

Cross-sectional study on the SF-36, the general self-efficacy, the social support, and the health promoting lifestyle of the young elderly in a community in Shanghai, China

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Background: The health levels of young elderly individuals are generally low due to multiple factors. This study sought to analyze factors that affect the health of the young elderly to provide a reference for improving their level of health.

Methods: We used cluster sampling to survey 1,000 young elderly residents aged between 60 and 69 and living in Town P, District M, Shanghai. Health levels were assessed using the Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36), Social Support Rate Score (SSRS), General Self-Efficacy Scale (GSES), and Health Promoting Lifestyle Profile II (HPLP II) instruments. Demographic characteristics were compared based on the SF-36 score and coupled with one-way analysis and stepwise regression analysis, to determine factors affecting health.

Results: The young elderly in this community have a high morbidity of chronic disease and score low in the SF-36, SSRS, GSES, and HPLP II. One-way analysis reveals that gender, education, marriage, current work, total social support score, total general self-efficacy score, and total health promoting score are factors affecting the scoring of the SF-36 and the results of stepwise regression analysis. Marriage, current working condition, age, total score of social support, total score of health promotion behavior, type of work, presence of chronic disease, and the number of children are positively correlated with the SF-36 score and can predict it.

Conclusions: To improve the health of community living elderly young it is necessary to adopt appropriate health promotion measures which motivate their self-efficacy and health responsibility. Such measures include increasing interactions between the young elderly and medical resources and offering them public participation opportunities to ensure that they receive adequate social support.

Keywords: Community; young elderly; health influential factors

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Introduction

The young elderly account for over half of the Chinese elderly population and are a major force in driving the national and social aging process (1). However, research on the health characteristics of this group is lacking. Existing research shows that health across all age groups can be affected by multiple factors that including demographic, cultural, and sociological factors. We used the Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36), Social Support Rate Score (SSRS), General Self-Efficacy Scale (GSES), and health promoting lifestyle profile II (HPLP II) questionnaires, to analyze the overall health of the young elderly and determine the impact of demographic, cultural, and sociological factors on specific outcomes. These results are conducive to establishing an understanding of the extent to which these factors exert their impacts and provides reference for the development of education proposals to improve the health of the young elderly.

We present the following article in accordance with the SURGE reporting checklist (available at http://dx.doi. org/10.21037/apm-20-2462).

Methods

Participants

As a new urban area in Shanghai, District M is situated on the urban-rural fringe, southwest of the city, and with an aging population. By the end of 2014, the number of residents aged 60 and over who were registered in the district was 282,290, accounting for 26.68% of the total registered population and the young elderly (aged between 60 and 70) accounted for 57.26% of elderly residents that group. Town P is located in District M and is the home of many "empty-nest" seniors as a result of the migration of young people to central urban areas and the relocation of people who previously lived in central urban areas. This has led to an elderly population surge in the community, increasing the demand of community old-age care (1). The registered population of Town P is 350,000, of whom 102,501 (29.3%) are over 60 years old and the young elderly takes up a share of 56.7% of this.

The inclusion criteria for individuals surveyed in this study are as follows: (I) are community residents; (II) are aged between 60 and 69 inclusive; (III) have the physical and mental capability to participate in the interviews in either mandarin or its dialects; (IV) provide their informed consent to be interviewed and allow their family to be notified if necessary. Those excluded from the interview were: (I) those having mental or cognitive disorders, major illnesses, or late-to-terminal-stage diseases; (II) those with poor compliance.

The calculation can be conducted based on literature of previous surveys. But due to the lack of research in the scoring of the health of the young elderly, the query failed to present the standard score of the SF-36 of the young elderly. And the outcomes of the research in the general population and the elderly are mostly at the level of medium health (2-8). The sample size was calculated based on ϖ =50%, and according to the formula for the calculation

of sample size $N = U_{\alpha}^2 \pi (1-\pi)/\delta^2$. In the formula, δ is set to be 5% as the permissible error to ensure accuracy, and α is set to be 1.96 as a 95% confidence limit to ensure accuracy is required. Using this formula, a sample size of 600 was calculated, although an objective of 720 was set as the formula allows an increase of 20%. Eventually 1,000 questionnaires were distributed and collected and 984 were found to be valid, accounting for 98.4% of the total.

All procedures performed in this study involving human participants were in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by the Ethics Committee of Ren Ji Hospital and informed consent was taken from all the participants.

