

# Study on the Application Effect of Family Follow-Up Rehabilitation Nursing in Elderly Autistic Patients in Community Institutions

Qing Ji<sup>1,2</sup>, Ronnell D. Dela Rosa<sup>1,3\*</sup>, Mingzhu He<sup>1</sup>, Minerva B. De Ala<sup>1</sup>

<sup>1</sup>School of Nursing, Philippine Women's University, Manila 1004, Philippines

<sup>2</sup>Zibo Vocational Institute Shandong, Zibo 255314, China

<sup>3</sup>School of Bataan Peninsula State University, Balanga 2100, Philippines

\*Corresponding author: Ronnell D. Dela Rosa, rddelarosa@pwu.edu.ph

**Copyright:** © 2022 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** *Objective:* To study the effect of family follow-up nursing in rehabilitation of elderly autistic patients in community institutions. *Methods:* 120 elderly autistic patients from February 2021 to July 2022 were randomly divided into a control group and a test group with 60 cases each. The patients in the control group were cared for at home by their family members, while the patients in the test group were given family follow-up rehabilitation care on the basis of the control group. The compliance of patients in the rehabilitation process, the UCLA loneliness score, the autism treatment assessment scale (ATEC) score of patients after this nursing care, and the quality-of-life scores of patients of the two groups before and after nursing care were compared. *Results:* The compliance of patients in the process of rehabilitation treatment was better in the experimental group than in the experimental group. The physical function score of patients after nursing was better in the experimental group than in the experimental group. The UCLA loneliness score and ATEC score of patients in the experimental group after nursing were lower than those of the control group ( $P < 0.05$ ); the quality-of-life score was higher in the experimental group ( $P < 0.05$ ). *Conclusion:* The application of family follow-up nursing in the rehabilitation of elderly autistic patients in community institutions can significantly improve patients' compliance and improve their prognosis, thus having high clinical value.

**Keywords:** Elderly autistic patients; Rehabilitation care; Family follow-up; Application effect

**Online publication:** September 28, 2022

## 1. Introduction

With the rapid aging of the population, the number of senile diseases is gradually increasing. The common physical diseases of the elderly are often more emphasized, while psychosomatic diseases are often ignored. According to the national psychological data statistics, 70% of the elderly in China more or less has the tendency of senile autism, and the common symptoms are as follows: depression, worrying about gains and losses <sup>[1]</sup>; living in isolation and avoiding communication with the outside world; emptiness and despair, lack of interest in life, which can be combined with anxiety, depression, geriatric hypochondrias and other psychological diseases in serious cases. This study analyzes the impact of home follow-up rehabilitation care for elderly autistic patients in community institutions. The main research is as follows:

## **2. Materials and methods**

### **2.1. Data collection**

General data 120 patients with senile autism in community elderly care institutions in our city from February 2021 to July 2022 were included in the control group and the test group, with 60 patients in each group. In the control group, there were 35 males and 25 females, with an average age of  $(74.18 \pm 4.71)$  years, ranging from 65 to 83 years old, including 22 patients with depression tendency and 38 patients with anxiety tendency. There were 33 males and 27 females in the experimental group. The age of the patients ranged from 65 to 84 years, with an average age of  $(73.25 \pm 4.25)$  years, including 20 patients with depression tendency and 40 patients with anxiety tendency. There was no significant difference in general data between the two groups ( $P > 0.05$ ).

### **2.2. Nursing methods in the family rehabilitation of patients in the control group and the experimental group**

In the control group, the patients were given general homecare by their family members which mainly includes providing help in completing necessary daily activities. In the experimental group, family follow-up rehabilitation nursing measures were adopted as follows:

#### **(1) Formulation of nursing plan**

Firstly, the basic information of elderly autistic patients in community institutions were understood in detail. The patients were then classified and sorted out, and a suitable psychological rehabilitation plan was formulated for each patient based on their recovery. The nursing team were mainly composed of community doctors, mental health doctors and nurses, and they should guide patients' families to give more support and help to nurses. Among them, family follow-up psychological rehabilitation nursing should be set at a fixed time every day, and the length of nursing care should be adjusted reasonably.

#### **(2) Implementation of nursing plan:**

##### **(a) Health education**

In the process of psychological rehabilitation of patients, health education was given to the patients and their families; information about elderly autism as well as the importance of family psychological rehabilitation training were explained to them [2]. Psychological rehabilitation training methods of elderly autistic patients after treatment were introduced to patients and their families in a variety of interesting ways. At the same time, professional psychological rehabilitation health care professionals and nurses took the initiative in psychological treatment and nursing for patients, provided them with standardized guidance on psychiatric medication in addition to general life and basic nursing, and explained the precautions needed during psychological rehabilitation training. The condition of elderly patients with loneliness were often unclear, and the recovery speed was slow in the process of psychological intervention and rehabilitation treatment. Therefore, the nursing staff fully understood the psychological state of the patients before giving them targeted psychological nursing measures, so as to ensure that the patients' psychology was in a normal state.

