

Research on Continuous Quality Improvement Application in Hospital Infection Nursing Care

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ABSTRACT

OBJECTIVE To discuss the effect of the continuous quality improvement application in hospital infection nursing care.

METHODS Our hospital inpatient department enrolled a total of 104 patients as the objects in this study from March to May 20, 2017. They were randomly divided into experimental group and control group by digital table method. The number of samples in each group was 52. The control group received routine care for infection prevention during treatment, while the experimental group received a continuous quality improvement prevention infection care method, so that the nursing satisfaction, infection incidence rate and the false negative rate of infection in the nursing job were compared and analyzed.

RESULTS The satisfaction of patients in the experimental group was 98.07%, while that in the control group was only 80.76%. The experimental group had obviously advantages and the statistics showed that, there was a statistical significance ($p < 0.05$). The false negative rate of infection in the experimental group was 13.46%, while that of the control group was 30.76%, showing the statistics ($p < 0.05$) and there was a statistical significance. The infection incidence rate was 15.38% in the experimental group and that in the control group was 36.53%. The infection rate in the experimental group is significantly lower, showing obvious statistical significance ($p < 0.05$).

Conclusion The continuous quality improvement application in hospital infection nursing care can effectively improve the patient's nursing satisfaction, reduce the incidence of infection in the nursing job and the false report rate of infection. It is a method for clinically effective infection nursing care, which is worthy of application and promotion.

Key words hospital; infection nursing care; continuous quality improvement

Hospital infection is an important part of hospital management, which is an important indicator to measure hospital management level and medical care level and a concern of hospitalized patients [1]. In the hospital, the various medical activities carried out by the patients are inseparable from the assistance of the nurses. Therefore, the occurrence of nosocomial

infections runs through the entire nursing job, so the nursing management plays an important role in the prevention and control of hospital infections. In this survey, 104 patients were selected and admitted to our inpatient department as subjects of this study from March 2017 to March 1818, whose continuous quality improvement nurse was imposed and application effect was observed. The specific report is as follows.

1 DATA AND METHODS

1.1 General date

The 104 patients admitted to the inpatient department of our hospital from March to May 20, 2017 were randomly divided into experimental group and control group by digital table method and each group consisted of 52 cases of samples. The control group were 25 female patients and 27 male patients, aged 23-64, with an average age of (43.5 ± 3.5) years. The experimental group included 23 female patients and 29 male patients, aged 23-63, with an average age of (43.2 ± 3.3) years. There was no statistically significant difference between the two groups ($P>0.05$). All patients were observed by this survey content and method.

1.2 Methods

Patients in the control group were treated by a conventional anti-infection prevention method during treatment. The experimental group were treated by a anti-infection prevention method of continuous quality improvement, The specific implementation method is as follows. ① Completing management organization: In order to prevent infection in the medical process, we must first have a complete hospital infection management system as a guarantee, and need a good organization in the management system. Therefore, anti-infection management committee can be established in the hospital^[2], The members of the committee should clarify their responsibilities, analyze and summarize the causes of nosocomial infections and develop programs to prevent infections; at the same time, they should set up special hospital infection management personnel, mainly responsible for all of the management and supervision evaluation. ② Strengthening the relevant education and training: According to China's relevant infection management laws, rules and regulations, formulate regulations^[3] that meet the actual conditions of our hospital, or work manuals for infection management and distribute them to various departments in the hospital. According to the cultural level of the personnel in the hospital, carry out the corresponding education and training. The main purpose is to supervise the staff's learning and strengthen their duties. Use of the online media platform to give a detailed explanation for the situation of hospital infections, the corresponding regulations and other answers and questions raised by the staff. Meanwhile, capture and analyze the short-term sensitive events in the hospital, grasp the influencing factors for the possible outbreak of hospital infections and further improve the efficiency of work on quality improvement^[4-5]. ③ Periodic assessment: According to the laws and regulations concerning infections in our hospital, we will formulate an infection quality improvement and management system suitable for the current situation. At the same time, we will formulate a work assessment form, conducted monthly, quarterly and annually. In each assessment, the relevant problems are analyzed, and the solution is tracked^[6]. If necessary, the implementation plan can be modified to ensure the quality of hospital infection care management. ④ Managing the hospital's high-risk infected departments, such as stomatology department, infectious diseases department, respiratory department, intensive care department, surgical operating rooms, and dialysis rooms, as well as various laboratories, disinfection rooms, and clinical inspection departments.

