

## **A survey of the awareness of palliative care among community medical staff in Chengdu area**

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**Abstract:** Through surveying questionnaires, the understanding of palliative care among medical personnel in community hospitals in Chengdu, acceptance of palliative care training, and the mastery of palliative care knowledge will provide to give suggestions for the training of palliative care workers and community promotion. Ten community hospitals were randomly selected from five administrative districts in Chengdu, and 139 community medical personnel were conducted questionnaire surveys. Among respondents, 53.1% had heard of "palliative care." The results of the "PCQN Scale" survey showed that the accuracy of dimension one is 36.2%, the accuracy of dimension two is 49.62%, and the accuracy of dimension three is 20.4%. And the impact of five factors on the education and training of medical personnel involved in palliative care Statistics. There was a significant difference in academic analysis ( $P < 0.05$ ). These five factors include Palliative care knowledge score, confidence in implementing palliative care, grasp the level of palliative care, willingness to work in palliative care, feeling comfortable or not when talking with patients or patients' family members on the topic of death. The community medical staff in Chengdu has a low awareness of palliative care. The willingness of medical personnel to participate in palliative care education is influenced by many factors.

### **1. Introduction**

Community palliative care is an active and comprehensive nursing method based on family and community, which makes the patients who cannot be cured receive treatment at home. Through evaluation, examination and other methods to alleviate the disease, reduce pain, deal with its psychological, social, spiritual and other problems, improve the quality of life of patients and their families.[1] Through the questionnaire, this paper understands the cognition of palliative care, the mastery of palliative care knowledge, the situation of community medical staff receiving palliative care training and the analysis of influencing factors, and puts forward some suggestions on how to train the employees of palliative care and strengthen the social promotion of palliative care.

### **2. Objects and methods**

#### **2.1. Research object**

In the 5 administrative districts of Chengdu, each district randomly sampled 2 community hospitals, a sample of 28 community medical staff, a total of 10 community hospitals, 139 community medical staff. Inclusion criteria: Community medical personnel who have worked in the community for more than half a year and have given informed consent. Exclusion criteria: Non-community medical personnel and community medical personnel who worked in the community for less than half a year did not agree to participate in the survey.

#### **2.2. Research methods**

##### **2.2.1. Survey tools**

A survey has conducted using a self-designed questionnaire and a PCQN scale proposed by Chen Xiuming's master's thesis "Investigation on current status of community nurses' cognition on

palliative care in Changchun” [2]. The questionnaire includes four aspects: basic information of community medical staff, awareness of palliative care, implementation status of community palliative care and acceptance of community palliative care. It includes the age, education, occupation and working hours of community medical staff, the survey of palliative care knowledge, the source of palliative care knowledge, whether community medical staff are willing to participate in palliative care education and training, and whether they are willing to work in palliative care services, etc. The questionnaire form is divided into three ways: single-choice, multiple-choice, and supplementary.

### 2.2.2. Survey method

A questionnaire survey was conducted among 139 medical staff in these 10 community hospitals. A total of 139 questionnaires were issued, and 139 were recovered. 98 questionnaires were valid, with an effective rate of 70.5%.

### 2.2.3. Statistical method

EPIDATA and SPSS software were used for questionnaire entry, analysis and processing. Using chi-square analyzed six factors on medical staff willing to accept palliative care education and training which are the medical staff of palliative care knowledge to master degree, palliative care knowledge score, learning interest, implementation of palliative care palliative care confidence degree, willing to work in the palliative care, whether the topic to talk about death with the patient or family members will be uncomfortable.

## 3. Results

### 3.1. General data

According to table 1, the age of the community volunteers surveyed is  $31.8 \pm 10.6$  years old, most of them have bachelor's degree or below, and most of them have worked for less than 5 years.

Table 1. General information of respondents

Entry	Group	Number	Composition ratio (%)
Gender	Male	20	20.4
	Female	78	79.6
Profession	Doctor	45	45.9
	Nurse	36	36.7
Education	Junior college or below	47	48.0
	Bachelor degree	37	37.8
	Master's degree	4	4.1
Age	18~25	37	37.7
	26~35	40	40.8
	36~45	11	11.2
	>46	10	10.2
Employment time	0~5	48	49.0
	6~10	20	20.4
	11~20	16	16.3
	>21	14	14.3
Religious beliefs	Have faith	7	7.1
	No faith	91	92.9
Monthly income	<1500	7	7.1
	1500~2500	24	24.5
	2501~3500	34	34.7
	>3500	36	33.7

### 3.2. Survey results of community medical staff's awareness of palliative care

#### 3.2.1. Survey results of community medical staff's access to knowledge of palliative care

In medical staff surveyed, 52 people (53.1%) have heard of "palliative care", 44 people (44.9%)

understand the concept of "palliative care", 42 people (42.9%) interested in learning knowledge of palliative care, 53 people (54.1%) said willing to participate in related training, palliative care training way and want the best for lectures, and the reasons for not being willing or not sure whether to participate in the training are mainly due to lack of time and no interest.