##### **(b) Sharing of experience**

Elderly autistic patients generally have a negative attitude towards active psychological rehabilitation training, and their purpose of psychological rehabilitation training is unclear in the process of treatment, resulting in their nonchalant attitude towards psychological rehabilitation training, or even refusal. In the actual psychological rehabilitation training, other elderly autistic rehabilitators in the community institutions were invited to have immersive communication with the patients. Some autistic patients with better recovery effects took the initiative to tell the patients who were receiving treatment about the successful treatment experience, and shared the fun in the process of psychological rehabilitation training, such as outings with family members, and

interesting cultural and recreational activities in community institutions [3]. In addition, the relationship among patients became closer when they actively talked about their conditions because they shared similar emotions and experiences. This made mutual encouragement more effective and helped to improve the treatment compliance of elderly autistic patients.

(c) Follow up of psychological rehabilitation training

The medical staff gave effective psychological rehabilitation training and guidance in the process of rehabilitation treatment for elderly patients with loneliness in creating a suitable family environment for treatment and recuperation: The activities of the whole family need to be adjusted during the course of disease of the patient. The purpose of adjustment is to make the family environment more conducive to the recovery of patients [4]. Note that family entertainment or social activities were controlled — not too often or too late. Other family members took the initiative to strengthen the exchange of thoughts and feelings with patients and understand what they think and do. All matters related to the patient at home were discussed with the patient and the patient's opinions were solicited. In short, a harmonious, warm and relaxed family environment was created. In addition, family follow-up psychological rehabilitation care emphasized on restoration and maintenance of the patient's social adaptability: humans not only have to be physiologically and psychologically functional, but also be socially adaptable. The latter includes learning abilities, professional abilities, social abilities, and the ability to carry out leisure activities. The recovery and rehabilitation of the disease not only requires the elimination of the symptoms of the disease itself, but also includes the maintenance and recovery of social functions.

(d) Rehabilitation follow-up

After medical intervention, the patients were followed up regularly [5]. Telephone follow-up and door-to-door follow-up were used to understand the recovery effect of psychological rehabilitation training on the patients, and the follow-up psychological rehabilitation training of patients were analyzed and summarized to guide patients in completing the training. Through active communication with the patients during follow-up, problems faced by the patients during psychological recovery were fully understood, targeted guidance were given to them, and any misconceptions about psychological rehabilitation training were corrected, and thus improving the family follow-up psychological rehabilitation training.

### 2.3. Evaluation index

The treatment compliance of the patients was evaluated by the medical staff, and the psychological rehabilitation nursing compliance, loneliness, degree of symptoms, as well as the quality of life were evaluated in terms of scores. Patients who actively cooperated with medical staff were able to carry out psychological rehabilitation training. Patients needed the supervision and guidance of medical staff and family members to carry out psychological rehabilitation training as part of their compliance. Patients who could not carry out psychological rehabilitation training as planned were considered non-compliant. The degree of loneliness and symptoms were evaluated by UCLA loneliness score [6] and Autism Treatment Assessment Scale (ATEC); The life ability score was completed with GQOLI-74 score [7].

### 2.4. Statistical methods

Statistical methods data processing was completed by G-Power statistical software. The counting data and measurement data were expressed as percentage and ( $\bar{x} \pm s$ ).  $\chi^2$  test and  $t$ -test were used for comparison between groups, and  $P < 0.05$  was considered statistically significant

### 3. Results

#### 3.1. Patient compliance

The patient compliance of the experimental group was better than that of the test group. The data comparison shows that the difference was statistically significant ( $P < 0.05$ ). The compliance of the patients in the experimental group was significantly higher with the intervention of the nursing team. (Table 1)

**Table 1.** Comparison of compliance between two groups of elderly autistic patients (case)

Group	Full compliance	Partial compliance	Noncompliance	Compliance (%)
Experimental	32	25	3	95.00
Control	24	22	14	76.67

#### 3.2. UCLA Loneliness Score and Autism Treatment Assessment (ATEC)

There was no significant change between the patients in the experimental group and the control group before nursing, but the UCLA score and ATEC after nursing were significantly lower than those in the experimental group ( $P < 0.05$ ), (Table 2).

**Table 2.** UCLA Loneliness Score and Autism Treatment Assessment (ATEC) results (score,  $\bar{x} \pm s$ )

Group	UCLA Loneliness Score		ATEC Score	
	Before care	After care	Before care	After care
Experimental	52.24 $\pm$ 8.01	32.18 $\pm$ 6.67	128.64 $\pm$ 27.62	52.70 $\pm$ 14.20
Control	51.76 $\pm$ 7.29	39.54 $\pm$ 9.11	124.26 $\pm$ 26.51	90.30 $\pm$ 18.50
F		176.67		198.34
P		< 0.05		< 0.05

#### 3.3. Quality of life

GQOLI-74 score was adopted to quantify the quality of life of family follow-up rehabilitation nursing. The quality of life of elderly autistic patients in the experimental group after nursing was significantly better than that of the control group as shown in Table 3 ( $P < 0.05$ ).

