

CONSTRUCTION AND PRACTICE ABOUT THE FINE MANAGEMENT OF CANCER PATIENTS DURING THE EPIDEMIC OF COVID-19

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ABSTRACT

Purpose: This paper explored the construction and practice of the fine management of cancer patients during the Covid-19 outbreak.

Methods: To establish the medical groups for the fine management of cancer patients during the Covid-19 outbreak, 6 doctors and 6 backbone nurses were selected from the oncology department since January 28th, 2020. And then the medical needs of cancer patients were obtained through telephone follow-up network. Next, the medical group was further divided and the we-media was used for the fine management of cancer patients based on patients' needs. When the we-media failed to solve problems in some special or emergent situations, a pattern combining hospitals, communities with patients was used to provide continuous medical care for cancer patients.

Results: The medical group effectively completed the information collection registration of 198 cancer patients through the telephone follow-up network. The current needs of 198 patients were ranked from high to low, and they were: knowledge of diseases, psychological support, PICC maintenance, complication treatment, medication use instructions, rehabilitation exercise instructions and diet combination methods, respectively. Based on patients' needs, the medical group has carried out the fine management for 198 patients through the following activities: 16 live broadcast, 4 recorded videos, 27 group activities targeted at patients, 48 one-to-one telephone counselling, 1 disease brochure, 1 nutritional diet recipe and 1 list for self-monitoring patients' diseases. During the epidemic outbreak, no death or infection cases were found.

Conclusion: The fine management effectively helped meet the urgent needs of cancer patients who sought medical service and treatment during the epidemic outbreak.

Keywords: novel coronavirus, tumours, fine management.

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Introduction

2019 novel coronavirus (2019-nCov for short) hit Wuhan, Hubei Province, China since December, 2019⁽¹⁾. And it then spread around China quickly. Jingzhou, a member of Wuhan city circle, was also greatly influenced by the epidemic. As 2019-nCov is mainly spread through respiratory droplets or physical touch, etc., people are generally susceptible and the disease has the characteristics of rapid attack, strong infectiousness, and great changes in

the course of diseases⁽²⁾. To prevent the spread of the virus comprehensively and effectively, the government has taken strict prevention and control measures as well as the traffic control⁽³⁾. Jingzhou Central Hospital, where I work, was listed as the first batch of designated hospitals that admit the 2019-nCov patients, and the common outpatient service was suspended. With the suspension of the common outpatient service and the strict traffic control, a lot of cancer patients were forced to quarantine at home, failing to receive the regular medical treatment.

Given the particularity of cancer patients' conditions and psychological status(1), the oncology department immediately conducted the whole seamless management through the fine management mode. The fine management mode has achieved satisfactory results, so it is well worth promotion. This paper will introduce the fine management mode as follows.

Materials and methods

Research Objects

The cancer patients who need reexamination or further medical service after January 30th, 2020, were selected as research objects in this paper.

Methods

Establish medical group

First, the following conditions should be considered: the number of office staffs, overall deployment of the hospital human resources, over 1 year of working experience in the oncology department, the proficient use of we-media, etc. Finally, 6 doctors and 6 backbone nurses were admitted to the medical group based on the principle of voluntariness. The author of the paper, also the group leader, was responsible for the coordination and implementation. The composition of the medical groups was organized as follows: 5 males and 7 females; 4 staff with junior title, 5 with intermediate title and 3 with senior title; 2 staff with 1-2 years of working experience in the oncology department, 4 staff with 2-5 years of working experience in the oncology department and 6 staff with over 5years of working experience in the oncology department. Their average age is 31 ± 6.72 years old. In the medical group, 2 of them were PICC specialized nurses, 2 were senior psychological consultants and 1 was the senior nutritionist.

Design the patients' information collection form

Regarding the design of the patients' information collection form, the group leader told group members in advance about how to look up the relevant documentation after establishing the medical group. Next, the group leader gave an online conference to 12 group members on Tencent Conference platform, and the group members made keynote speeches about how to design the patients' information collection form. After that, the group leader completed the design of the patients' information collection form by sorting the members' speeches.

The final design of the patients' information collection form includes names, contacts, education, family support, current residence, responsible physicians, mobile electronic devices, hospitalization time, re-examination time, treatment method, medication, current problems, current discomfort symptoms, etc.

Patients' information collection network

After the design of the patients' information collection form was completed, 1 doctor and 3 nurses looked up the information of all the cancer inpatients after October, 2019 according to the time when they were hospitalized, and filled the detailed information about the inpatients in the form correctly, including names, contacts, education, responsible physicians, hospitalization time, reexamination time, treatment methods, etc. A group member was responsible for setting up QQ groups and WeChat groups. Meanwhile, patients were further divided into groups and then allocated to group members. Next, group members called their patients to obtain the information of patients, including names, current residence, family members, medication, current problems, current discomfort symptoms. Moreover, they also guided patients to join QQ groups or WeChat groups. For the few patients without mobile electronic devices, group members would call them one by one for communication and guidance according to the task arrangement.

