

Study on the Influence of Psychological Pressure on Medical Staff in Isolation Ward of New Coronavirus Pneumonia

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Abstract: The new type of coronavirus that broke out in early 2020 has strong infectivity and can cause acute respiratory symptoms. At present, the new coronavirus pneumonia has been diagnosed in more than 70000 cases, more than 2000 deaths. Wuhan is the most serious area of the epidemic, and health care workers are under great physical and mental pressure, which brings great health hazards to health care workers. Through the investigation of the mental health status of the first-line medical staff of the new coronavirus pneumonia, the mental health status of the special population under severe stress events is analyzed, which provides the basis for formulating the psychological intervention measures of the medical staff during the epidemic period of the new coronavirus pneumonia.

1. Introduction

Although the situation of the epidemic is severe and the psychological pressure of the medical staff working in the isolation ward is high, but the support of the society and the hospital is also high, compared with the SARS and influenza research, this is because, despite the severe situation of the epidemic, the psychological pressure of the medical staff working in the isolation ward is high, but it has also aroused the high attention of the social and hospital leaders, and the care and care of the medical staff in the society and the hospital has reduced the psychological burden of the medical staff to a certain extent. Therefore, we still need to pay attention to the psychological state of the medical staff in the isolation ward, give positive psychological support, and let them get better harm in this anti-epidemic war. about infection anxiety, the results of this study suggest that nurses are more anxious than doctors. In the early stage of the outbreak, the protective equipment was insufficient, the transmission route and treatment method of the disease were not clear, and the nurses often had close contact with the patients with new coronavirus pneumonia because of the need of nursing operation, and the contact time with the infected patients was longer. So nurses are more likely to be infected than doctors, and more worried about themselves and their families. similar results have also been found in our country. nurses show more mental sub-health status in clinical work, especially physical features such as dizziness, headache, dyspnea, etc. The managers of hospitals and departments and the general public should give nurses more understanding and attention[1].



Figure 1 Medical staff working in isolation wards

2. Effects of Pneumonia on Ward Staff

2.1. Nurses are More Tired Than Doctors

As with other scholars, nurses are more likely to fatigue than doctors. Although the medical and nursing work is relatively hard, the nursing work is trivial and heavy, and the rest time is irregular and other factors make the nurses more tired; in addition, the impact of emergencies, high work risk, high work stress will lead to psychological pressure on nurses, and the fatigue state of nurses is more obvious. At the same time, the study found that health workers who live with their children, in addition to coping with heavy work, have to deal with the trifles of life, especially the fear of infection of their children. After the disease outbreak, the manpower reserve is insufficient, the hospital needs to carry on the human resources allocation according to the disease outbreak situation. The study found that emergency non-infective health care workers were more fatigued by different disciplines and unfamiliarity with the environment than infection professionals. Therefore, in the work we should cooperate with each other to understand, so that the emergency deployment of medical staff to get more concern, as soon as possible to adapt to the environment, familiar with the process.

2.2. The Lower the Working Life, the Greater the Impact of Psychological Stress

From the two factors of work burden and work motivation, the results show that health care workers who have worked for more than 20 years still maintain their enthusiasm and enthusiasm for work, although they bear a heavy work burden. Perhaps because most of the health-care workers who have worked for more than 20 years are section managers, responsible for the coordinated operation of the overall work of the section and health care work, they have a greater responsibility, the various work experiences they have gained at this stage and the sense of belonging and honor that the organization will work more actively. Social support and hospital support factors felt by non-infectious health workers were lower than those of infectious professional health workers, probably because infectious professional health workers were more likely to have access to information about new coronary pneumonia. Although the hospital provided a certain degree of psychological support to health care personnel with counseling experts, he ignored the non-infectious professional health workers who came to support. In addition, the active implementation of infection control by national governments, local governments and hospitals, and the provision of disease-related information and material compensation to front-line medical personnel in the fight against the epidemic have greatly increased the awareness of medical personnel to protect themselves, especially for medical personnel in their own profession. Therefore, whether it is an infection expert or not, working on the front line of disease outbreak should be recognized and respected by society.



Figure 2 Pneumonia isolation ward

3. Psychological Stress Response of First-line Anti-epidemic Medical Staff

3.1. Anxiety and Fear

The emergence of anxiety and fear emotion in nursing staff is a normal psychological phenomenon, but more attention should be paid to the nurses who frequently appear anxiety and fear emotion. The root cause of this panic is that in the face of sudden outbreaks, in order to ensure the health and safety of the broad masses of the people, a large number of medical personnel returned to their jobs and went to the front line of fighting the epidemic. Medical personnel entering the isolation ward, must wear thick protective clothing, continuous work for several hours, because of the inconvenience of wearing off, in order to prevent cross-infection and infection, medical personnel should eat as little as possible before wearing protective clothing, do not eat after wearing protective clothing do not drink, do not go to the toilet, physical exertion is great. And continuous stress overload work, sleep is seriously inadequate, medical staff often physical and mental exhaustion. In addition, the new type of coronavirus pneumonia in the early stage of the epidemic, the shortage of protective materials, various protective measures are not in place, medical staff are at risk of occupational exposure at any time, worried about their own and family infection, resulting in anxiety and even fear[2] .