**Table 3.** GQOLI-74 score before and after nursing (score,  $\bar{x} \pm s$ )

Group	Before care	After care
Experimental	134.75 $\pm$ 4.52	197.89 $\pm$ 13.80
Control	134.10 $\pm$ 4.26	154.90 $\pm$ 12.45
P	> 0.05	< 0.05

### 4. Discussion

Providing for the elderly has become a major challenge in China. The life care of the elderly in the community is one of the main roles of a community vice center. The elderly need to face loss constantly. The elderly will not only lose their income and health, but also their roles, ideals, relatives, and so on. When the loss reaches a certain degree, the elderly will have emotional loss, which will lead to loneliness, loneliness, anxiety and other bad psychology [8], which will lead to autism. Some elderly people will still feel lonely even with the company of their relatives if they cannot get spiritual satisfaction or lack social communication. Autism is generally formed by being alone, and single elderly people living alone are more

likely to develop autism. Autism is also related to the environment. Autistic patients often feel excluded from the group, unable to integrate into the group, unable to feel cared for, and have no one to talk to about their depression. Autism not only causes the elderly to have negative emotions, but also drastically reduces their quality of life [9].

Autism has a great impact on human health with the development of social economy. The impact of autism on health is becoming more and more serious, and we must pay great attention to it and constantly improve the diagnosis and treatment effect and nursing quality. The current clinical treatment of elderly patients with autism is drug treatment. Although drug treatment can control the patient's condition to a certain extent, it is still far from ideal. Many research reports show that autism patients should be treated with high-quality.

Systematic and comprehensive nursing management can significantly improve the rehabilitation effect [10]. Family holistic rehabilitation nursing management is the continuation of community nursing management. It mainly provides nursing training and guidance to patients and their families through telephone return visits and family visits, which can not only timely understand the changes of patients' conditions, but also guide patients' families to improve their nursing management ability, so as to promote the recovery of the patients [11].

The application effect of community routine nursing management and community family holistic rehabilitation nursing management were compared and analyzed in this study. The results showed that the UCLA score and ATEC of patients in the experimental group after nursing were significantly lower than those in the experimental group, and the quality-of-life score of the experimental group was significantly higher than that of the control group. This means that the application effect of family follow-up rehabilitation nursing in elderly autistic patients in community institutions was better than that of community or institution routine nursing management [12].

In conclusion, the application effect of family follow-up rehabilitation nursing in elderly autistic patients in community institutions is satisfactory. It significantly improves the rehabilitation effect and quality of life of patients, and helps improve the nursing satisfaction of patients' families.

## Disclosure statement

The authors declare no conflict of interest.

## References

- [1] Gu C, Sun W, Zhang L, et al., 2017, Study on the Current Situation and Measures of Community Elderly Continuous Home Care. *Abstract of the World's Latest Medical Information*, 16(31): 546–547.
- [2] Liu H, 2015, Planning and Management of Overall Rehabilitation of Autistic Families. *Disability In China Human*, 6(12): 58–59.
- [3] Liu M, Zhang K, 2017, Research on the Path of Social Work Intervention in Autistic Families from the Perspective of Ecosystem Theory: Taking Wuhu City as an Example. *Journal of Kaifeng Institute of Education*, 37(6): 281–282.
- [4] Wei L, 2021, Effect of Comprehensive Nursing on Depression and Quality of Life in Elderly Patients with Acute Myocardial Infarction. *Special Health*, 2021(25): 253
- [5] Zhang L, 2017, Effect of Home Follow-Up Nursing on Rehabilitation Compliance of Elderly Stroke Patients in the Community. *China Health Standard Management*, 8(05): 155–157.
- [6] Russell DW, 1996, UCLA Loneliness Scale (Version 3): Reliability, Validity and Factor Structure. *Journal of Personality Assessment*, 66(1): 20–40.

- [7] Zhang Y, Zhang Y, Huang Q, et al., 2013, The Effect of Family Intervention on Social Support and Quality of Life in Rural Schizophrenics *Modern Preventive Medicine*, 40(22): 3.
- [8] American Psychiatric Association, 2013, *Diagnostic and Statistical Manual of Mental Disorders (DSM-5) 5th Edition*. American Psychiatric Association Publishing, Washington, DC, 50–54.
- [9] Hu Y, Ping J, 2022, The Effect of Standardized Cancer Pain Nursing Based on Gqol-74 Scale on the Bad Mood, Pain and Sleep of Patients with Advanced Liver Cancer *International Journal of Nursing*, 41(4): 5.
- [10] Wang J, Zhang X, 2015, Discussion on Loneliness and Nursing Intervention of Empty Nest Elderly People in Community. *Contemporary Nurses' Ten-Day Journal*, 2015(9): 15–17.
- [11] Gu C, Sun W, Zhang Z, et al., 2017, Continuous Home Care for the Elderly in the Community Research on Situation and Measures. *World's Latest Medical Information Abstract*, 16(31): 546–547.
- [12] Hu H, Wang Z, Li X, et al., 2014, Loneliness and Depression of the Elderly in Nursing Homes Research on the Situation and its Relationship J7. *China Nursing Management*, 14 (10): 1033–1036.

**Publisher's note**

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.