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Application of Humanistic Nursing Care for Patient with Bipolar Disorder Who Use SPECT Renal Dynamic Imaging When They Are Treated

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Abstract: Objective: To assess application of humanistic nursing care for patient with bipolar disorder who use SPECT renal dynamic imaging when they are treated. Methods: 120 participants were invested to join our study from January 2018 to December 2018, who were diagnosed as bipolar disorder and were receive measure was associated with SPECT renal dynamic imaging. We randomly assign the participants to two groups, that include control group (n = 60) and intervention group (n = 60). The control group participants were received traditional nursing services. Base on traditional nursing services, the intervention group patients has additional humanistic nursing care in the treatment process. Our researchers collected the information include the participants character, the satisfaction of patients and satisfaction rate of different age group in intervention group. The information from hospital database, interview and simple questionnaires. Result: In participants characteristics, the patients compliance of two groups have different in the result [57 (95%) vs 49 (80%), p = 0.025]. In patient satisfaction research, the intervention group has better assessment in overall result, it not only has not dissatisfaction assessment but also has most very well assessment rate [42 (70.0%) vs 32 (53.3%)]. In satisfaction rate of different age group research, the most very well assessments from '< 20 years old' group and '> 41 years old' group. Conclusion: the humanistic nursing care provide great improvement of satisfaction to the patient with bipolar disorder who use SPECT Renal dynamic imaging when they are treated.

Keywords: Humanistic Nursing Care, Bipolar Disorder, Renal Dynamic Imaging

1. Introduction

Bipolar disorder is a chronic mental disorder, its characteristics include recurrent episodes of depression, hypo/mania, and mixed states. In the worldwide, the general population was affected more than 1% [1]. Base on Mühleisen and Sarrazin's report, the pathophysiology of bipolar disorder include a number of neurodevelopmental processes [2, 3]. Bipolar disorder may be characterized by complex pathophysiological and mood-specific biological alterations, increasingly implemented in current staging models [4]. In Germany, approximately 1.5% of adults have been diagnosed with some form of bipolar disorder, and that figure is higher in women and young individuals [5]. In addition, bipolar disorder is positively associated with several negative outcomes, such as chronic conditions, cardiovascular disease, stroke, complex activity limitations, and suicide and other causes of premature death [6]. Therefore, investigating factors that may increase the risk of bipolar disorder should be a public health priority over the next years.

The single-photon emission computerized tomography (SPECT) renal dynamic imaging is an important technique for assessing kidney function, so it can measure the status of glomerular filtration rate. As one of bipolar disorder treatment method is drug treatment by lithium salt, that

lithium salt is excreted by the kidneys, the SPECT renal dynamic imaging is a safety guarantee of lithium salt treatment [7, 8]. In China, some patients still were not satisfied with the Chinese care provided, in spite of total nursing service quality was improved in recent years. There is a part of nurses still ignore the psychological and social care in their work process. It may lead to a lower overall humanistic care ability of nurses in China [9, 10]. Aim of this study is evaluate application of humanistic nursing care for patient with bipolar disorder who undergoing SPECT Renal dynamic imaging.

2. Methods

2.1. Participants Enrollment and Survey Methods

120 participants were invested to join our study from January 2018 to December 2018, who were diagnosed as bipolar disorder and were receive measure was associated with SPECT renal dynamic imaging. We randomly assign the participants to two groups, that include control group (n = 60) and intervention group (n = 60). Furthermore, the two group use different nursing services in treatment process. In control group, the participants were received traditional nursing services. Base on traditional nursing services, the intervention group patients has additional humanistic nursing care in the treatment process. The humanistic care included that new communication skills, psychological assessment of patients and new nursing measure. Our researchers collected the information include the participants character, the satisfaction of patients and satisfaction rate of different age group in intervention group. The information from hospital database, interview and simple questionnaires.

Their inclusion criteria were: (1) The patients were diagnosed as bipolar disorder; (2) They were receive measure was associated with SPECT renal dynamic imaging; (3) The patients still have basic language understanding and communication skills; (4) Patients volunteered to participate our study in treatment. Their withdraw criteria were: (1) The patients have other mental illness; (2) Mental retardation; (3) unconsciousness.

2.2. Statistical Analysis

Our data analyzer performed the statistical analysis by SPSS 22.0. The P value, t-test and chi-square test were associated with collection result were analyzed. Besides, the mean standard deviation for statistical description.

3. Result

The participants characteristics were collected by hospital database. Base on Table 1, the basic information of between intervention group and control group is similar (P > 0.05), such as gender and age. In addition, the patients compliance of two groups have different in the result [57 (95%) vs 49 (80%), p = 0.025].

***Table 1.** Participants Characteristics.*

Projects	Intervention Group, n (%)	Control Group, n (%)	P Value
Gender			
Male	27 (45.0%)	26 (43.3%)	0.913
Female	33 (55.0%)	34 (56.7%)	0.887
Age (year)	33.3 ± 12.8	32.5 ± 15.9	0.781
Patients Compliance	57 (95%)	49 (80%)	0.025

The patient satisfaction was collected by interview and simple questionnaire. The patient satisfaction assessment only has 3 level, that include very well, good and dissatisfaction. Base on Table 2, it shows the patient satisfaction status in nursing result. The intervention group has better assessment in overall result, it not only has not dissatisfaction assessment but also has most very well assessment rate [42 (70.0%) vs 32 (53.3%)].

***Table 2.** Satisfaction of Patients.*

Projects	Satisfaction		
	Very Well	Good	Dissatisfaction
Control Group (n = 60)	32 (53.3%)	20 (33.3%)	8 (13.3%)
Intervention Group (n = 60)	42 (70.0%)	18 (30.0%)	0 (0%)

The Table 3 shows very well assessment and good assessment of intervention group in different age group. The most very well assessments from '< 20 years old' group and '> 41 years old' group. Also, '20 - 30 years old' group and '31 - 40 years old' have most good assessments in the result.

***Table 3.** Satisfaction rate of different age group in Intervention group.*

Projects	< 20 years old (n = 11)	20 - 30 years old (n = 17)	31 - 40 years old (n = 14)	> 41 years old (n = 18)
Very Well	10 (90.9%)	7 (41.2%)	9 (64.3%)	16 (88.9%)
Good	1 (9.1%)	10 (58.8%)	5 (35.7%)	2 (11.1%)
Dissatisfaction	0	0	0	0

4. Discussion

Bipolar disorder is a severe mental illness that affects approximately 3% of the general population and typically requires lifelong treatment, including pharmacotherapy [11-13]. Base on the report, the patients often present exacerbation in times of stress, they were most often

diagnosed between the ages of 18–30 years and is episodic [14]. Despite the impressive advances in pharmacotherapy, the illness still represents a huge burden for the patients and their families that persists far beyond periods of acute symptomatology [15]. following as the report, the efficacy of specific adjunctive psychotherapy has also been proven [16]. However, the response to psychological treatment seems to differ between studies. This variability is most likely explained by the type of intervention used, comparison groups and by the characteristics of the subjects included.

Base on research result, the humanistic nursing care provide great improvement of satisfaction to the patient with bipolar disorder who use SPECT Renal dynamic imaging when they are treated. In particular, the humanistic nursing care has stronger influence for the patients were associated with '< 20 years old' group and '> 41 years old' group. So the influence of humanistic nursing care is increased as decreased age of patients who age was not higher than 20 years. Additionally, it also is increased as increased age of patients who age was higher than 40 years. In limitation, the sample size was limit the significant status of result as part of data result was too small so that it can not compare with other data, such as '80 - 90 years old' group only has 1 participants.

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