



An Overview of Nursing Practice and Optimization Strategies for Epidemic Infectious Diseases — Taking COVID-19 As an Example

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Abstract: This paper combines the author's experience in the nursing practice of patients with COVID-19 at the Xiaogan Central Hospital in Hubei Province, and analyses the response strategies for epidemic infectious diseases. It is hoped that this paper will provide some guidance and help in the response to epidemic infectious diseases.

Keywords: epidemic infectious disease, neonconiosis, nursing practice

1. Introduction

In recent years, the threat posed by diseases to human beings has not abated but has become increasingly serious. Pandemic infectious diseases such as H7N9 influenza and Ebola have triggered a number of public health incidents in many parts of the world, claiming many human lives and causing far-reaching impacts on all aspects of society. The timely screening, effective control and scientific management of large-scale epidemic infectious diseases are related to the safety of people's lives and social stability across the country. 2020 saw the sudden outbreak and rapid spread of COVID-19 epidemic worldwide in the first half of the year, which has caused indelible impacts on a number of industries such as culture and tourism, manufacturing and has also brought new challenges to healthcare workers. In view of this, this paper takes COVID-19 epidemic in 2020 as the entry point, and combines the author's practical experience of nursing care in rescuing patients with COVID-19 at Xiaogan Central Hospital with an analysis of the response strategies around epidemic infectious diseases, in the hope of helping to provide guidance and assistance for the response to epidemic infectious diseases.

2. Nursing practice and innovation of epidemic infectious diseases

2.1 Be well prepared

In order to improve the efficiency of nursing work and to quickly get involved in nursing work, the author made some necessary preparations before going to the Xiaogan Central Hospital for support. Before participating in the support, the hospital organized special training on theories and skills related to COVID-19, and also did basic psychological construction for us. Prior to this, the nurses all had experience in treating patients with acute and critical illnesses. When I was faced with a new working environment and a relatively unfamiliar workflow, I made the following relevant preparations: Firstly, before entering the isolation area, I learned the models of various types of equipment in the hospital such as monitors, micropumps, infusion pumps, non-invasive/invasive ventilators, transnasal high-flow machines and CRRT machines by asking the medical and nursing staff who entered first, and We also retrieve information on the Internet to learn the operating rules and techniques of using the equipment in the hospital. Not only that, we also set up a training and learning group through a WeChat group, which facilitated the nurses involved in the support to learn from each other and discuss the knowledge of COVID-19 care and prevention of complications, psychological intervention and rehabilitation care. Secondly, the health care team in which we work takes on the care of patients using ECMO equipment in the hospital. Therefore, in caring for patients with COVID-19, we learned about nursing care related to ECMO, which included the pick-up and drop-off of ECMO supplies and the commissioning of the equipment.

2.2 Pay attention to the psychology of patients and give spiritual support

Firstly, the COVID-19 is new and little is known about it by both medical experts and the general public, and this leads to patients easily falling into a state of isolation, panic and other stressful psychological conditions, thus questioning the role of medicine and rejecting treatment or blindly believing in drugs and over-medicating. Secondly, patients with COVID-19, especially those in areas where COVID-19 epidemic is relatively severe, lack social interaction due to their

long stay in a relatively closed and isolated environment. They tend to accumulate a lot of negative emotions inside due to loneliness and isolation, and fall into anxiety or depression. Therefore, when caring for patients with COVID-19 in hospital isolation areas, the author provides not only physical care, but also a moderate amount of attention to patients' emotions and lives, providing them with psychological care. For example, the author helps patients with poor lung function to perform active and passive breathing exercises to increase pulmonary rehabilitation. For example, after patients are discharged from the hospital, I provide extended care services through health education via WeChat, such as guiding patients on the scientific use of medication at home, reminding them of the precautions related to home isolation and regularly reviewing their results, and then giving them back to us in a timely manner. In addition to this, we also remind patients to adhere to rehabilitation training, and during the rehabilitation training process, we listen to them and actively guide them, so that they can feel the care from the health care staff and the community, so that they can return to their families sooner and resume a normal and healthy life and have a better and seamless connection with the local community hospital or community.

2.3 Actively innovate ways of nursing work

Nursing staff need to face a large number and a wide variety of patients with different personalities and backgrounds, for different patients, different nursing strategies need to be used, and the flexible response to the nursing experience needs to be honed by practice. In the care of patients with COVID-19, the author actively innovates the ways of nursing work, strictly implements one person, one strategy and one nursing plan, and suggests that the isolation ward should adopt a model combining overall responsibility and functional nursing, which means that it can provide nursing services for patients in a person-centred way and can better complete the treatment and care of patients, thus providing quality nursing services for patients. In addition, in the isolation area, health care workers need to wear heavy protective clothing, and it is more difficult to communicate with each other verbally. Therefore, the author has established a WeChat group for nursing staff and patients to share knowledge of instrumentation and nursing experience through the internet, so that nursing staff in the hospital can quickly understand the relevant knowledge and carry out nursing work. The author has also made full use of the network to conduct patient love sessions on the cloud, which provides a good platform for patients to communicate online, show their talents, release psychological pressure and regain confidence in their lives.

