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Analysis of the Current Situation and Influencing Factors of Social Isolation Among the Elderly in the Community

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Abstract: *Objective:* To investigate the current situation of social isolation among the elderly in the community, and to analyze its influencing factors. *Methods:* A total of 265 elderly people were selected to conduct the survey using the general information questionnaire and the Chinese version of the social isolation scale for the elderly. *Results:* The social isolation score of the elderly was (20.15 ± 0.23). Factors such as age, education level, economic status, and social participation ability influenced the social isolation score ($P < 0.05$). *Conclusion:* The social isolation of the elderly is more serious, and the social isolation can be alleviated by improving the level of education and the economic situation and strengthening social participation.

Keywords: Community; Elderly; Social isolation

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1. Introduction

According to the latest data released by the National Bureau of Statistics, at the end of 2022, the number of elderly people aged 60 and above reached 280 million [1]. The elderly in the community are the main part of the elderly, and the elderly in the community have various psychological problems, especially social isolation, due to factors such as illness, widowhood, and experiencing emergencies. Social isolation refers to a state of complete or near-total lack of contact between an individual and society [2]. The purpose of this study was to investigate the current situation and influencing factors of social isolation among the elderly in the community.

2. Materials and methods

2.1. General information

A total of 268 questionnaires were distributed in this study, and 265 questionnaires were valid, with an effective rate of 98.88%.

(1) Inclusion criteria: (a) Age ≥ 60 years old; (b) Have certain comprehension skills and good communication; (c) Lived in the community for ≥ 1 year; (d) Informed consent and voluntary participation.

(2) Exclusion criteria: (a) Audio-visual impairment and language impairment; (b) Patients with neurological dysfunction and out-of-control diseases.

2.2. Research methods: cross-sectional survey

2.2.1. Research tools

(1) General information questionnaire, mainly including gender, age, ethnicity, education level, occupation, marital status, etc.

(2) Chinese version of the Social Isolation Scale in Older Adults (C-SIS): A total of 6 items, including two dimensions of connection and belonging. The Likert 5-level scoring method was used, with a total score of 0–24 points, and a lower score indicated a more severe social isolation. The Cronbach's α coefficient of the total scale was 0.763.

2.3. Statistical analysis

SPSS 25.0 was used for statistical analysis. Data were expressed as either mean ± standard deviation (SD) or [*n* (%)]. A *P* value of less than 5 indicated a statistically significant difference.

3. Results

3.1. General information on older people in the community and univariate analysis

A total of 265 community elderly people were included in this study (**Table 1**). The chi-squared test was used to analyze the differences in social isolation status in different data characteristics. As can be seen from **Table 1**, there were significant differences with different genders, ages, education levels, occupations, marital status, chronic diseases, surgical history, walkers, children, residence, monthly income, hobbies, and community care attitudes ($P < 0.05$).

Table 1. Comparison of the incidence of social isolation among older adults in communities with different characteristics

Item	Social isolation	Non-social isolation	χ^2	*P*
Gender				
Male	70 (51.47)	66 (51.16)	0.003	0.96
Female	66 (48.53)	63 (48.84)		
Age				
60–69	78 (57.35)	70 (54.26)	4.928	0.085
70–79	46 (33.82)	36 (27.91)		
≥ 80	12 (8.82)	23 (17.83)		

Table 1. (Continues)