3.2. Depression and Helplessness

Medical staff will feel helpless and they often feel nervous. The position of the professional role of the medical staff in saving lives and helping the wounded increases the psychological pressure of the medical staff. At the beginning of epidemic outbreak, because the source of infection, transmission route, diagnosis method and so on are not clear, the new coronavirus research leading to the occurrence of the disease is also very limited, and the clinical specific drugs for the new coronavirus pneumonia have not been reported. Medical staff often feel helpless and guilty when they encounter suspected or confirmed cases. And with the spread of the epidemic, the number of infections, the emergence of critical cases, the increase of death cases, because of the particularity of the disease, patients died by medical staff to deal with the body directly after death, in the face of ineffective treatment of patients, infected colleagues or relatives, and the effect of the epidemic prevention and treatment of uncertainty, will cause medical staff into a state of depression and helplessness, and even to their own job burnout and meaningless feeling.

3.3. Compassion and Fatigue

Medical workers will feel sympathetic fatigue. Compassion fatigue, also known as secondary trauma, refers to the psychological state of tension, apathy, anger and so on caused by brief high intensity contact information. After the new outbreak of coronavirus pneumonia, medical staff should be responsible for the treatment of confirmed cases, but also responsible for the sampling of suspected cases, and at the same time, psychological guidance to patients to alleviate the anxiety

and panic of patients. Faced with the increasing number of confirmed cases and various epidemic prevention and control information, some medical staff will become numb and indifferent.

4. Psychological Intervention of Medical Staff

4.1. Pressure Control and Appropriate Release

Before participating in the rescue, the medical staff should focus on the psychological crisis intervention training, understand the stress response, learn how to cope with stress and regulate emotion. Use regular shift system, reasonable arrangement of medical staff work and rest time, avoid long time high intensity, overload work, ensure adequate sleep after work, balanced diet. Let oneself have negative emotion, can discover and adjust in time, can vent oneself negative emotion by writing diary, chatting with family, confiding with colleague or friend, listening, encouraging, encouraging and so on.



Figure 3 Medical staff in protective clothing

4.2. Self-Affirmation and Regulation of Negative Emotions

acknowledge your efforts and efforts, acknowledge the limitations of your abilities, and tell yourself that it is impossible to take care of all patients again and again. A reasonable and objective view of the development of disease outbreak and death of critical patients to avoid excessive guilt. Use mindfulness meditation to calm yourself down, feel and accept yourself, and tell yourself to do your best and believe in the power of the country. Improve the confidence of medical staff to fight the epidemic by listening to or watching positive reports. In the face of their own physical and psychological conditions, such as negative emotions persist or have already appeared stress symptoms, should adjust the work in time, seek professional help.

4.3. Control Information Sources

Reduce the pressure information of the exporter, moderate understanding of epidemic information, avoid the continuous exposure of epidemic information, so that focus, limited attention can be, from the authoritative and reliable media to understand the epidemic information, to know, do not believe in rumors do not spread rumors. During working hours, you can chat with family, colleagues or friends, talk about work, and talk about topics other than outbreaks. Faced with the spread of the epidemic, the number of confirmed cases increased, objective analysis of the causes, objective and correct understanding of the epidemic prevention and control work. Find oneself appear compassion fatigue, should undertake psychological intervention in time.

4.4. Mental Health Education

frontline medical staff need the encouragement of managers, and daily condolences can enhance the confidence of medical staff to overcome the disease. Strengthen the training of professional knowledge in epidemiology, remove the doubts caused by the lack of knowledge of medical personnel, establish family, hospital and social support systems, implement economic subsidies to

front-line medical personnel, and work arrangements with work and rest are conducive to the physical and mental health of front-line medical personnel. Establish and improve the whole psychological intervention system of medical staff, carry out case discussion every day, sum up the experience of improving cases, so as to improve the self-confidence of front-line medical staff.

5. Conclusions

All in all, in major disaster accidents, the incidence of acute psychological stress disorder and post-traumatic stress disorder is high, and the new type of coronavirus pneumonia, as a public health emergency, is also a lack of understanding, will bring great challenges to the physical and mental health of medical staff, so it is very important to do a good job of psychological intervention of medical staff to protect the physical and mental health of medical staff and fight the prevention and control of epidemic situation. In the absence of intervention, the sample size is small, and further longitudinal study is still needed to clarify the effect of intervention after the end of the disease outbreak.

References

- [1] Deng, Rong., Chen, Fang., Liu, Shanshan., et al. Factors affecting psychological stress of medical staff in isolation ward of new coronavirus pneumonia. *Chinese Journal of Infection Control*, vol. 19, no. 3, pp. 256-261, 2020.
- [2] Zhong, Yanping., Huang, Jieying., Xie, Zhiwei., et al. A Study on Mental Health and Intervention Effect of First-line Medical Staff Against New Coronavirus. *General Care*, vol. 18, no. 8, pp. 955-957, 2020.