3. Strategies to improve the level of response to epidemic infectious diseases

3.1 Nursing staff should actively improve their own quality

Firstly, under the guidance of the concept of lifelong learning, the cornerstone of professional growth for nursing staff is to "love learning, learn more, study more and accumulate more". Therefore, on the road to professional growth, nursing staff should actively participate in in-service training and independent further training, which is one of the important ways to broaden their horizons and enhance their nursing abilities. Read and learn the theoretical knowledge and then think about nursing practice on a new level, armed with theoretical knowledge and based on nursing practice experience.

Secondly, do daily nursing work well and solidify basic skills. Nursing staff can accumulate a wealth of practical experience in nursing during the years and years of caring for patients. Without the accumulation and comprehension of daily nursing work, there will be no ease in responding to unexpected events. Responding to large-scale, sudden, epidemic infectious diseases requires calling on the experience nursing staff have accumulated in all aspects of their regular nursing work, including knowledge structures, ways of thinking, patient conditions, methods of care, and emergency response skills. It is therefore important for nursing staff to take daily nursing care seriously, actively undertake and participate in daily nursing care, take the initiative to record every aspect of their daily nursing care and reflect on their experience against the practice of good health care professionals.

3.2 Medical institutions should improve the standard of medical care

Firstly, to strengthen the training of nursing personnel. With the advancement of technology, medical institutions have introduced various types of medical devices and equipment that bring together highly sophisticated technology, such as ECMO. While these new devices have improved the efficiency and precision of disease diagnosis and treatment, they have also raised the bar for medical work, requiring operators to be skilled in the use of the equipment. Therefore, nursing staff in the new era must actively follow the latest developments within the healthcare field, understand new theories and trends in nursing, and strive to achieve their own professional growth. Specifically, firstly, medical institutions can regularly send medical and nursing staff to higher education institutions for further training in a graded, tiered and classified manner, and arrange for medical and nursing staff to go to other medical institutions to learn from practical experience. Secondly,

medical institutions can join hands with units such as the health and disease control departments to establish medical associations and take the initiative to invite experts and scholars to the hospital for exchanges, so as to provide learning opportunities for medical and nursing staff, thereby enhancing their abilities and establishing a strong team of medical and nursing staff who can handle epidemic infectious diseases with ease. Thirdly, after the introduction of new medical devices and equipment, medical institutions should promptly organize training for nursing staff to help them accurately grasp the operation of medical equipment, so as to standardize the use of medical equipment and improve the nursing staff's professionalism. Fourth, medical institutions should actively organize medical and nursing skills competitions to promote learning through competition, thereby consolidating the business skills of medical and nursing staff and improving their business standards.

Secondly, medical institutions should develop psychological crisis intervention programs and procedures for epidemic infectious diseases, so that psychological support can be provided to patients in time for the outbreak. Specifically, firstly, medical institutions can actively set up crisis intervention teams consisting of psychiatrists, psychotherapists and psychological counselors for large-scale epidemics, and set up a 24/7 psychological rescue line and a dedicated WeChat public number to provide effective psychological counselling services for frontline staff and people in centralized isolation for epidemic prevention and control. Secondly, medical institutions can set up "Heart to Heart" WeChat groups for family members to communicate with them in a timely manner about the specific situation of patients and to boost their confidence. Thirdly, medical institutions have set up volunteer teams to regularly cut the hair and nails of patients with limited mobility, accompany them to read books and listen to music, so that patients can feel the warmth of family members during isolation, and connect the "last mile" between medical staff and patients.

3.3 Government departments should manage disease emergencies well

After the outbreak of a pandemic, governments at all levels, as social managers, should manage the emergency response to the disease and take timely action to deal with the sick. Specifically, firstly, the government should actively improve the emergency response mechanism for mass epidemics, starting with the top-level design to find ways to improve the emergency response system for mass epidemics characterized by "prevention and initiative", forming a joint system of surveillance, early warning and prevention and control of mass epidemics led by the health and disease control departments, with the active collaboration of other administrative departments.

Secondly, the government should cooperate with higher education institutions, enterprises and professionals in the field of medicine in many aspects, and set up high-level expert committees on epidemic disease emergency response according to administrative divisions and government levels, so as to organize medical experts to conduct research and analysis on the disease situation in a timely manner during the "internal information period" when epidemic diseases have not yet aroused public concern. In the "internal information period", when epidemics are not yet of public concern, medical experts will conduct research and analysis of the disease situation, formulate scientific and reasonable prevention and control plans for epidemic diseases, and make them available to the public in a timely manner.

4. Conclusion

The emergence of epidemics such as COVID-19 not only tests the government's ability to govern, but also challenges medical institutions and health care workers. This paper argues that it is unrealistic to rely solely on the power of healthcare workers or healthcare institutions as a single entity in the response to epidemic infectious diseases, and that the whole community must be supported from all sides. Specifically, firstly, caregivers must actively improve their own quality. Secondly, healthcare institutions must improve their standard of care. Thirdly, government departments must do a better job of managing disease emergencies. It is important to note that although COVID-19 epidemic has been effectively controlled in China, new epidemic infections may emerge in the future. Therefore, it is important to learn from the experience of COVID-19 epidemic and to improve the medical standard of healthcare institutions and the nursing skills of nursing staff, so that they can better fulfil their mission of "health is important; life is important".

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