Item	Social isolation	Non-social isolation	χ^2	*P*
Ethnic				
Han Chinese	120 (88.24)	120 (93.02)	1.776	0.183
Minority	16 (11.76)	9 (6.98)		
Education				
Elementary school and below	60 (44.12)	62 (48.06)		
Junior high school	63 (46.32)	32 (24.81)	20.985	< 0.001
High school or technical secondary school	8 (5.88)	27 (20.93)		
Technical secondary school or above	5 (3.69)	8 (6.20)		
Occupation				
Non-manual	32 (23.53)	28 (21.71)	1.254	0.534
Manual	78 (57.35)	69 (53.49)		
Semi-manual	26 (19.12)	32 (24.81)		
Marital status				
Yes	111 (81.62)	115 (89.15)	2.991	0.084
No	25 (18.38)	14 (10.85)		
Chronic medical conditions				
None	22 (16.18)	40 (31.01)		
One	52 (38.24)	51 (39.53)	12.939	0.005
Two	33 (24.26)	26 (20.16)		
Three and more	29 (21.32)	12 (9.30)		
History of surgery				
No	86 (63.24)	96 (74.42)	3.849	0.05
Yes	50 (36.76)	33 (25.58)		
Walker usage				
Yes	50 (36.76)	27 (20.93)	8.053	0.005
No	86 (63.24)	102 (79.07)		
Living children				
No	14 (10.29)	2 (1.55)	8.922	0.003
Yes	122 (89.71)	127 (98.45)		
Number of children				
0	12 (8.82)	2 (1.55)		
1	35 (25.74)	22 (17.05)		
2	47 (34.56)	53 (41.09)	14.731	0.022
3	30 (22.06)	41 (31.78)		
4	8 (5.88)	7 (5.43)		
5	4 (2.94)	2 (1.55)		
6	0 (0.00)	2 (1.55)		

Table 1. (Continues)

Item	Social isolation	Non-social isolation	χ^2	*P*
Residency				
Living alone	22 (16.18)	9 (6.98)		
With a spouse	82 (60.29)	76 (58.91)	9.781	0.021
With children	25 (18.38)	40 (31.01)		
Other	7 (5.15)	4 (3.10)		
Monthly income (Chinese Yuan)				
≤ 3,000	76 (55.88)	78 (60.47)	5.061	0.167
3,000–6,000	35 (25.74)	39 (30.23)		
≥ 6,000	25 (18.38)	12 (9.30)		
Hobbies				
None	47 (34.56)	28 (21.71)	7.091	0.029
One	28 (20.59)	41 (34.78)		
Two and more	61 (44.85)	60 (46.51)		
Attitudes towards community-based elderly care				
Dissatisfied	7 (5.15)	4 (3.10)	0.765	0.682
Ordinary	66 (48.53)	66 (51.16)		
Satisfied	63 (46.32)	59 (45.74)		

3.2. Social isolation among older adults in the community

The social isolation score was 20.15 ± 0.23. A C-SIS score of ≤ 20 is classified as social isolation. 104 elderly people were in low physical activity, 119 elderly people had poor psychological resilience, and 120 elderly people had low overall well-being. The results are detailed in **Table 2**.

Table 2. Social isolation of elderly people in the community (*n* = 265)

Item	Score (mean ± SD)	Group	Number	Composition ratio
Social isolation	20.15 ± 0.23	> 20	129	48.7
		≤ 20	136	51.3
Physical activity	212.55 ± 6.77	> 180	161	60.8
		≤ 180	104	39.2
Mental resilience	26.62 ± 0.44	> 26	146	55.1
		≤ 26	119	44.9
Overall wellbeing	158.00 ± 1.70	> 158	145	54.7
		≤ 158	120	45.3

3.3. Multivariate analysis

Taking social isolation as a dichotomous dependent variable, and using gender, age, ethnicity, etc. as independent variables, the multivariate unconditional logistic regression model was included. The specific results are detailed in **Table 3**.

Table 3. Logistic regression analysis of influencing factors of social isolation among elderly people in the community (n = 265)

