

## Analysis Of Factors Influencing Nursing Needs Of The Aged In Qiqihar City

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**Keywords:** Elderly; Qiqihar City; Care Needs; Influencing Factors; Risk Of Depression

**Abstract: Objective:** To study the factors influencing the nursing needs of the elderly in Qiqihar city and analyze them. **Methods:** 300 quasi-old people in Qiqihar city were included in the study, and the nursing needs of the subjects were analyzed by questionnaires. Through multiple regression analysis, the factors influencing the nursing needs of the elderly in Qiqihar city were determined. In addition, the self-rating depression scale was used to analyze the risk of depression of the study subjects, and the influential factors related to the risk of depression were determined by multivariate Logistic regression analysis. **Results:** The scores of nursing needs of the para-aged were (4.02±0.25) points, among which the scores of nursing needs of the para-aged were (4.58±0.31) points and (4.42±0.32) points for the para-aged and the para-aged were higher than those of the para-aged and the para-aged (3.46±0.23) points and (3.40±0.34) points for the para-aged and the para-aged respectively (P < 0.05). Taking the score of nursing needs of the quasi-elderly in Qiqihar city as the dependent variable and the education level and marital status as the independent variable, the values were as follows: education level in junior high school and below =0, senior high school and above =1; Spousal =0, spousal =1. Multiple regression analysis showed that the scores of nursing needs of the elderly without a spouse and with a higher education level were higher (all P < 0.05). The risk of depression in the 300 quasi-elderly people accounted for 32.67%, and the single-factor analysis found that age, gender, marital status and monthly income were all related to the risk of depression in the quasi-elderly people (all P < 0.05). Taking the risk of depression in the quasi-elderly as the dependent variable, the values were assigned as follows: risk of depression =1, risk of non-depression =0. Taking age, gender, marital status and monthly income as independent variables, the values are as follows: age > 55=1, 45-55 =0; Male =1, female =0; Non-spouse =1, spouse =0; Monthly income < 2000 yuan =1, ≥2000 yuan =0. Multivariate Logistic regression analysis found that male, non-spouse, and monthly income < 2000 yuan were all independent risk factors for depression in the elderly (all OR > 1, P < 0.05). **Conclusion:** The nursing needs of the aged in Qiqihar city are relatively high, which are affected by education level and marital status. In addition, gender, marital status and monthly income all affect the risk of depression in the elderly to a certain extent, which deserves clinical attention.

As we all know, the problem of aging in the global scope is becoming increasingly serious, especially in China. According to the survey data, the number of elderly population in China is gradually increasing at a speed visible to the naked eye, and has been widely concerned at home and abroad [1]. Clinically, the quasi elderly mainly refer to those aged 45-59 years old. They are in the transitional period from middle age to old age, with the main characteristics of good health, clear mind and energetic, and the functions of the major organs and systems in the body begin to decline [2]. At present, since the promotion of family planning in China, many 4-2-1 families have been born, and the first generation of such families has gradually stepped into the ranks of the elderly. In other words, it will become the main force of the elderly population in the coming decades. According to the relevant research reports, [3] incidence rate of chronic diseases in the elderly is significantly higher than that of the elderly, thus making the quasi elderly people a key group of healthy aging medical services. Nowadays, due to the increasing pressure on their children's work

and the accelerating pace of life, more and more quasi elderly people plan to choose nursing homes for the elderly, but the quality of nursing care in these institutions is uneven. In order to better serve this kind of quasi elderly group, it is of great significance to clarify the nursing needs of the quasi elderly, and it is particularly important to improve the nursing service of the elderly care institutions [4]. In view of this, this paper through the research of Qiqihar City quasi elderly care demand factors and scientific analysis, in order to provide reference for the region to cultivate professional elderly care personnel and realize healthy aging, so as to better serve the elderly care cause, now make the following report.

## **1. Object and method**

### **1.1 General information**

300 quasi elderly people in Qiqihar city were included in the study. The number of male and female was 134 cases and 166 cases respectively; the age range was 45-59 years old, the average age was  $(55.67 \pm 4.22)$ ; education level: 169 cases of junior middle school and below, 131 cases of senior high school and above; marital status: 102 cases with spouse, 198 cases without spouse; monthly income: < 2000 yuan 89 cases, 211 cases  $\geq$  2000 yuan. Inclusion criteria: (1) all subjects were aged from 45 to 59 years old; (2) they had lived in the local area for more than 1 year; (3) they had clear consciousness and had normal reading comprehension ability. Exclusion criteria: (1) patients with severe physical or (and) mental illness; (2) patients with cognitive dysfunction; (3) participants in other studies; (4) patients with clinical data missing. All subjects were informed and signed the consent form, which was approved by the hospital ethics committee.