Fine management implementation in groups

After the patients' information was collected through the network, 12 group members were divided into 6 groups according to the main existing problems and discomfort symptoms. The 6 groups covered the following areas, including the guide to diseases, the guide to medication, PICC maintenance, psychological counseling intervention, functional exercise and diet management. The patients were divided into their own responsibility scopes by 6 groups for specific management. Meanwhile, the group leader published medical staffs' contacts of 6 groups as well as the information of the corresponding patients in QQ groups and WeChat groups so that patients could communicate with medical staff whenever it was necessary. The disease-related knowledge group made the live broadcast twice a week in QQ groups, and it also explained the risks of 2019-nCov on cancer patients, ways to cope with risks, as well as self-monitoring and treatment procedures of illness changes, etc. After the live broadcast was over, 30 minutes was left for patients to

ask questions. During the interaction, medical staff knew about the state of patients' illnesses and made detailed records. The group of the medication use guide published the common methods on how to use medicine, prevention and treatment of side effects, and medication use cautions. Regarding the individual medication use, responsible physicians sent one-to-one voice texts or messages to guide patients. Moreover, patients were required to reply after understanding the texts or messages. Through long-distance videos, PICC maintenance group checked the completeness of patients' PICC dressings as well as the complications one by one. Meanwhile, patients were told how to avoid and deal with complications. For those patients who were discharged from the hospital with a PICC maintenance package, patients' family members were guided to adopt the simplified maintenance steps for self-maintenance. In the psychological counselling group, the symptom checklist (SCL-90) was used to evaluate the psychological conditions in QQ groups. For those suffering from psychological discomfort symptoms, the one-to-one WeChat voiced texts or QQ voiced texts were used for psychological counselling. The psychological relief treatment was conducted in QQ groups once a week. The functional exercise group first recorded videos of postoperative breast cancer functional exercise as well as PICC functional exercise and recovery and then uploaded them to QQ groups. Patients were organized to learn the functional exercise by themselves, and patients were led to exercise once a week. Moreover, patients were also organized to take part in Tai Chi exercise twice a week to boost immunity. The nutritional management group made the nutritional diet prescriptions in the form of electronic brochures and then uploaded them to group sharing for patients to learn. Meanwhile, they were prepared to answer patients' questions about nutritional diets.

Results

General conditions of patients

Through the information look-up, 216 patients need to return for medical treatment, and 18 patients weren't included in the management system because of communication failure. 198 information collection forms were effectively completed through the telephone follow-up network. The current needs of 198 patients were ranked from high to low: knowledge of diseases (78.79%), psychological support (64.65%), PICC maintenance (49.50%), complica-

tion treatment (43.43%), medication use guidance (38.89%), rehabilitation exercise guidance (31.82%) and diet allocation (18.18%). Among the patients, 16 patients didn't know how to use We-media because of age and education problems, so the medical team achieved the medical care through one-to-one telephone communication. 6 patients were hospitalized for changes in illness conditions, and the medical groups helped patients communicate with the community. Jingzhou Central Hospital dispatched vehicles to pick up patients or patients' family members drove to hospitals for medical treatment. No cases of death or infection was found until the paper was published.

Implementation of fine management by the medical groups

Since January 28th, 2020, 12 medical staff were divided into 6 groups to conduct continuous medical care for 198 patients. The medical care was conducted in various forms. The live streaming was conducted 16 times and lasted for 32 hours in total. 4 videos were recorded, the group activities were held 27 times, and one-to-one telephone counseling was conducted 48 times. Moreover, the implementation of the fine management was productive in other aspects: 1 brochure about disease, 1 nutritional diet recipe and 1 list for self-monitoring patients' diseases.

Discussion

Necessity Analysis of Implementing the Fine Management on Cancer Patients During 2019-nCov

Since 2019-nCov was so serious and spreads quickly, all the local governments took strict prevention and control measures, and various medical institutions also responded actively. With the leadership of the Party, good medical resources were used to support Hubei and medical staff fought against the epidemic bravely, thus safeguarding people's life security^(4,5). As the whole China including the government, the public and medical institutions put their effort into the fight against 2019-nCov and the strict traffic control was implemented, patients with chronic diseases like cancer patients may be less cared or even ignored while seeking medical service. During the 2019-nCov outbreak, patients with chronic diseases were more likely to be infected and had a poorer prognosis. Compared with healthy people, cancer patients had a relatively low immunity and were

more likely to get infected by novel coronaviruses. Once these cancer patients got infected, it would be fatal⁽⁶⁾. Moreover, cancer patients were in quarantine at home for 2019-nCov, so they couldn't get treated as expected or have reexamination, resulting in serious complications, malnutrition, and side effects of medication use. If the cancer patients couldn't return to the hospital for medical treatment, their illness would certainly get worse, causing depression and anxieties. If the problem was not handled properly, new problems would arise⁽⁷⁾. Therefore, it is necessary to implement the fine management among cancer patients during the 2019-nCov outbreak.