Factors	Reference	B	SE	Wald χ^2	P	OR	95% CI
Gender							
Male	Female	-0.516	0.34	2.306	0.129	0.597	0.307–1.162
Age							
60–69	≥ 80	1.225	0.654	3.502	0.061	3.403	0.944–12.271
70–79		0.913	0.641	2.027	0.155	2.492	0.709–8.76
Ethnic							
Han Chinese	Minority	-0.097	0.569	0.029	0.865	0.908	0.298–2.768
Education							
Elementary school and below	Technical secondary school or above	2.011	0.997	4.071	0.044	7.471	1.059–52.693
Junior high school		2.474	0.953	6.74	0.009	11.872	1.834–76.868
High school or technical secondary school		0.288	0.968	0.089	0.766	1.334	0.2–8.898
Occupation							
Non-manual	Semi-manual	0.432	0.531	0.662	0.416	1.541	0.544–4.364
Manual		0.185	0.452	0.167	0.682	1.203	0.496–2.917
Marital status							
Yes	No	-0.075	0.577	0.017	0.897	0.928	0.3–2.874
Chronic medical conditions							
None	Three and more	-1.558	0.609	6.557	0.01	0.21	0.064–0.694
One		-0.495	0.536	0.851	0.356	0.61	0.213–1.744
Two		-0.324	0.556	0.338	0.561	0.724	0.243–2.153
History of surgery							
No	Yes	-0.251	0.38	0.437	0.509	0.778	0.369–1.639
Walker usage							
Yes	No	1.293	0.417	9.611	0.002	3.644	1.609–8.252
Living children							
No	Yes	18.998	6948.857	0	0.998	178209005.3	0–.c
Number of children							
0	6	0.333	0	-	-	1.396	1.396–1.396
1		19.744	6948.857	0	0.998	375741889	0–.c
2		18.424	6948.857	0	0.998	100359452.1	0–.c
3		18.024	6948.857	0	0.998	67228404.7	0–.c
4		18.778	6948.857	0	0.998	143006350.3	0–.c
5		20.488	6948.857	0	0.998	790589110.8	0–.c

Table 3. (Continues)

Factors	Reference	B	SE	Wald χ^2	P	OR	95% CI
Residency							
Living alone	Other	1.327	0.929	2.041	0.153	3.771	0.611–23.289
With a spouse		0.783	0.782	1.001	0.317	2.187	0.472–10.136
With children		-0.478	0.817	0.342	0.559	0.62	0.125–3.075
Monthly income							
≤ 3,000	≥ 6,000	-1.638	0.687	5.68	0.017	0.194	0.051–0.748
3,000–6,000		-1.376	0.629	4.778	0.029	0.253	0.074–0.867
Hobbies							
None	Two and more	1.449	0.454	10.191	0.001	4.26	1.75–10.372
One		0.043	0.421	0.01	0.918	1.044	0.458–2.381
Attitudes towards community-based elderly care							
Dissatisfied	Satisfied	0.464	0.822	0.319	0.572	1.59	0.318–7.959
Ordinary		0.129	0.363	0.127	0.722	1.138	0.559–2.316

4. Discussion

4.1. Social isolation of older adults in the community

Cudjoe *et al.* [2] found that the older adults prevalence of social isolation was 24.0% in the United States. Han *et al.* [3] conducted a survey and found the incidence of social isolation was 24.3%. The results of this study showed that the incidence rate was 51.3%. Differences in education level, geographical environment, concept definition, and research methods may be the reasons for the differences in the incidence of social isolation among the elderly at home and abroad. The incidence of social isolation among the elderly in this study was at a high level, suggesting that the risk of social isolation among the elderly is high, which should be paid attention to. The study also showed that physical activity and social isolation have a certain impact, which is consistent with the research conclusions of Li *et al.* [4], suggesting that the elderly are less physically active, have fewer friends, and are also very prone to social isolation.

4.2. Educational attainment

The results of this study showed that education level was negatively correlated with the incidence of social isolation among the elderly in the community. This may be due to the fact that the lower the education level of older adults, the worse their learning ability, the lower their ability to use the Internet to obtain and receive information, and the inability to improve their social adaptability through the use of the Internet, which leads to social isolation [5].

4.3. Age and disease

This study found that chronic diseases are more likely to occur with age. Studies have confirmed that common chronic diseases in the elderly are risk factors for social isolation [6]. The coexistence of multiple chronic diseases can impair the physical function of the elderly, and physical dysfunction will affect their interaction and relationship with family and social members, affecting their psychological state and social relationships, thereby increasing the risk of social isolation.

4.4. Ability to participate in society

This study found that older adults with poor social participation were more likely to experience social isolation. Actively participating in social activities can help the elderly improve their self-awareness and realize their self-worth, and also provide a channel for making friends and better integrating into the social collective. Poor social participation will reduce the social participation of the elderly and increase the incidence of social isolation.

5. Conclusion

In summary, the current situation of social isolation of the elderly in the community is not optimistic and should be paid attention to. The influencing factors of social isolation were mainly reflected in education level, economic income, age and disease, and social participation ability.

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Disclosure statement

The authors declare no conflict of interest.

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