### 3.2.2. Palliative care knowledge questionnaire response

The Palliative Care Knowledge Questionnaire contains a total of 20 items, which are investigated from the three dimensions of palliative care philosophy and principles, control of pain and other symptoms, mental and social support. Each entry has three options "correct", "error" and "don't know". The correct answer for the odd entry is "error", the correct answer for the even entry is "correct", one point for correct answer, wrong answer or don't know get no score. The results ranged from a low of three to a high of 13. The average score was  $8.50 \pm 2.37$ . See table 2 for details.

Table 2. Response to the palliative care knowledge scale

Entry	Right N(%)	Wrong N(%)	Unknown N(%)	Difficulty
1. Palliative care is only available to those whose conditions are deteriorating or getting worse.	34(34.7)	41(41.8)	23(23.5)	0.347
2. Morphine is the reference standard for the analgesic effect of other opioids	50(51.0)	27(27.6)	21(21.4)	0.510
3. The course of the disease determines the method of pain treatment.	28(28.6)	58(59.2)	12(12.2)	0.286
4. Adjuvant therapy is important for pain control.	87(88.8)	5(5.1)	6(6.1)	0.888
5. It is important for family members to be at the bedside until death.	2(2.0)	92(93.9)	4(4.1)	0.020
6. At the end of the patient's life, sleepiness associated with electrolyte imbalance reduces the need for sedation.	36(36.7)	35(35.7)	27(27.6)	0.367
7. The main problem of chronic morphine analgesia is drug addiction.	18(18.4)	77(78.6)	3(3.1)	0.184
8. Patients taking opioids such as morphine and codeine should be given preventive measures and treatment for gastrointestinal symptoms.	70(71.4)	18(18.4)	10(10.2)	0.714
9. Providing palliative care requires emotional separation.	51(52.0)	15(15.3)	32(32.7)	0.520
10. At the end of the disease, morphine can be used to relieve discomfort even if there is severe breathing difficulties.	18(18.4)	61(62.2)	19(19.4)	0.184
11. Men generally relieve their sadness faster than women.	34(34.7)	29(29.6)	35(35.7)	0.347
12. The concept of palliative care and active treatment is consistent.	41(41.8)	29(29.6)	28(28.6)	0.418
13. In advanced stages of the disease, placebos can be used appropriately to treat certain types of pain.	10(10.2)	81(82.7)	7(7.1)	0.102
14. Large doses of codeine are more likely to cause nausea and vomiting than morphine.	57(58.2)	15(15.3)	26(26.5)	0.582
15. Suffering is equivalent to physical pain.	73(74.5)	16(16.3)	9(9.2)	0.745
16. Demerol is not an effective analgesic for controlling chronic pain	52(53.1)	31(31.6)	15(15.3)	0.531
17. The accumulation of sense of loss caused by nursing dying patients inevitably makes palliative care workers physically and mentally exhausted	16(16.3)	61(62.2)	21(21.4)	0.163
18. The clinical manifestations of chronic pain are different from acute pain	76(77.6)	14(14.3)	8(8.2)	0.776
19. Losing a distant or poorly connected relative is easier to cope with than losing a close relative or family member.	24(24.5)	65(66.3)	9(9.2)	0.245

20. Fatigue or anxiety can cause a decrease in pain threshold	57(58.2)	24(24.5)	17(17.3)	0.582
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### 3.2.3. Scores of each dimension of palliative care knowledge

Dimension 1 is the philosophy and principle of palliative care, including items 1, 9, 12 and 17. Dimension 2 is the control of pain and other symptoms, including items 2, 3, 4, 6, 7, 8, 10, 13, 14, 15, 16, 18 and 20. Dimension 3 is mental and social support, including items 5, 11, 19. Average score, maximum score and minimum score of each dimension are shown in table 3.

Table 3. The average score, the highest score, the lowest score and the correct rate of each dimension of palliative care knowledge of community medical staff

Dimension	Average score(Total score)	Highest score	Lowest score	Correct rate
Dimension 1	1.43±1.00(4)	4	0	36.2%
Dimension 2	6.49±2.14(13)	11	1	49.62%
Dimension 3	0.59±0.66(3)	2	0	20.4%

### 3.3. Single factor analysis of medical staff attending palliative care training

Combined with the data obtained from the questionnaire survey, the chi-square test was conducted with the R\*C contingency table to compare the influence of various factors on the willingness to participate in palliative care training. Upon examination, the medical staff palliative care knowledge score, the confidence of the implementation of palliative care, whether have enough palliative care knowledge, willing to work in the palliative care, whether the topic to talk about death with the patient or family members will be uncomfortable, those five factors involved in the influence of palliative care education training has significant difference after statistics analysis ( $P<0.05$ ). The results are shown in table 4-8 below.