Outcome measures

The major outcome of this study is the SF-36 score of the young elderly in the community. The outcome indicates that the surveyed young elderly are generally at a low level of health. The SF-36 is positively correlated with marriage, current working condition, age, total score of social support, total score of health promotion behavior, type of work, chronic disease, and number of children.

Assessment of health behavior levels

The SF-36 survey is a widely used assessment instrument which assesses 9 different aspects: physiological functioning (PF), physical role functioning (RP), bodily pain (BP), general health perceptions (GH), vitality (VT), social role functioning (SF), emotional role functioning (RE), mental health (MH), and health changes (9-11). It includes two comprehensive assessments, i.e., physical health (including PF, RP, BP, and GH), and psychological health (including VT, SF, RE, and MH). It has excellent reliability and validity and is applicable to the cohort in this survey. The Cronbach's α coefficient of the scale is 0.869. Chinese scholars have adapted the SF-36 for use in this country by developing new assessment standards which include low health level for scores below 71, medium health level for scores between 72 and 117, and high health level for scores above 117 (12).

The survey was translated into a Chinese version by the Teaching and Research Office of Social Medicine of the Medical School of Zhejiang University in 1991.

Covariant

Based on the baseline record of the sociodemographic data,

the SSRS, GSES, and HPLP II instruments were also used in the questionnaire survey. The SSRS used was designed by Xiao Shuiyuan (13), and includes objective support (three items), subjective support (four items), and supportseeking behavior (three items). The scores of the 10 items add up to a total score ranging from 12 to 64. Scores less than or equal to 22 represent low social support level, between 23 and 44 indicate medium social support level, and higher than 45 for a high social support level. Higher scores indicate greater social support. The coefficient of internal consistency is between 0.890-0.940 and the restretest reliability is 0.920, indicating a good predictive validity (14,15). Developed by Zhang et al. in 1995 (16,17), the GESE consists of 10 items, assesses the confidence that one has when encountering setbacks or challenges, and adopts the 4-point Likert scale. The scores of each of the 10 items are added and the sum divided by 10 to obtain a total score. The total score has three levels: high self-efficacy level [3.1-4], medium self-efficacy level [2-3], and low selfefficacy level [1-1.9]. The HPLP II used was revised by Cao et al. (18) and has a Cronbach's α coefficient ranging from 0.63 to 0.81 and test-retest reliability of 0.69. This instrument has 52 items covering six dimensions: health responsibility, nutrition, interpersonal relationships, selffulfillment, exercise, and stress management. The outcome has four levels of scores: poor [52–90], mediocre [91–129], good [130-168], and excellent [169-208]. Higher scores indicate higher levels of healthy lifestyle. The instrument is widely applied to research in health behavior and has good validity, with reliability above 0.90 (19).

Quality control

Support for the study was obtained from the local community including local hospitals prior to distribution and all study group members were appropriately trained in its use. The survey was conducted during intervals in the physical examination individuals undergo at their community health care centers. The purpose, significance, and methodology of the study as well as information regarding confidentiality and the privacy principle were explained to individuals. If in agreement to participate, a letter of consent required was signed although participation was at the discretion of the individual and withdrawal could occur at any time. While most individuals completed the survey by themselves, when a participant was unable to complete a questionnaire due to comprehension or visual issues, researchers were instructed to verbalize the questions

Zhu et al. Community, young elderly, health, influential factors

without inducing the participant. Upon completion of the survey, any questions or issues raised by the participant were addressed in a bid to ensure effectiveness. All information was kept confidential and the survey results were intended for this study only.

Statistics

Following the collection of questionnaires, two researchers entered original data into an Excel spreadsheet which was then imported into SPSS 22.0 software for analysis. Measurement data was described and analyzed with $\bar{x}\pm s$, the chi-squared test, and the independent *t*-test, and the one-way analysis of variance was adopted to find the demographic, sociological, and cultural factors that might influence SF-36 scores. With the significantly different factors in the one-way analysis as the independent variables and scores of the SF-36 as the dependent variables, stepwise regression was used to analyze the influence of the independent variables on dependent variables and the predictive effect. The difference had statistical significance if P<0.05.

