EFFECT OF COMPREHENSIVE NURSING INTERVENTION ON DEPRESSION, ANXIETY AND QUALITY OF LIFE OF INFERTILITY PATIENTS

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ABSTRACT

In order to improve quality of life for infertility patients and relieve their adverse emotional state, this paper conducted in-depth analysis and research of the clinical effect of implementation of comprehensive nursing intervention on the treatment process of infertility patients. A total of 3800 patients who had been treated for infertility in some 10 hospitals from June 2014 to June 2015 were selected as study subjects. Among them, 2500 patients who decided to receive fine nursing in the treatment process after discussion with doctors and family members were selected as observation group; the remaining 1300 patients who didn’t receive comprehensive nursing intervention due to various reasons but received routine nursing care in the treatment process were selected as a control group. The preferred infertility patients in this study received 8 weeks of nursing intervention. After completion of nursing, a comparison of the psychological state of anxiety and depression and quality of life of the two groups of patients revealed that various indicators of the observation group patients with comprehensive nursing intervention improved, patient psychological mood moved in a more positive direction, life attitude was more positive and patients were more willing to cooperate in the treatment. Hence, the therapeutic effect was significantly better than that of the control group. Therefore, this clinical research fully confirms the great role of comprehensive nursing intervention in the clinical treatment of infertility patients. It is recommended that comprehensive nursing intervention should be promoted in the actual clinical process.

Key words: Comprehensive Nursing Intervention, Infertility, Quality of Life, Clinical Effect.

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Introduction

Clinical medical researchers define infertility in the following manner: No successful pregnancy is achieved without any contraceptive measures for one year and normal sexual life. According to the main causes, infertility can be divided into primary infertility and secondary infertility. Primary infertility mainly means that the patient has never had a successful pregnancy; secondary infertility means that the patient once had a pregnancy, but is now unable to become pregnant due to various reasons. In recent years, with changes of social habits and deterioration of the natural ecological environment, infertility has become a very common clinical problem. Research shows that the disease affects at least 10%~15% of childbearing couples, and there is an obvious relationship between infertility and patient age (as shown in Table 1).

Infertility will have a serious impact on a patient's normal life as patients often expend a huge effort to have a successful pregnancy, resulting in a serious decline in quality of life and larger psychological burden and pressure. The case is especially problematic for female patients, as females originally have relatively weak emotions and may likely have anxiety and depression in the face of great pressure of pregnancy, which will lead to progress
of disease and increase in treatment difficulty. Zhang Zhixiang, He Ying, Zheng Xing et al. found through clinical research that comprehensive nursing intervention has a good clinical effect in improving the negative psychological state of patients and quality of life.(1-3). The pathogenesis of infertility in female patients is relatively complex, and can be specifically divided into the following types: tubal infertility (Figure 1), infertility caused by ovulation disorder (Figure 2), immune infertility (Figure 3) and unexplained infertility. Infertility usually causes great psychological pressure on patients, resulting in obvious anxiety, depression and other psychological problems.

In the treatment process, low compatibility and compliance greatly lowers treatment effect. To this end, this study applied the concept of comprehensive nursing in the clinical treatment of infertility patients. Good treatment results were achieved, specifically as follows:

<table>
<thead>
<tr>
<th>Childbearing couples</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>infertility among all couples</td>
<td>1/10</td>
</tr>
<tr>
<td>infertility in childbearing</td>
<td>1/7</td>
</tr>
<tr>
<td>couples aged 30-34</td>
<td></td>
</tr>
<tr>
<td>infertility in childbearing</td>
<td>1/5</td>
</tr>
<tr>
<td>couples aged 35-39</td>
<td></td>
</tr>
<tr>
<td>infertility in childbearing</td>
<td>1/4</td>
</tr>
<tr>
<td>couples aged 40-44</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: The relationship between infertility and age of patients.

Method

**General information**

The 3800 patients were female. The oldest was 35 years old while the youngest was 21 years old, average 26.9±3.9 years; There were 2100 cases of primary infertility and 1700 cases of secondary infertility. All patients who volunteered to participate in this investigation underwent standard specific clinical testing of infertility, with clear logical thinking ability and communication skills. To ensure accuracy of the results, this study excluded patients with unconsciousness, malignant tumor, cardiovascular disease.

**Nursing method**

The 1300 patients in the control group received routine nursing care, specifically including nursing medication, routine examination and necessary disease education.