⑤ Feedback evaluation: Pay unscheduled visits to various departments [7], Generally, check the application of aseptic technology and hand hygiene standards, while supervising the operation of disinfection and isolation. It is no time to solve the problems and carry out staged evaluation, meanwhile, report the evaluation results to facilitate the follow-up work.

1.3 Therapeutic observation

Compare and analyze the nursing satisfaction, the incidence of infection and the false negative rate of infections in nursing work between the two groups of patients. Nursing satisfaction evaluation: This survey uses questionnaires to collect data. The survey items include 10 items, each item is 10 scores. The total score of the questionnaire is 100 scores, in which 80 scores or above is very satisfactory, 60-80 scores is satisfactory and below 60 scores is not satisfactory. Nursing satisfaction = (total number of cases - non satisfaction number) / total number of cases × 100%.

1.4 Statistical Method

Data collected in the experiment were processed with SPSS17.0 statistical software package. Nursing satisfaction, incidence of infection and false negative rate of infection events in nursing job were described by n (%) and tested by χ^2 . When $P < 0.05$, the difference was significant in clinical comparison .

2 RESULTS

2.1 Comparison of nursing satisfaction between two groups

The nursing satisfaction of the experimental group was 98.07%, while that of the control group was only 80.76%. The experimental group had obvious advantages ($p < 0.05$), with statistical significance, as shown in Table 1.

Table 1 Comparison of nursing satisfaction between two groups (n,%)

Group	Number of cases	Very satisfaction	Satisfaction	Non satisfaction	Nursing satisfaction
Experimental group	52	42	9	1	51(98.07)
Control group	52	31	11	10	42(80.76)
χ^2					8.2346
p					0.0041

2.2 Comparison of infection rate and missed report rate between two groups

The incidence of infection in the experimental group was 15.38%, while that in the control group was 36.53%. The incidence of infection in the experimental group was significantly lower than that in the control group ($p < 0.05$). The incidence of infection in the experimental group was significantly lower than that in the control group ($p < 0.05$).

Table 2 Comparisons of infection incidence and missed reporting rate between the two groups (n,%)

Group	Number of cases	Incidence of infection	False negative rate of infection
Experimental group	52	8(15.38)	7(13.46)
Control group	52	19(36.53)	16(30.76)
χ^2		6.0529	4.5217

p

0.0138

0.0334

3 DISCUSSION

Hospital infection management has always been the focus for our hospital management. In this survey, our hospital gave fully play to the concept of continuous quality improvement and carried out the operational work, thus achieving good results. Through a complete management organization, our hospital infection management can be developed in an orderly manner. The specific personnel, specific events improve work efficiency. Through the management of the organization's behavior, we can timely detect the occurrence of infection, and regularly summarize the situation of infection, so as to formulate excellent programs to prevent infection actively. The management organization can evaluate the supervision process to ensure its supervision quality. With the specific and full-time management, the false negative rate of clinical infection has greatly decreased. The results showed that the false negative rate of infection in the experimental group is 13.46%, while that in the control group is 30.76%, showing statistics ($p < 0.05$), that is to say, the complete management organization can effectively reduce the false negative rate of infection, so that the situation of nosocomial infections has been attached importance to. Through the relevant professional education and training, staff members have improved their professional quality [8], avoided staff paralysis in the busy and boring work and the decrease of the importance of hospital infection.

By providing learning opportunities for staff members, they can deal with problems in their work well and recognize the shortcomings. In view of the capture and analysis of sensitive incidents in hospitals, staff members can have a certain sense of prevention and be aware of the adverse consequences of nosocomial infection, thereby improving the quality of work and reducing the incidence of nosocomial infection. Also, the survey shows that the incidence of infection in the experimental group is 15.38%, while that in the control group is 36.53%. The incidence of infection in the experimental group is significantly lower than that in the control group. Statistical results showed that ($p < 0.05$), the statistical significance was obvious and the results showed the practical effect of continuous quality improvement application.

The formulation of the assessment system has made the staff pay more attention to the situation of nosocomial infection and ensured the quality of nursing management of nosocomial infection. Among the many departments in the hospital, some departments are at high risk of infection, such as stomatology departments, infectious diseases departments and so on. In this department, great attention should be paid and the management is more stringent. Through feedback evaluation, we can timely understand the problems existing in the actual work, and take the evaluation results as an evaluation standard of hospital infection nursing work, so that the follow-up work can be more smoothly carried out. To sum up, the implementation of continuous quality improvement in hospital infection nursing can effectively improve patients' nursing satisfaction, reduce the incidence of infection and the false negative rate of infection events in nursing work. It is a better effective clinical method for the infection nursing care and it is worth applying and promoting.

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