Results

A total of 1,000 questionnaires were distributed and collected, and 984 found to be valid. Baseline demographic characteristics are shown in Table 1. This reveals 475 women (48.3%) and 509 men (51.7%) successfully completed the survey and their age ranged from 60 to 69 years, with an average age of 63.97±2.88 years. Most respondents had a monthly household income of less than 6,000 yuan (68.3%), 114 (11%) did not receive formal education, 849 (86.3%) were living with family members, 978 (99.4%) had at least one offspring, and all (100%) had some form of medical insurance. A history of chronic disease was reported by 660 (67%) of respondents with the most prevalent being hypertension (57.7%), followed by migraine (41.3%), heart disease (32.5%), chronic bronchitis (26.9%), and diabetes (14.3%). The chronic diseases had an average morbidity rate of 67% (Table 2) and a history of two or more chronic diseases was reported by 404 (41%) respondents with a comorbidity rate of 61.2%.

The total SSRS scores of respondents was 38.29 ± 5.2 , indicating a medium level; the total score of the GSES was 2.98 ± 0.82 , also indicating a medium level; the total score of the HPLP II was 132.99 ± 18.84 , indicating a low level; and the total score of the SF-36 was 99.16 ± 4.87 , indicating

Table	1	Dem	ographic	cha	racteristics
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Item	Category	Sample, n	Percentage (%)
Gender	Male	509	48.3
	Female	475	51.7
Age	60–65 years old	552	56.1
	66–69 years old	432	43.9
Education	Illiteracy	114	11.6
	Primary school	455	46.2
	Middle and high school	309	31.4
	Junior college or above	106	10.8
Marriage	Married	830	84.5
	Unmarried, divorced, or other	154	15.5
Number of children	0	6	0.6
	1	32	3.2
	2	731	74.2
	≥3	215	21.8
Living situations	Live alone	73	7.4
	Live with spouse	610	62.0
	Live with children	239	24.3
	Nursing home	62	6.3
Current work	Retired	939	95.4
	Keep working	45	4.6
Previous jobs	Worker/service staff	259	26.3
	Peasant	437	44.4
	Public institution	104	10.6
	Freelancer	184	18.7
Religious belief	Yes	30	3.0
	No	954	97.0
Monthly household income	≤3,000 yuan	270	27.4
	3,001–5,999 yuan	402	40.9
	6,000–10,000 yuan	116	11.8
	≥10,001 yuan	196	19.9
Chronic diseases	Yes	660	67.0
	No	324	33.0
Medical insurance	Rural health insurance	760	77.2
	Urban health insurance	109	11.1
	Employee health insurance	115	11.7
	No	0	0

Table 2 Prevalence of chronic disease (n=984)

Zhu et al. Community, young elderly, health, influential factors

Item	People (n)	Percentage (%)	Scale
Chronic diseases			SSRS
Hypertension	568	57.7	
Heart disease	119	12.0	
Migraine	406	41.3	
Stroke/hemiplegia	93	9.4	GSES
Diabetes	143	14.5	HPLP
Hyperlipidemia	62	6.3	
Head injury history	63	6.4	
Kidney disease	105	10.6	
Chronic bronchitis	264	26.9	
Hyperthyroidism/hypothyroidism	51	5.1	
Number of chronic diseases			
0	324	32.9	SF-36
1	257	26.1	
2	213	21.6	
3	82	8.3	
4	28	2.8	
5	14	1.4	
6	9	0.9	
7	16	1.6	
8	10	1.0	
9	9	0.9	
10	10	1.0	SSRS,
11	12	1.2	Scale;

Scale	Dimension	Score
SSRS	Objective support	8.67±1.89
	Subjective support	24.00±3.74
	Support availability	7.85±2.09
	Total	38.29±5.27
GSES	Total	2.98±0.82
HPLP	Health responsibility	21.66±4.64
	Nutrition	22.68±4.35
	Interpersonal relationship	21.80±4.51
	Self-fulfillment	19.56±5.38
	Exercise	16.10±4.98
	Stress management	18.65±3.91
	Total	132.99±18.84
SF-36	Physiological functioning	21.60±1.98
	Physical role functioning	6.12±0.70
	Bodily pain	6.21±1.99
	General health perceptions	17.25±1.81
	Vitality	16.07±1.63
	Social role functioning	6.71±1.06
	Emotional role functioning	4.38±1.49
	Mental health	20.82±2.45
	Total	99.16±4.87
	Health changes	3.25±0.77

SSRS, Social Support Rate Score; GSES, General Self-Efficacy Scale; HPLP II, health promoting lifestyle profileII; SF-36, The Medical Outcomes Study 36-Item Short-Form Health Survey.

a medium level (*Table 3*). The standard scores converted from original scores for the dimensions are all at medium levels, of which BP, RE, and RP have low scores and MH, GH, and VT have high scores. The overall health level of respondents is low.

