

Application of Nursing Risk Management in Assisted Reproductive Nursing

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Abstract: Objective: discuss and analyze the application effects of nursing risk management in assisted reproductive nursing. Methodology: this research was carried out by selecting 384 IVF-ET (In-vitro fertilization and embryo transfer) patients admitted by certain hospital during February 2016 to February 2018 as research objects, who are classified into general group and research group at random by numbering all randomly, with 192 objects per group for comparing adverse event rate and nursing quality of patients in these two groups. Result: the adverse event rate of patients in research group is 4.17%, while that in general group is 10.94%, with the adverse event rate in research group lower than that in general group ($P < 0.05$); the overall scores of nursing quality in research group is (96.37 ± 9.37) , while that in general group is (79.34 ± 8.25) , with the overall score in research group significantly higher than that in general group ($P < 0.05$); the nursing satisfaction of research group and general group are 95.31% and 84.38% respectively, with the satisfaction in research group significantly higher than that in general group ($P < 0.05$). Conclusion: in assisted reproductive nursing, the application of nursing risk management plays a critical role, which can not only reduce the adverse event rate, but also effectively improve the nursing quality of patients, as well as improve the nursing satisfaction of patients, thus being proven that nursing risk management shall be widely applied in clinical nursing.

Keywords: Nursing risk management; Assisted reproduction; Application Effect

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1. Introduction

Assisted reproductive technology, also known as ART technology, is a kind of technology of manually controlling gametes, zygotes and embryos to get pregnant by employing medical technologies and methods^[1]. During the assisted reproductive nursing process, patients who fail to get pregnant within a relatively long time will feel down under great mental stress^[2], which may result in strained nurse-patient relationship. In order to relieve such kind of adverse nurse-patient relationship, the application of nursing risk management plays an important role during the assisted reproductive nursing process. Therefore, this research was carried out by selecting 384 IVF-ET patients admitted by certain hospital during February 2016 to February 2018 as research objects for discussing and analyzing the application effects of nursing risk management in assisted reproductive nursing, with the results reported as below.

2. Data and Method

2.1 General Data

This research was carried out by selecting 384 IVF-ET patients admitted by certain hospital during February 2016 to February 2018 as research objects, who are classified into general group and research group at random by numbering the patient admission number randomly, with 192 objects per group, under the premise that all patients signed the Informed Consent Form. Wherein, the age of patients in research group ranges from 30-37, with the average age being (31.21 ± 0.11) , infertility age ranging from 1-7, and average infertility age being (4.35 ± 2.12) . Wherein, the age of patients in general group ranges from 31-36, with the average age being (30.72 ± 0.20) , infertility age ranging from 1-5, and average infertility age being (4.27 ± 2.34) . Meanwhile, select 32 nurses of certain hospital at the same period as the research objects, and then train them accordingly. All selected nurses shall be

registered nurses, with the age ranging from 25-34 and the average age of (28.64±2.37). Compare the general information of patients in both groups, with difference free from statistical significance ($P > 0.05$), which are comparable.

2.2 Method

The nursing method employed for patients in general group is a kind of routine nursing, while the one employed in research group is nursing risk management. To be specific, the corresponding methods are as below: (1) Identification of nursing risks. In assisted reproductive nursing, the application of nursing risk management and risk identification is critical, which can provide evidences for formulating emergency plans. In order to carry out risk identification, it is necessary to establish the nursing risk management group firstly. Upon establishing the nursing risk management group, there is a need to select leaders and members, with 1 leader and 31 members. On this basis, formulate the corresponding nursing regulations, and organize related personnel to study for mastering the operation specifications completely. After that, carry out training for related personnel and then determine the training contents. During the training, intensive training on specialty shall be employed. Training contents mainly involve in specialty knowledge, professional skill, emergency skill and first aid knowledge. Upon completion of the training, review and examine the concrete work of related personnel, and record the cause of adverse events occurred in the nursing process. (2) Nursing risk management measures: based on identified nursing risks, analyze the arising cause by employing discussion and communication methods. At the same time, put forward different countermeasures against different reasons, such as enhancing communication with patients, and paying attention to improve the responsibility consciousness and professional levels of nurses. In a word, bring forward and improve the corresponding improvement measures against risks occurred in the nursing process. Later, continue to assess nurses, and then analyze, conclude, improve and re-apply. (3) Formulate and perfect risk management responsibility system and ensure that related nurses can improve their nursing level constantly via implementing such a system. (4) Build up the information file management system and expand the user authority for accelerating nurses to improve personal professional level constantly.