Table 4. The influence of palliative care score on the willingness to receive palliative care education and training

Score	N	Willing	Unwilling	Not sure	$\chi^2$	p
3-6	20	7	3	10	12.356	0.015
7-10	59	30	12	17		
11-13	19	16	2	1		

Table 5. The influence of confidence in providing palliative care to patients on willingness to receive palliative care education and training

Have the confidence	N	Willing	Unwilling	Not sure	$\chi^2$	p
Yes	20	15	0	5	17.589	0.001
No	35	12	13	10		
Not sure	43	26	4	13		

Table 6. The influence of sufficient knowledge of palliative care on willingness to receive education and training in palliative care

Sufficient knowledge	N	Willing	Unwilling	Not sure	$\chi^2$	p
Yes	9	8	0	1	9.931	0.042
No	66	32	16	18		
Not sure	23	13	1	9		

Table 7. The influence of the willingness to work of palliative care on the willingness to receive education and training in palliative care

The willingness to work	N	Willing	Unwilling	Not sure	$\chi^2$	p
Willing	23	19	0	4	14.380	0.006
Not sure	59	29	11	19		

Unwilling	16	5	6	5
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Table 8. The influence of talking about death with a patient or family member on the willingness to receive education and training in palliative care

Is it uncomfortable	N	Willing	Unwilling	Not sure	$\chi^2$	p
Yes	28	15	3	10	9.567	0.048
No	43	28	9	6		
Not sure	27	10	5	12		

## 4. Discussion

### 4.1. Investigation result analysis of knowledge acquisition of palliative care

According to the survey results on the acquisition of palliative care knowledge by community medical staff, 53.1% of them have heard of "palliative care", and 44.9% know the concept of "palliative care". Compared with the Canadian and Australian surveys mentioned in the article by Chen Xiuming, the people are far behind the understanding of palliative care. [2] 42.9% of the people are interested in learning the knowledge of palliative care, indicating that the community medical staff in our country have insufficient understanding of palliative care, but the medical staff are quite interested in "palliative care" and are willing to learn and know it, and expect the training to be carried out in the form of lectures. According to the basic information of the respondents, most of them have bachelor's degrees or below, and most of them have been in the industry for 0-5 years. The short working time and low educational background result in that the community medical workers have little understanding of the new development of the industry and have poor acceptance of the new knowledge of the new model.

### 4.2. The result analysis of palliative care knowledge questionnaire

According to the investigation results of palliative care knowledge, the accuracy of dimension 2 is higher than that of dimension 1 and dimension 3, and the accuracy of dimension 3 is the lowest. Community medical staff have a good grasp of the control of pain and other symptoms. They have a better grasp of philosophical and principles of palliative care, but have a poor grasp of mental and social support. Community medical staff needs to know about palliative care, and knowledge about mental and social support needs to be promoted. The specific analysis of each dimension answer is as follows:

#### 4.2.1. Palliative care philosophy and principles

The accuracy of this dimension was 36.2%, and the 17th item (The accumulation of sense of loss caused by nursing dying patients inevitably makes palliative care workers physically and mentally exhausted, the answer is WRONG) had the lowest accuracy. It shows that most of the community medical staff cannot distinguish their work and life well and cannot deal with their emotions well, which is likely to bring the emotions from work into their life. The 9th item (Providing palliative care requires emotional separation, the answer is RIGHT) has the highest accuracy. 51 people answered correctly and 32 did not know, indicating that most of the staff knew that when providing palliative care they should bring their emotions into the care and take the initiative to care for and help the patients and their families. In the first item (Palliative care is only available to those whose conditions are deteriorating or getting worse, the answer is WRONG), 34 people answered correctly and 23 people did not know the answer, indicating that most of the community medical staff did not know the target of palliative care.

#### 4.2.2. Control of pain and other symptoms

The average correct rate of this dimension was the highest, and the correct rate of 13th item (In advanced stages of the disease, placebos can be used appropriately to treat certain types of pain, the answer is WRONG) was the lowest, only 10 people got it right. The correct rate of 7th item (The main problem of chronic morphine analgesia is drug addiction, the answer is WRONG) and 10th item (At the end of the disease, morphine can be used to relieve discomfort even if there is severe

breathing difficulties, the answer is RIGHT) was also low, only 18 people answered correctly. The 4th item (Adjuvant therapy is important for pain control, the answer is RIGHT) had the highest accuracy rate, with 87 people answering correctly. It can be seen that the community medical staff have a poor grasp of the knowledge related to pain control after the middle and advanced stage of disease and the use of opioids, while they have a good grasp of the knowledge related to the pain control of adjuvant therapy. The reason may be that the patients accepted by the community hospitals are few in the middle and advanced stages, and the community hospitals mostly adopt some adjuvant therapies for pain control, and rarely use opioids.