As shown in *Table 4*, results indicate that gender, marital status, and the types of work respondents have engaged in have an impact on the total score of the SF-36 (P<0.05).

According to the results of the single factor analysis, 12 variables were assigned as influencing factors. After assigning dummy variable values to living conditions (compared with living in pension institutions), working types (compared with freelancers), and taking the total score of the health survey profile as the dependent variable, stepwise regression analysis was carried out (*Table 5*). See *Table 6* for specific assignment items and assignment details.

All the data were input into SPSS 22 statistical software and the model was constructed by stepwise regression. The variable entered into P_{in} =0.1, the variable elimination equation P_{out} =0.15, and the independent variables were calculated in a collinear manner. After 12 iterations of variable selection, the results showed eight factors in the variable equation model, the model equation has a certain predictive effect on the health survey profile, the model is well constructed, and the tolerance >0.1, Vif <10, which shows that the variables are highly correlated with the

Table 4 One-way	analysis of influential	factors of SF-36 scores
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Item	Sample	SF-36 scores	F/t value	P value
Gender			12.311	<0.01
Female	475	98.78±4.79		
Male	509	99.95±4.93		
Age years old			58.648	<0.01
60–64	487	98.14±4.12		
65–69	497	100.46±5.41		
Marriage			35.262	<0.01
Married	831	90.09±4.21		
Divorced	95	80.13±4.82		
Widowed	33	81.30±5.08		
Unmarried	25	82.52±2.84		
Education			4.135	0.008
Illiteracy	114	98.80±4.37		
Primary school	455	99.01±5.24		
Middle and high school	309	99.18±5.33		
College or above	106	101.26±5.17		
Living situations			3.843	0.009
Live alone	73	98.85±4.93		
Live with spouse	610	100.81±4.94		
Live with children	239	99.41±4.47		
Nursing home	62	99.21±4.87		
Number of children			5.322	0.005
0	6	96.93±4.53		
1	32	101.75±2.02		
2	737	98.98±4.62		
≥3	215	99.38±5.81		
Current work			20.354	<0.01
Retired	939	99.03±4.89		
Working	45	103.07±1.01		
Job before retirement			56.557	<0.01
Worker/service staff	172	97.53±4.37		
Peasant	450	98.36±4.20		
Public institution	306	101.38±4.88		
Freelancer	56	102.50±4.19		

Table 4 (continued)

Table 4 (continued)

Item	Sample	SF-36 scores	F/t value	P value
Number of chronic diseases			68.216	<0.01
0	324	98.92±4.42		
1	257	101.78±4.57		
2	213	96.65±4.39		
≥3	191	97.31±4.13		
Health promoting			68.096	<0.01
Poor	16	94.00±4.54		
Mediocre	493	97.44±4.66		
Good	416	100.78±4.41		
Excellent	59	103.38±2.89		
Self-efficacy			41.072	<0.01
Low level	311	97.18±4.05		
Medium level	360	99.88±5.12		
High level	313	100.28±4.73		
Social support			12.661	<0.01
Low level	127	96.75±3.94		
Medium level	685	98.49±4.66		
High level	172	103.56±3.50		

SF-36, The Medical Outcomes Study 36-Item Short-Form Health Survey.

health survey profile score and there is no collinearity.

Discussion

Relations between demographic factors and the health of the young elderly

The Chinese version of the SF-36 provides a comprehensive assessment of physical and psychological health (9,10,20). The survey results show that the health of the young elderly is at a medium level.

Relation between education and the health of the young elderly

Higher education levels correlated with higher SF-36 scores in this survey. Those with higher levels of education were mostly engaged in mental labor and are either still working or continuing to self-educate. Research shows that education has indirect correlations with the health of the elderly. Those with higher levels of education

often receive a higher standard of health care, take better care of themselves, and avoid inappropriate lifestyles. They are likely to stop smoking, have a reasonable diet, exercise (21), and have higher levels of self-efficacy and support-seeking behavior. It is advisable to develop means by which those with lower levels of education can obtain more time, attention, and guidance as it concerns health promotion and support seeking behavior.