Feasibility Analysis of Implementing the Fine Management on Cancer Patients During 2019-nCov

From the epidemiological perspective, in order to effectively control the infection source, cut off transmission routes and protect the susceptible population⁽⁵⁾, Jingzhou Central Hospital suspended the general outpatient service since January, 25th, 2020. According to the unified arrangement of Jingzhou epidemic prevention and control headquarter, some wards of the hospital were used to receive and treat the patients diagnosed with 2019-nCov. Meanwhile, the holiday of the Chinese Spring Festival was also cancelled in the hospital, so all the medical staff needed to work again. Because of the suspension of the outpatient service, the number of inpatients in common wards reduced greatly, while medical staffs were on duty as usual. Except those medical staff who worked on the frontline in the fight against 2019-nCov, most medical staff had a relatively light workload in the inpatient department, so they had enough time for the implementation of the fine management.

Moreover, most medical staffs were not only equipped with specialty knowledge but also were proficient at using the we-media, so they could provide professional medical service for cancer patients with the help of the we-media platform and telemedicine⁽⁸⁾. In addition, most medical staffs in the oncology department were Chinese Communist Party members, and they hoped to take their responsibilities and provide substantial help for more patients during the 2019-nCov outbreak. Medical staff were organized to provide cancer patients with medical service and resources successfully through we-media during the epidemic outbreak. Therefore, it is completely feasible to implement the fine management among cancer patients⁽⁹⁾.

Operational Analysis of Implementing the Fine Management on Cancer Patients During 2019-Ncov

The following points should be paid attention to while implementing the fine management.

- accuracy and carefulness: All the patients' information should not only be collected comprehensively and accurately, and various problems of patients should be handled properly. Both generality and individuality should be highlighted to avoid a solution for diverse problems while offering disease knowledge to patients. Moreover, we should start from details in the implementation. Every details of patients should be paid attention to for the fine management⁽¹⁰⁾.

- To avoid being formalistic, the group leader should supervise and examine through the whole course, ensuring that every patient gets properly cared.

- To avoid the job burnout and stress of medical staffs, the voluntariness of medical staffs should be fully respected before conducting the work. While implementing the work, we should first listen to the difficulties or problems that the group members encountered and then helped them solve problems. The group members should be spiritually encouraged to keep fighting and work efficiently, so they wouldn't suffer from the job burnout and stress of medical staffs.

Conclusions

As medicine develops continuously, the lifetime of cancer patients gets prolonged and the life quality also gets greatly improved⁽⁶⁾. Facing the sudden 2019-nCov outbreak, cancer patients are tested physically and mentally. Therefore, during the epidemic prevention and control, the patients' hospitalization problems could be effectively solved by fully playing the power of medical staff in the oncology department and implementing the fine management among cancer patients. We were sure to win the fight in helping patients get rehabilitated when the 2019-nCov broke out.

References

- 1) Yao, Yang & Zhang. Psychological status and adjustment strategies during the novel coronavirus pneumonia epidemic [J/OL]. Journal of Modern Oncology: 1-2[2020-02-25].
- 2) Han, Ding & Wang. Experts' consensus on clinic management principles about patients with emergent and severe cardiovascular diseases during the novel coronavirus pneumonia epidemic [J/OL] Medical Journal of China's People's Liberation Army:1-6[2020-02-25]
- 3) Traffic control in the downtown of Jingzhou City, Hubei Province by Jingzhou prevention and control headquarter of novel coronavirus infection from 14:00, February, 2nd. [EB/OL].<http://news.sina.com.cn/c/2020-02-02/2020-02-25/>.
- 4) National Health Commission of the People's Republic of China. Novel coronavirus pneumonia diagnosis and treatment plan (trial version 5 revised).2020-02-08.
- 5) Chinese Center for Disease Control and Prevention-Emergency response epidemiology group of novel coronavirus pneumonia. Epidemiological characteristics of 2019 novel coronavirus pneumonia. Chinese Journal of Epidemiology. 2020, 41(2): 145-151.
- 6) Xu, Liu, Hu & Wang. Clinical management of lung cancer patients during the novel coronavirus pneumonia outbreak [J/OL]. Chinese Journal of Lung Cancer: 1-6.
- 7) Yi, Deng & Xu. Multi-center study on the information needs of malignant tumor patients and their family members[J]. Medical Information, 2019, 32(22): 72-78.
- 8) Hu, Sheng & Pei. Influence of we-media health education on the life quality of maintenance hemodialysis patients[J].China's Nursing Education, 2017, 14(09): 655-658.
- 9) Wang, Ding & Wang. Application effects and implications of mobile health care APP in continuous nursing[J]. Nursing Study, 2019, 33(05): 803-806.
- 10) Xue, He & Zhu. Thoughts on the construction of kidney transplantation patients' fine management mode based on the internet[J]. Journal of Chinese Modern Doctors, 2019, 57(13): 134-137+141

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