Patients in the observation group received comprehensive nursing intervention in addition to routine nursing care. All the nursing work proceeded as follows:

- Considering the particular mental emotions of female patients and to improve nursing satisfaction, before starting formal nursing, the main duty nurse gave comprehensive analysis and evaluation of previous medical records and the individual situation of every patient, found the general nursing direction and formulated a specific nursing program after discussion with primary nursing personnel and patient families;
To eliminate the patient's sense of fear and tension in the hospital environment, the nursing staff paid great attention to communication and interaction with patients. In face-to-face communication, nursing staff answered every question put forward by patients and their families, and always maintained a high degree of patience and a friendly tone. The main purpose was to obtain the patient's rapport in a short time, so that patients could actively cooperate with treatment.

Comprehensive disease explanations for patients and their families were provided so that patients could realize that depression, anxiety and other negative psychological emotions are very unfavorable for infertility treatment, and helped patients eliminate negative emotions in a timely manner;

To ensure the smooth development of nursing work, several nursing staff individualized their work, applying different psychological interventions and relaxation training for patients at different ages, sex and education levels, diverting patient attention away from the disease, so that patients could pay attention to relatively novel and interesting things in life. Also, psychological comfort, etc. was adopted so that patients could realize the importance of coordination treatment and mood relaxation, which helped patients feel confidence in treatment;

A large portion of the anxiety and depression in infertility patients originates in the family environment. Hence, to improve the therapeutic effect, primary responsible staff had detailed communication with the family members of patients, with a view to ensuring that family members of patients could provide full consideration and care for patients, to help effectively relieve the patient's physical and mental pressure;

To improve therapeutic efficiency, nursing staff strictly supervised daily medication, kept detailed records and observations of their adverse reactions, communicated with attending doctors in a timely manner in the case of relatively serious adverse reactions and developed new therapeutic schemes. Meanwhile, some bad eating habits during the treatment period were corrected, obese patients were informed to lose weight and undernourished patients were told to enhance nutrition.

Comparative method

The percentage of the two groups of patients with psychological depression and anxiety after nursing were compared. The scores of physiological state and physiological function of the two groups of patients were evaluated as well as quality of life of the two groups after nursing intervention.

Statistical method

In the effect analysis on improvement in quality of life of infertility patients through comprehensive nursing intervention, all income data were input and output with SPSS statistical software, with n,% to denote count data and with chi square X2 for test; mean number ± average number (±s) was used to denote measurement data, with t value for test. If P<0.05, there was statistical significance in the difference.

Results

The results show that before nursing intervention, there was no difference in the basic condition of anxiety, depression and quality of life of the two groups of patients, P>0.05 meant no statistical significance.

But after a period of 8 weeks of nursing intervention, various indexes of observation group patients were significantly improved. Physical function scores of the two groups of patients after nursing intervention were compared. The observation group patients scored 90.78±10.13, while the control group patients scored 82.16±7.56, difference between the two groups was P<0.05, with statistical significance; in the physiological function score of the two groups of patients, the average score of the observation group was 87.32±16.21, while the control group score was 80.15±14.31, the difference between the two groups, P<0.05, with obvious statistical significance.

Moreover, after 8 weeks of nursing intervention, observation group patients with depression and anxiety accounted for 65% (1625/2500) of the total number, control group patients with depression and anxiety accounted for 87% (1131/1300) of the total number. The difference between the two groups was smaller than 0.05, with statistical significance.

Discussion

Clinical studies show that operational capability and level of nursing staff play an important role in the clinical treatment process, which has great significance for improving women's negative psy-
chological mood and improving the patient’s quality of life\(^6\). 

To this end, 2300 cases of infertility patients in the observation group received comprehensive nursing intervention in this study. Most infertility patients receive clinical care by health care workers or nurses during hospitalization. Whether these nurses have sufficient communication and interaction with patients will have different influence on the mood of patients. Sufficient communication will help patients maintain a good mood, and moreover help improve patient awareness of the disease and degree of cooperation with physician treatment and nursing treatment.

In addition, the degree of patient awareness of the disease represents a main reason that affects treatment effect. If patients have insufficient understanding of the long course of treatment, they will worry and feel depressed. This attitude is not conducive to patient cooperation with treatment and nursing. Therefore, in the nursing process, comprehensive health knowledge publicity and education among patients is necessary, a tone of affinity should be used to introduce disease related common sense, so that patients can have a more objective look at the development and treatment after full understanding of the disease\(^7\). In addition, family and social support for patients are very important, as is the patient’s spiritual resource for coping with the disease. Nursing staff can call upon family members to provide more care for patients and ease the patient’s negative emotions so that patients will therefore establish confidence and be actively engaged in rehabilitation therapy.

References


9) Hu Hongda. Effect of Comprehensive Nursing Intervention On Quality of Life of Elderly Patients with Coronary Heart Disease Accompanied with Depressive Symptoms (J). China Modern Doctor, 2013, 23 (06).


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