Relations between marital status and the health of the young elderly

The results of our survey confirm those of others (22), in showing that the marital status of the young elderly is closely associated with physical and mental health. Those who were divorced, widowed, or unmarried had lower total scores than the married, with the difference having statistical significance (P<0.05). Spousal support in finance, life, and spiritual consolation is significantly important, whereas those who are divorced, widowed, or unmarried

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lterre	Non-st	andardization coefficient	Standardization coefficient			Collinearity statistics	
item	В	Standard error of mean	Beta	t	Р	Tolerance	VIF
Living condition	60.546	1.563		38.737	0.000		
Living alone/pension institution	0.211	0.483	0.016	0.437	0.662	0.440	2.271
Spouse's residence/pension institution	-0.171	0.360	-0.025	-0.475	0.635	0.231	4.332
Children's living/pension institutions	0.149	0.387	0.019	0.385	0.700	0.256	3.899
Original work type							
Workers/freelancers	-1.004	0.478	-0.113	-2.098	0.036	0.214	4.675
Farmers/freelancers	-1.891	0.397	-0.279	-4.759	0.000	0.180	5.552
Career/freelancer	0.275	0.407	0.038	0.677	0.498	0.199	5.020
Chronic diseases	-0.640	0.099	-0.190	-6.484	0.000	0.719	1.391
Total score of health promotion	2.106	0.152	0.395	13.830	0.000	0.758	1.319
Total score of social support	0.824	0.289	0.073	2.849	0.004	0.934	1.170
Age	1.421	0.188	0.209	7.559	0.000	0.812	1.132
Number of children	1.156	0.221	0.159	5.233	0.000	0.669	1.495
Current occupation	-2.162	0.596	-0.110	-3.626	0.000	0.672	1.489
Marriage	0.873	0.296	0.094	2.952	0.003	0.611	1.636

R=0.634, R²=0.402, adjusted R²=0.392, f=3.940, P<0.05. a, dependent variable; \: total score of SF-36. VIF, variance inflation factor.

Table 6 Variable assignment table

Factor	Variable	Assignment method
Gender	X1	1=male, 2=female
Education	X2	1=illiteracy, 2=primary school, 3=middle and high school, 4=junior college or above
Marriage	X3	1=unmarried, 2=married
		3=divorced, 4=widowed
Current work	X4	1=retired, 2=working
Total social support score	X5	1=low level, 2=medium level, 3=high level
Total GSES score	X6	1=poor, 2=general, 3=good, 4=excellent
Total score for health promoting behaviors	X7	1=low level, 2=medium level, 3=high level
Living situations	X8 (Dummy variable 1)	Classification variable assignment: X81=living alone=1, others are 0; X82=live with spouse=1, others are 0; X83=live with children=1, others are 0; Compared with pension institutions
Previous work type	X9 (Dummy variable 2)	Classification variable assignment: X91=worker=1, others are 0; X92=farmer=1, others are 0; X93=career=1, others are 0; Comparison of freelancers
Chronic diseases	X10	1=0 chronic disease; 2=1 chronic disease; 3=2 or more chronic diseases
Number of children	X11	0=0, 1=1, 2=2, 3=3 or more
Age	X12	1=60-64, 2=65-69

GSES, General Self-Efficacy Scale.

Zhu et al. Community, young elderly, health, influential factors

may develop a sense of isolation and frustration, and reject social activities. It is advisable to offer those living in such circumstances targeted social support and other means to assist their inclusion into the community.

Relations between work and the health of the young elderly

Work had almost the same impact on the health of the young elderly as education. Those still working had higher SF-36 scores than those who had retired. There was also a difference in the total score items in the one-way analysis of the types of previous work, with statistical significance (P<0.05). This suggests a degree of satisfaction through work previously performed is maintained even after that work has ceased. The knowledge and skills which people gain over a long working life should be seen as a rich social resource. Encouraging people to share their precious life and work experience may be one way of improving their sense of social contribution and worth and should be considered when designing strategies to improve the health of the young elderly.