### **1.2 Research methods**

(1) Nursing service demand questionnaire: Based on Maslow's hierarchy of basic needs, the questionnaire mainly covers the following five dimensions: ① reproductive health and medical needs; ② safety needs; ③ respect needs; ④ love and belonging needs; ⑤ self-realization needs. The reliability of the scale was 0.568 and the validity was 0.714. There were 34 items in the scale. Each item was scored 5-1 according to the "very needed to not needed". The higher the score, the higher the demand for nursing service. The average score is taken as the final result, where the average score = total score / 34. (2) Self rating Depression Scale (SDS) [6]: The main contents include 20 items, each of which has four options: "no or little time", "a small part of time", "quite a lot of time", "most or all of the time". The score was 0-3 and the total score was 0-60. The total score  $\geq$  41 was recorded as the risk of depression, and the higher the score, the greater the risk of depression.

### **1.3 Observation index**

Objective to analyze the relationship between nursing demand score and clinical characteristics of the quasi elderly, the influencing factors of nursing demand of the quasi elderly in Qiqihar City, the relationship between the depression risk and clinical characteristics of the quasi elderly, and the influencing factors of the depression risk of the quasi elderly.

### **1.4 Statistical processing**

SPSS 22.0 software was used to analyze the data, % and  $(\bar{x} \pm s)$  were used to express the counting and measuring data. The  $\chi^2$  and t-test were performed. Multiple regression analysis and multivariate logistic regression analysis were used to analyze the influencing factors of nursing demand and depression risk of the quasi elderly in Qiqihar city.  $P < 0.05$ , the difference was statistically significant.

## **2. Result**

### **2.1 Analysis of the relationship between nursing demand score and clinical characteristics of**

## the quasi elderly

The nursing needs score of the quasi elderly was  $(4.02 \pm 0.25)$ , of which the nursing needs of the educated senior high school and above and the unmarried quasi elderly were  $(4.58 \pm 0.31)$  and  $(4.42 \pm 0.32)$ , respectively, which were higher than those of the junior middle school and the quasi elderly with spouse  $(3.46 \pm 0.23)$  and  $(3.40 \pm 0.34)$  respectively (all  $P < 0.05$ ), as shown in Table 1.

**Table 1.** Analysis of the relationship between nursing demand score and clinical characteristics of the quasi elderly ( $\bar{x} \pm s$ )

clinical features		Cases	Nursing needs score (points)	T value	P value
age (year)	45 ~ 55	143	4.03±0.27	1.358	0.175
	> 55	157	3.99±0.24		
gender	male	134	4.01±0.25	0.674	0.501
	female	166	4.03±0.26		
degree of education	Junior high school and below	169	3.46±0.23	35.920	0.000
	High school and above	131	4.58±0.31		
marital status	Having a spouse	102	3.40±0.34	25.600	0.000
	No spouse	198	4.42±0.32		
Monthly income (yuan)	< 2000	89	4.03±0.24	0.622	0.534
	≥2000	211	4.01±0.26		

## 2.2 Multiple regression analysis on Influencing Factors of nursing needs of the quasi elderly in Qiqihar City

Taking the nursing needs score of the quasi elderly in Qiqihar City as the dependent variable, the education level and marital status as the independent variables, the assignment is as follows: education level in junior high school and below = 0, senior high school and above = 1; with spouse = 0, without spouse = 1. Multiple regression analysis showed that the higher the score of nursing needs of the elderly without spouse and higher education level (all  $P < 0.05$ ), as shown in Table 2.

**Table 2.** multiple regression analysis on Influencing Factors of nursing needs of the quasi elderly in Qiqihar City

Group	$\beta$ value	SE value	B value	T value	P value
degree of education	-0.301	0.041	-0.194	-4.794	0.000
marital status	0.155	0.013	0.028	2.301	0.019
constant	3.833	0.315	-	12.176	0.000

Note:  $R^2 = 0.262$

## 2.3 Analysis of the relationship between depression risk and clinical characteristics in the quasi elderly

The proportion of the 300 cases with depression risk was 32.67%. The univariate analysis showed that age, gender, marital status and monthly income were all related to the risk of depression (all  $P < 0.05$ ), as shown in Table 3.

**Table 3.** Analysis of the relationship between the risk of depression and clinical characteristics in the elderly (n, %)

clinical features		cases	Risk of depression (%)	$\chi^2$ value	<i>P</i> value
age (year)	45 ~ 55	143	31 (21.68)	15.000	0.000
	> 55	157	67 (42.68)		
gender	male	134	65 (48.51)	27.627	0.000
	female	166	33 (19.88)		
degree of education	Junior high school and below	169	56 (33.14)	0.039	0.844
	High school and above	131	42 (32.06)		
marital status	Having spouse	102	20 (19.61)	11.982	0.001
	No spouse	198	78 (39.39)		
Monthly income (yuan)	< 2000	89	50 (56.18)	31.806	0.000
	$\geq 2000$	211	48 (22.75)		

## 2.4 Multivariate logistic regression analysis on risk factors of depression in the elderly

Multivariate logistic regression analysis showed that male, no spouse, monthly income < 2000 yuan were independent risk factors of depression risk in the quasi elderly (all or > 1,  $P < 0.05$ ), as shown in Table 4.

