

Improving the willingness of nurses in operating room to care for patients infected with COVID-19

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Background

Facing with the high variability, strong infectivity and unknown coronavirus disease 2019 (COVID-19) and its viruses, medical personnel have experienced higher levels of stress. It is clear that they greatly increase the chance of cross-infection when receiving COVID-19 patient undergoing surgery before, during, and after the operation. There is also a high risk of nosocomial cluster infection. Therefore, the establishment of a good infection control guideline in the operating room to ensure the safety of patients and medical personnel is important.

Method

After the survey investigation, nurses in the operating room have low willingness to care for patients with COVID-19. The main reasons include:

1. Environmental equipment: There is no negative pressure operation environment. The multiple and inconsistent storage places of protective equipment are observed.
2. Policy: There is no guidelines on the control measures for surgical infection of COVID-19 patients.
3. Nurses: Nurses lack experiences related to emerging infectious diseases, worry about being infected, and feel unconfident to bear surgical care of patients infected with COVID-19.

The following improvements activities of the operating room environment are designed through this project: The establishment of special protective equipment vehicles and infection control guidelines, the organization of nursing education and situational simulation activities, the assessment of putting on and taking off protective equipment, and the activation of personnel support and stress relief mechanisms.



Results

After the implementation of the project, the willingness of numbers of nurses in the operating room to care for COVID-19 patients increased from 7 to 117. The willingness to care for COVID-19 patients increased from 5.7% to 87.3%, which has reached the project goal. The average score of course tests increased from 70 to 95 points. The average correct rate of personal protective equipment put on and taken off assessments increased from 74.5% to 92.3%.

Conclusion

Clear guidance on epidemic prevention in the operating room and nursing education and training to improve self-protection skills, coupled with sufficient equipment, materials and sufficient manpower, allow nurses confidently to provide the full-term and holistic care of patients with COVID-19. The cleaning and disinfection of the hospital environment is one of the most important methods to reduce nosocomial infections and maintain the safety of patients and staffs. Further, this project recommended outsourced cleaning manpower to be included in the official staff of the hospital. The COVID-19 related training and educational courses should also be included for nurses to jointly improve the effectiveness of epidemic prevention.