Relations between living situations and the health of the young elderly

The elderly who live alone or in nursing homes have lower SF-36 scores than other groups and the difference has statistical significance (P<0.05). This is a finding consistent with the outcomes of other research (23). Traditional perceptions of family in China have made the Chinese people highly reliant on a happy family and retirement or physiological decline can reduce the sphere of activity with community or family of the elderly. Those who live alone or in nursing homes experience solitude, depression, and other psychological conditions which reduce health levels. Yan et al. (23) found that subjective support and support-seeking behavior have positive effects on the psychological health of "empty nest" elderly people. A greater focus should be placed on the psychological health of the young elderly who are living in socially isolated environments by increasing social support and encouraging self-efficacy and active aging.

Relations between chronic diseases and the health of the young elderly

As the survey results show, the young elderly has a morbidity rate of 67.2% and a comorbidity rate of 61.2%, which are both at a high level. Except for the RE dimension, the young elderly without chronic disease had

higher total SF-36 scores than those with chronic diseases and the difference was statistically significance (P<0.05). This reinforces evidence that the presence of chronic disease greatly impacts general health levels and that there is a further correlation between the presence of multiple chronic diseases and deteriorating health levels. There is also a correlation between the number of chronic diseases present and long-term medication, which is unsurprising. Research shows that those requiring long-term medication usually have low health levels possibly, because of their economic burdens or the repeated attacks of diseases (24). Ensuring the young elderly are well informed about their chronic disease and are aware of the steps they can take to managing it and avoiding exacerbation including the importance of adhering to medication regimes, will improve their ability to cope and enjoy life.

Relations between self-efficacy, health promoting lifestyle, social support, and the health of the young elderly

Of the 984 respondents, 67% reported having at least one chronic disease, which is higher than the average morbidity of those aged over 60 years old as indicated in China's 6th census (25). Belloc et al. (26) concluded that the occurrence and progress of diseases are closely associated with unhealthy lifestyles and that people of all ages that have healthy lifestyles tend to demonstrate high levels of health. As the results of this study show, health responsibility, nutrition, interpersonal relationship, self-fulfillment, exercise, and stress management appearing as dimensions of the HPLP-II can predict health levels to some extent, and the increase of health levels synchronizes with increased health promoting lifestyles. At the same time, self-efficacy is the indicator of intention and activity across all areas of health. Explicit intention to health activities and current behaviors are positively correlated with the belief in self-efficacy. People with high levels of self-efficacy can demonstrate greater execution and motivation and tend to choose correct strategies (27).

The young elderly with higher levels of self-efficacy in the present study had higher health levels. Social support is regarded as one of the important indicators in assessing active aging at the national and individual levels and previous research has proven the correlation between social support and improvement in the physical functioning scale of the SF-36 (28). Social support and interaction play an important role in preventing the morbidity and mortality of chronic disease in the elderly (29).

Our study also shows social support, subjective support, objective support, and support-seeking behavior are all associated with the health levels of the young elderly. However, health promotion programs for this group are not extensively and variedly conducted across communities in China and most research on the impact of health promotion interventions is directed to the young. It is essential for more research to be conducted on the impact of health promotion strategies for improving self-efficacy, social support, and healthy lifestyles on the health levels of the young elderly to ensure the best strategies are implemented.

Relations between health experience of the young elderly and their health levels

Research has shown that healthy lifestyles can not only improve health but reduce the negative impact of chronic diseases and the incidence of various diseases (30). Holahan et al. have found that promoting a healthy lifestyle is a spontaneous behavior made by the elderly to proactively control, maintain, and improve their health (31). The young elderly have the ability to develop an interest in maintaining their own health and our results showed respondents wanted to engage in everyday life and to sustain the best overall health levels. As the World Health Organization illustrated in 1986, health promotion includes encouraging healthy lifestyles, creating supportive environments for health, enhancing community action, and adjusting the direction of health services (32). Health promotion is not a behavior that is focused merely on the prevention of disease or health problems, but an approach to helping individuals develop and change in the right direction (33). Hence, it is necessary to adopt appropriate health promoting habits, allow individuals to maintain and improve health, and motivate them to have health responsibility when considering ways to improve the health levels of the young elderly. Increasing the interactions between the young elderly and superior medical resources, ensuring they have access to adequate support, enhancing their health capacity, and increasing the long-term effectiveness of any intervention are crucial components to developing integrated health promotion strategies for hospital and community based young elderly residents.

Limitation

The limitation of this study is that the survey was only conducted in one urban community. This district has

relatively abundant social and medical resources and may not generally represent the health behavior level of all the young elderly.

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Footnote

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Zhu et al. Community, young elderly, health, influential factors

528

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529

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