income demonstrates a negative correlation with nursing home expenses, indicating that Vietnamese individuals, fundamentally, may not prioritize living in nursing homes during their elderly years. These research findings echo previous studies and highlight the need to attract individuals by enhancing the quality of service in nursing homes, aiming for fundamental transformations in relationships and common structures within these facilities, affecting both residents and staff. Approaches to alleviate boredom, loneliness, and meaninglessness in nursing homes through the creation of an environment conducive to life development have been proposed (Kane et al., 1998; Thomas, 1999). Recent cultural change efforts include empowering nursing assistants, developing a more homogeneous staff, abolishing hierarchical management, adjusting physical spaces by creating smaller living communities, sometimes referred to as households, neighborhoods, or clusters, simulating home environments by allowing residents access to kitchens, laundry rooms, and the like, extending meal times and choices as well as improving air quality, valuing and emphasizing individual, personal benefits over striving for high achievements in large organized activities, holding regular community meetings of resident groups, along with soliciting resident input on governance and decisions affecting daily life, and providing a range of end-of-life support measures designed to assist residents, staff, other residents, and families,

including post-death personal commemorative activities. People's income is increasing along with the aging population, causing the need for good quality nursing homes for the elderly to increase. Vietnam needs to attract investment in this type to enrich people's need for nursing homes. At the same time, as income increases, people tend to choose high-quality services. State-owned nursing homes cannot meet people's needs, so it is necessary to promote the private sector to provide them. this type of service.

5. Conclusions

Typically, the quality of nursing homes serving the elderly is often low and has not been prioritized for improvement, except for privately funded nursing homes. Society tends to accept a range of issues in nursing home life as given: the physical environment resembling a hospital, rigid daily life habits, a general lack of privacy, overall low physical facility conditions, and longstanding evidence of understaffing and inadequate training to meet residents' physical needs. Most of them are impoverished, and those who are not struggle to access their resources. Operators are less concerned with improvement as there may be a perceived trade-off between the amount spent on nursing homes and the funds left for other forms of care.

The lack of attention to measuring the satisfaction of the elderly living in nursing homes is evident. Although various aspects of quality are considered components of the care provided in nursing homes, many researchers believe that the satisfaction of residents is the most appropriate measure of quality in nursing home care. Therefore, resident satisfaction is an indispensable part of nursing home care quality and is influenced by various individuals, such as the residents themselves, their family members, staff, and nursing home authorities.

References

- Bos, A., Kruse, F. M., & Jeurissen, P. P. T. (2020). For-profit nursing homes in the Netherlands: what factors explain their rise? *International Journal of Health Services*, 50(4), 431-443. <https://doi.org/10.1177/0020731420915658>
- Chu, L. W., & Chi, I. (2008). Nursing homes in China. *Journal of the American Medical Directors Association*, 9(4), 237-243. <https://doi.org/10.1016/j.jamda.2008.01.008>
- Castle, N. (2005). Are family members suitable proxies for transitional care unit residents when collecting satisfaction information? *International Journal for Quality in Health Care*, 17(5), 439-445. <https://doi.org/10.1093/intqhc/mzi056>
- Corazzini, K. N., Meyer, J., McGilton, K. S., Scales, K., McConnell, E. S., Anderson, R. A., Lepore, M., & Ekman, I. (2016). Person-centered nursing home care in the United States, United Kingdom, and Sweden: Why building cross-comparative capacity may help us radically rethink nursing home care and the role of the RN. *Nordic Journal of Nursing Research*, 36(2), 59-61. <https://doi.org/10.1177/2057158516649145>
- Coulter, A., & Oldham, J. (2016). Person-centred care: What is it and how do we get there? *Future Hospital Journal*, 3(2), 114-116. <https://doi.org/10.7861/futurehosp.3-2-114>
- Fahey, T., Montgomery, A. A., Barnes, J., & Protheroe, J. (2003). Quality of care for elderly residents in nursing homes and elderly people living at home: Controlled observational study. *BMJ: British Medical Journal: International Edition*, 326(7389), 580-583. <https://doi.org/10.1136/bmj.326.7389.580>
- Gerritsen, D. L., Steverink, N., Ooms, M. E., de Vet, H. C., & Ribbe, M. W. (2007). Measurement of overall quality of life in nursing homes through self-report: The role of cognitive impairment. *Quality of Life Research*, 16(6), 1029-1037. <https://doi.org/10.1007/s11136-007-9203-7>
- Jenkins Morales, M., & Robert, S. A. (2020). The effects of housing cost burden and housing tenure on moves to a nursing home among low-and moderate-income older adults. *The Gerontologist*, 60(8), 1485-1494. <https://doi.org/10.1093/geront/gnaa052>
- Kane, R. A., Kane, R. L., & Ladd, R. L. (1998). *The heart of long-term care*. New York: Oxford University Press.
- Molony, S. L., Kolanowski, A., Van Haitsma, K., & Rooney, K. E. (2018). Person-centered assessment and care planning. *The Gerontologist*, 58(Suppl. 1), S32-S47. <https://doi.org/10.1093/geront/gnx173>
- Reader, T. W., Gillespie, A., & Roberts, J. (2014). Patient complaints in healthcare systems: A systematic review and coding taxonomy. *BMJ Quality & Safety*, 23(8), 678-689. <https://doi.org/10.1136/bmjqs-2013-002437>
- Spangler, D., Blomqvist, P., Lindberg, Y., & Winblad, U. (2019). Small is beautiful? Explaining resident satisfaction in Swedish nursing home care. *BMC Health Services Research*, 19(1), 886. doi:10.1186/s12913-019-4694-9
- Szczepura, A. (2011). Residential and nursing homes: how can they meet the challenge of an aging population? *Aging health*, 7(6), 877-887. <https://doi.org/10.2217/ahe.11.79>
- Parker, C., Barnes, S., McKee, K., Morgan, K., Torrington, J., & Tregenza, P. (2004). Quality of life and building design in residential and nursing homes for older people. *Ageing & Society*, 24(6), 941-962. <https://doi.org/10.1017/S0144686X04002387>
- Thomas, W. H. (1999). *The Eden Alternative handbook: The art of building human habitats*. Summer Hill Company Incorporated.
- Vaismoradi, M., Wang, I. L., Turunen, H., & Bondas, T. (2016). Older people's experiences of care in nursing homes: A meta-synthesis. *International Nursing Review*, 63(1), 111-121. <https://doi.org/10.1111/inr.12232>
- Williams, A., Straker, J. K., & Applebaum, R. (2016). The nursing home five star rating: How does it compare to resident and family views of care? *The Gerontologist*, 56(2), 234-242. <https://doi.org/10.1093/geront/gnu043>