2.3 Observation Indicator

Observation indicators employed in this research mainly cover adverse event rate, nursing quality rating and nursing satisfaction. Wherein, nursing quality rating is carried out by employing the hospital-prepared scale, with assess-

ment indicators mainly covering professional knowledge, skill, and service attitude and communication skills. The full score of each rating item is 100, and the higher the rating, the better the nursing quality. Furthermore, hospital-prepared nursing satisfaction questionnaire is also employed in this research for assessing the nursing satisfaction, with assessment criterion being ① strongly satisfied; ② generally satisfied; ③ unsatisfied; ④ very unsatisfied; The overall satisfaction = $(① + ②) / (① + ② + ③ + ④) * 100\%$

2.4 Statistical Treatment

Data processed via software SPSS19.0 shall be employed. Enumeration data shall be expressed in %, with χ^2 for validation; measurement data shall be expressed in $\bar{x} \pm s$, with t for validation. If P is < 0.05 , it means the difference is of statistical significance.

3. Results

3.1 Comparison of Adverse Event rate of Patients in Both Groups

According to the research on adverse event rate of patients in both groups, we can find that there are 8 adverse events occurred in total 192 patients in research group, with the adverse event rate being 4.17%, while 21 adverse events occurred in total 192 patients in general group, with the adverse event rate being 10.94%. The data of adverse event in research group is much lower than that in general group, and it means the difference is of statistical significance ($\chi^2=6.301, P=0.001, P < 0.05$).

3.2 Comparison of Nursing Quality Rating of Patients in Both Groups.

According to the research on nursing quality of patients in both groups, we can find that the overall scores of nursing quality in research group is (96.37±9.37), while that in general group is (79.34±8.25), with the overall score in research group significantly higher than that in general group. It means the difference is of statistical significance ($t=7.435, P=0.006, P < 0.05$).

3.3 Comparison of Nursing Satisfaction of Patients in Both Groups

According to the research on nursing satisfaction of patients in both groups, we can find that there are 183 patients being satisfied about the nursing in 192 patients in research group, with the satisfaction being 95.31%, while 162 patients being satisfied about the nursing in total 192 patients in general group, with the satisfaction being 84.38%, with the satisfaction in research group significantly higher than that in general group. It means the difference is of statistical significance ($\chi^2=12.596, P=0.000, P < 0.05$).

4. Conclusion

Along with the improvement of medical level and consciousness of rights safeguarding, better requirements on nursing level and nursing quality of nurses have been put forward. Nursing risk management mainly refers to keeping patients free from impairment of biological functions and mental function, disfunction or deficit and death within the permissible range of laws and regulations under the nursing process^[3]. During the assisted reproductive nursing process, adverse nurse-patient relationship is prone to occur in the nursing process considering the specificity of nursing objects, which may further result in patient-hospital disputes^[4]. The main reasons shall be attributed to the more prominent existence of ethical, legal and psychological issues involved in reproductive medicine, which is also a quite controversial subject. Till now, there is no unified nursing method available for assisted reproductive nursing in China^[5]. In regard to assisted reproductive nursing, different scholars have carried out study from different perspectives, such as personalized nursing, humanistic care and informatization management. By retrieving the currently available literature, we can find that there are few researches from the perspective of nursing risk management. Therefore, this research contends that the application of nursing risk management in the assisted reproductive nursing is of great significance and value. Therefore, this research was carried out by selecting 384 IVF-ET patients admitted by certain hospital during February 2016 to February 2018 as research objects for studying the application effects of nursing risk management in assisted reproductive nursing, with the results reported as below.