#### **4.2.3. Mental and social support**

The accuracy of this dimension is the lowest, which is similar to the research results of Chen xiuming[2] and Zou min[3]. Although the bio-psycho-social medical model has long been proposed, it may be due to the low general education of community medical staff, and the lack of active learning and understanding of new knowledge, resulting in community health workers have not paid attention to the psychosocial support of patients and their families. The 5th item (It is important for family members to be at the bedside until death, the answer is WRONG) had the lowest correct rate, only two people got it right, which was also the item with the lowest correct rate among those 20 items. It may be related to our country's tradition. In our country, it is generally believed that family members accompany patients until the death of the patient is a manifestation of respect, filial piety and affection. However, when the family members accompany the patient until the death of the patient, the family will not be able to get out of the sorrow of the death of the relatives for a long time after the patient's death, thus affecting the quality of life of the patient's family later.

#### **4.3. Single factor analysis results of medical staff on the training of palliative care**

##### **4.3.1. Community medical staff with scores of palliative care related questionnaires between 11 and 13 are more willing to receive palliative care education and training.**

This shows that these medical staff have paid attention to and understood the information related to palliative care in daily life, and they are interested in palliative care, so they are more willing to receive palliative care education and training.

##### **4.3.2. Community medical staff who think they have sufficient knowledge of palliative care are more willing to receive palliative care education and training.**

This shows that medical staff who have acquired enough palliative care knowledge are more willing to participate in the study of palliative care.

##### **4.3.3. Talking about death with a patient or family member doesn't make them uncomfortable and more likely to be trained in palliative care.**

This shows that medical staff who are not afraid to talk about death are more likely to accept palliative care and are more willing to learn palliative care.

#### **5. Suggestion**

##### **5.1. Training of community palliative care professionals**

###### **5.1.1. Training of nursing students**

Educators should pay full attention to the education of nursing students during the period of school, and incorporate palliative nursing professional education into their teaching and training programs, and integrate them into undergraduate and postgraduate nursing education courses so that nursing students have a certain understanding of community palliative care during school. And provide nursing students with clinical practice opportunities to access community palliative care, so that they get more perceptual knowledge.

### **5.1.2. Training of serving staff**

Managers should conduct the necessary on-the-job training related to community palliative care for active staff such as hospitals, community or family nurses, especially in the areas of funeral services for the families of patients, bereavement counselling and education on the death of patients. At the same time, drawing on advanced experience, extensive community palliative care theory and practice research, the creation of community palliative care professional magazines and the establishment of academic institutions, regular community palliative care academic conferences, to cultivate their awareness of scientific research and innovation. In addition, managers should provide a platform for communication and discussion among the practitioners engaged in the practice and research of community palliative care. [4] In order to increase the access of community palliative care medical staff to new medical concepts, enhance their confidence in nursing patients, and gradually upgrade community palliative care into a unique field in nursing practice. [5]

### **5.1.3. Rehired retired nurse**

Community medical institutions retired nurses, organized retired nurses to carry out nursing work in the community or family, regularly organized experience exchange meetings, and let retired nurses to teach nursing experience to young nurses and to cultivate more community nursing talents.

## **5.2. Social promotion**

### **5.2.1. Carry out more public lectures on palliative care related knowledge**

Community hospitals and major hospitals can carry out public lectures on palliative care knowledge from time to time. Social organizations, various enterprises, hospitals themselves or the government should help lay the foundation for the lecture. Some small gifts can be prepared as entertainment prizes in the middle of the lecture to attract more people to attend the lecture. The promotion targets include patients, family members of patients, medical personnel and the general public. Use lectures to establish a correct view of life and death for people, so that people can avoid talking about death, and also let people see the benefits and good prospects of palliative care. Medical staff and patients who are eligible for palliative care are encouraged to participate, so that they can truly experience the comprehensive and convenient services that palliative care brings to them.

### **5.2.2. To establish and implement incentive policies related to palliative care**

For government departments, community hospitals should be encouraged to carry out palliative care, and provide certain guarantee for community hospitals in terms of medical equipment and necessary funds. Government departments should regularly assess the development of community hospitals and give appropriate rewards and punishments according to the development of palliative care in hospitals. For hospitals, medical staff should be encouraged to actively implement palliative care for patients who meet the requirements, regularly inspect the implementation of palliative care by medical staff, make the results of the investigation public, and give certain punishment to those who perform poorly, and give engorgements to those who perform well. Encouragement can be spiritual or economic. So as to improve the attention of medical staff to palliative care and the enthusiasm of providing palliative care for patients.

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