**Table 4.** multivariate logistic regression analysis on risk factors of depression in the elderly

Group	$\beta$	SE	Wald	<i>P</i>	OR	95%CI
age > 55	0.123	0.153	0.646	0.422	1.130	0.838 ~ 1.526
male	0.512	0.248	9.573	0.000	2.153	1.324 ~ 3.502
No spouse	0.394	0.118	11.149	0.000	1.483	1.177 ~ 1.868
income < 2000 元	0.419	0.186	5.074	0.024	1.520	1.056 ~ 2.189
constant	1.121	0.580	3.736	0.052	3.068	—

## 3. Discussion

At present, relevant data show that the aging situation of the population in Qiqihar city is not optimistic, and the continuous transformation of the family structure causes the shortage of traditional family care manpower, which leads to more and more elderly people who choose to stay in the pension institutions [7-9]. At present, the development and management of domestic pension institutions are still in the initial stage of exploration, which has a large space for development. Moreover, the service status of most pension institutions is far from meeting the diversified needs of today's aging groups. In addition, many elderly care institutions are not equipped with professional elderly care and psychological counseling professionals, or lack of corresponding hardware or software facilities, which makes medical care services and mental and psychological services and other projects imperfect, resulting in the elderly's routine care needs not fully met [10-12]. The quasi elderly people are in a special historical period from the middle age to the elderly. Although they are not the elderly in real sense, the data show that the incidence rate of chronic diseases in these groups is not lower than that of the elderly, or even more than the latter. It has become the focus group of [13-15]. In the past, there have been many reports on the nursing needs of the elderly and related influencing factors, but most of them only pay attention to the effect of a certain nursing measure or the impact on the prognosis of patients, and there is no study to analyze the status quo of nursing needs of the quasi elderly and related influencing factors. Therefore, this direction also has a certain research value, and can provide scientific guidance for the formulation of clinical health service plan for the elderly, which is conducive to the implementation of elderly care service in the

future.

In this paper, the results of comparative study found that: the nursing needs of the quasi elderly score higher. This fully indicates that there is a great potential nursing demand for the quasi elderly. The possible cause of chronic diseases is the higher incidence rate of the elderly. This can also be confirmed in the Research Report of Li Qiang and others [16]: in the results, it is pointed out that the elderly in Qiqihar have a high demand for long-term care. However, there are also negative research conclusions. For example, Wang Huizhen et al. [17] investigated the nursing needs of the elderly in pension institutions from the psychological, physiological and spiritual aspects: The nursing needs of the elderly are low. The results obtained are obviously different from the results of this study. The main reasons for the differences between the two studies may be related to the age and sample size of the subjects, as well as the differences in regional environment. For example, the physical fitness of the elderly in some longevity areas is generally good, and in the quasi elderly stage, there is often no need for excessive nursing intervention, so the demand for nursing measures is also lower. This is also worthy of clinical attention in the future. In addition, multiple regression analysis showed that the higher the score of nursing needs of the quasi elderly without spouse and higher education level. That is to say, with the increase of education level and the occurrence of no spouse, the nursing demand level of the quasi elderly is higher. Analysis of the reasons, the author believes that the low level of education of the quasi elderly people tend to have a low level of economic income, which makes them have economic concerns about the demand for nursing services. However, the quasi elderly with spouse can take care of each other and care about each other in life, and have relatively low demand from the outside world. It can be seen that in clinical practice, due to the focus on the lower education level and spouse of the quasi elderly, through strengthening health education and other ways to improve the level of their nursing needs. In addition, multiple logistic regression analysis showed that male, no spouse, monthly income < 2000 yuan were independent risk factors of depression risk in the quasi elderly. The main reason is that in a relatively closed environment such as the nursing home, women tend to adapt more easily, and are more willing to talk and express in emotion, which is conducive to the release or relief of their own negative emotions. However, the unmarried quasi elderly people are unable to obtain the comfort from their spouses in terms of spirit, lose the physiological and psychological protection of marriage, and promote the occurrence of many negative and bad psychological emotions [18-20]. In addition, the lower monthly income of the quasi elderly people generally have a greater economic burden, which is bound to have a certain negative impact on their own psychological state, and then increase the risk of depression. This is confirmed by similar conclusions in the reported results of et al [21-23]. It should be pointed out that there are also some shortcomings or limitations in the research process, such as relatively small sample size, and lack of collaborative research with other medical institutions of the same level or higher level. This may cause slight bias on the results of this study. In the future, we can further expand the sample size, and obtain more scientific and accurate conclusions through regional research comparison, so as to better serve the clinical work [24-25].

To sum up, the nursing needs of the elderly in Qiqihar are relatively high, and to a certain extent, it is affected by the education level and marital status. In addition, gender, marital status and monthly income can affect the risk of depression in the elderly to a certain extent, which should be paid more attention to.

## **Project**

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