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, neoconiosis, 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,
医疗机构可以与单位如公共卫生与疾病防控部门建立医疗协会，并主动邀请专家和学者到医院进行交流，以提供学习机会，从而提高他们的能力，建立一支能轻松应对传染病的医疗和护理团队。第三，新医疗设备和设备引进后，医疗机构应组织护理人员进行培训，帮助他们准确掌握医疗设备的操作，以标准化使用医疗设备，提高护理人员的专业水平。第四，医疗机构应积极组织医疗和护理技能比赛，通过竞赛促进学习，从而巩固医疗和护理人员的业务技能，提高其业务标准。

第二，医疗机构应制定心理危机干预计划和程序应对传染病，为病人提供及时的心理支持。具体来说，首先，医疗机构可积极设立危机干预团队，包括精神科医生、心理治疗师和心理咨询师，设立24/7心理救援热线和一个专门的微信公众号，为前线工作人员和集中隔离进行有效心理辅导服务。其次，医疗机构可设立“心连心”微信小组，用于家庭成员与他们及时沟通，了解病人的具体情况，提高其信心。最后，医疗机构可设立志愿者团队为行动不便的病人剪发、修剪指甲，陪伴他们读书和听音乐，使病人在隔离期间感受到家庭成员的温暖，连接医疗人员与病人之间的“最后一英里”。

3.3 政府部门应管理好疾病应急

在传染病爆发后，各级政府部门，作为社会管理者，应管理好应急响应和采取及时的行动。具体来说，首先，政府应积极完善重大传染病应急响应机制，从顶层设计出发，完善重大传染病应急响应系统，形成以“预防和主动”为特征的重大传染病防控体系，由卫生和疾病防控部门主导，其他行政部门积极参与。

其次，政府应与医学高等教育机构、企业及专业委员会等多方面合作，根据行政区域和政府级别设立高层次专家委员会，以便在“内部信息期”及时研究和分析传染病情况，制定科学合理的防控计划，并及时向公众发布。

4. 结论

传染病如COVID-19的出现不仅考验了政府的治理能力，也对医疗机构和医护人员提出了挑战。本文认为，仅依靠医护人员或医疗机构单打独斗应对传染病是不现实的，整个社会必须支持。具体来说，首先，看护者必须主动提高自身素质。其次，医疗机构应提高护理标准。第三，政府部门应做好疾病应急管理工作。重要的是，尽管COVID-19疫情在中国已被有效控制，但未来仍有可能出现新的传染病。因此，应从COVID-19疫情中吸取经验，提高医疗机构的医疗标准和护理人员的护理技能，使他们能更好地履行“健康是重要的；生命是重要的”使命。

References