According to the research in this Paper, the adverse event rate of patients in research group is 4.17%, while that in general group is 10.94%, with the adverse event rate in research group lower than that in general group. It means the difference is of statistical significance ($P < 0.05$). This means that the application of nursing risk management in the assisted reproductive nursing can effectively lower the adverse event rate. According to the further analysis of adverse events based on this finding, we can find that the factors resulting in the occurrence of adverse events can be attributed to nurses, patients and hospital. Among which, nurses and hospital are the key factors, therefore, some scholars carried out research in this regard. Taking 82 patients as research objects, Huan Lv, Yuhui Zhang, Qiong Chang, et al. (2016) analyzed risk factors of nursing risk management in the assisted reproductive nursing. According to their research, the main risk factors are generated from nurses, patients, hospital

and society^[6]. Wherein, nurses and patients are the most important influencing factors, which is consistent with the research results in this Paper. Therefore, when applying the nursing risk management in the assisted reproductive nursing, special attention shall be paid to the training of nurses, which can be helpful for improving the professional level of nurses to a certain degree, thus lowering the adverse event rate. What's more, from the perspective of patients, when applying the nursing risk management, proper nursing methods are also employed for the adverse events caused by patients, such as psychological nursing, which can further relieve the doctor-patient relationship to a certain degree, thus lowering the adverse event rate. Furthermore, these scholars also analyzed the adverse event rate, which was, however, carried out from the perspective of season, with the result also showing that the application of nursing risk management can also lower the occurrence of adverse events. Therefore, the application of nursing risk management in the assisted reproductive nursing is of great clinical value.

Meanwhile, this research makes a comparison on nursing quality of patients in both groups, we can find that the overall scores of nursing quality in research group is (96.37 ± 9.37) , while that in general group is (79.34 ± 8.25) , with the overall score in research group significantly higher than that in general group. It means the difference is of statistical significance ($P < 0.05$). This means that the application of nursing risk management in the assisted reproductive nursing can also improve the nursing quality of patients. The nursing risk management employed in this research also carried out management of patients, such as improving the understanding of patients on ART. The advancement of patient quality will certainly boost the nursing quality significantly. This theory has been proven via research carried out in this Paper, and some scholars also carried out research in this regard. According to their research, the nursing for patients in the assisted reproductive center can enhance the understanding rate of patients on ART, which can further improve the nursing quality of patients^[7]. The foregoing results also serve as the basis for further research. Some scholars also analyzed from the perspective of the rate of wrong implementation of doctors' orders, with the results showing that the nursing risk management is of great significance^[8-9]. By retrieving the currently available literature, we find that researches carried out by some scholars are also helpful for the research in this Paper. According to the investigation to patients, we can find that the application of risk management nursing, compared with routine nursing, can better improve the nursing quality of patients. Therefore, the application

of nursing risk management in the assisted reproductive nursing is of great significance and value.

Finally, this research also compared the nursing satisfaction of patients of both groups. According to the results, the satisfaction on nursing of research group and general group are 95.31% and 84.38% respectively, with the satisfaction of research group much higher than that of general group. It means the difference is of statistical significance ($P < 0.05$). This means that the application of nursing risk management in the assisted reproductive nursing can also improve the nursing satisfaction of patients. This shall be attributed to the application of nursing risk management in the assisted reproductive nursing, which can lower the adverse event rate, improve the nursing quality and boost the nursing satisfaction of patients. Some scholars also carried out research in this regard, with the results consistent with the research one in this paper^[10]. Therefore, the application of nursing risk management in the clinical nursing is also of great value and significance.

In conclusion, in assisted reproductive nursing, the application of nursing risk management plays a critical role, which can not only reduce the adverse event rate, but also effectively improve the nursing quality of patients, as well as improve the nursing satisfaction of patients, thus being proven that nursing risk management shall be widely applied in clinical nursing.

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