## Demand-Oriented Measures to Improve the Quality of Special Outpatient Medical Care Services

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*Abstract:* Special medical service refers to providing special medical services to part of crowds to meet their personalized needs to the greatest extent, so as to provide better medical services. Based on the survey of the demand of special outpatient patients, this article proposes demand-oriented measures to improve the quality of medical care services.

Since the reform and opening up, China's economy has continued to grow rapidly, becoming the world's second largest economy and its per capita income has also entered the ranks of upper-middle-income countries, among which high-income people have strong economic strength and higher requirements for medical services [1]. Concierge Medicine originated in Europe in the 1990s, which means that patients pay an annual fee every year to provide them with highly personalized, convenient and fast high-quality medical services [2], and after being introduced into China, public hospitals are carried out according to the characteristics of China's medical treatment, but the scale of special needs medical treatment is limited to 10%. At present, most of China's special needs medical services are mostly improved from the aspects of medical environment, service time and attitude [3], but they do not explore the needs of patients for all-round improvement, resulting in deviations between service supply and patient demand. In this paper, the patient-oriented management model is implemented in the special needs outpatient clinic to ensure that the service supply is accurately matched with the needs of patients [4], so as to improve the service quality of the special needs outpatient clinic more comprehensively and effectively, and has achieved certain results [5]. This article aims to share the experience of special outpatient management in our hospital and provide reference for the management of special needs outpatient or general outpatient in other hospitals.

#### **1. Objects and Methods**

#### **1.1. Research Object**

From October 2021 to March 2022, patients with special needs outpatient visits in a tertiary hospital in Chengdu were selected as research subjects by random sampling method. Admission Criteria: The patient has completed the consultation process and is willing to cooperate with the investigation. Exclusion criteria: those with infectious diseases, or those who are unable to

cooperate with the investigation due to critical illness. Investigators are uniformly trained to explain the purpose and significance of the investigation to patients before the investigation, and the patients complete it independently after obtaining informed consent. A total of 260 questionnaires were distributed, 246 were actually recovered, and 239 valid questionnaires were finally obtained after eliminating erroneous answers, missing answers and obvious logical errors.

#### **1.2. Survey Tools**

#### 1.2.1. Demographic Data

Including gender, age, education level and personal monthly income, etc..

#### 1.2.2. Quality Evaluation Scale of Outpatient Medical Services in Public Hospitals

The scale is developed by Zhang Xingwei and others in China, and the half-confidence of the scale is 0.967, and the Kronbach coefficient is 0.950. Including five dimensions, namely: basic needs satisfaction, security needs satisfaction, belonging and love satisfaction needs, respect needs satisfaction, self-realization needs satisfaction, each indicator using 5-level Likert scale method, complete non-conformity, non-compliance, general, compliance, complete compliance are counted 1-5 points respectively, the total score is 100 points, the higher the score, the better the demand is met.

#### 1.3. Statistical Methods Statistical Analysis Using SPSS 26.0 Software

Continuous variables are described in mean numbers $\pm$  standard deviations, or interquartile intervals, and categorical variables are described by constituent ratios (%). Nonparametric tests were used to compare demographic data with demand satisfaction scores.

#### 2. Outcome

#### 2.1. Basic Profile of the Outpatient

Among the 239 patients surveyed, 157 were women, accounting for 65.69%; There were 161 young people aged 18-44, accounting for 67.36%; Most of them were from Sichuan Province (202, accounting for 84.52%); The education level was generally high, with college degree or above (151, accounting for 63.18%); The monthly income of individuals was generally higher, with 52.3% of patients > 5000/month; The main reasons for choosing this outpatient clinic are high technical level, good equipment conditions and good service attitude. See table 1.

variable	Demographic characteristics	Number	Composition ratio
gender		0.2	24.210/
	man	82	34.31%
	woman	157	65.69%
age	< 17	5	2.000/
	$\leq$ 17 years old 18-44 years old	161	2.09% 67.36%
		68	28.45%
	45-59 years old	5	28.43%
Origin	$\geq$ 60 years old	3	2.09%
Origin	Sichuan Province	202	84.52%
	Provincial	37	15.48%
Education	FIOVIIICIAI	57	13.4070
Education	Primary school and below	9	3.77%
	secondary school	79	33.05%
	College degree or above	151	63.18%
Personal monthly income		131	03.1070
rersonar monuny meome	≤5000	114	47.7%
	5000-10000	71	29.71%
	>10000	54	22.59%
occupation	>10000	54	22.3970
occupation	intendant	26	10.88%
	Technical and service personnel	88	36.82%
	Students, housewives, retired workers	47	19.67%
	other	125	32.63%
Type of medical insurance	other	125	52.0570
Type of medical insurance	Social medical insurance	221	91.63%
	At your own expense	18	17.53%
Visiting our hospital for the first time			
	be	119	49.79%
	not	120	50.21%
Visiting department			
	internal medicine	106	44.35%
	surgery	40	16.74%
	ENT Section	19	7.95%
	other	74	30.96%
Reasons for choosing this outpatient clinic (multiple choice questions)			
- · ·	High level of technology	220	92.05%
	The equipment is in good condition	153	64.02%
	Good service attitude	90	37.66%
	Medicines are abundant	80	33.47%
	Reasonable charges	66	27.62%
	Close/convenient	47	19.67%
	Medical insurance designated units	35	14.64%
	other	15	6.27%

## Table 1: Survey subject demographics

#### 2.2. The Relationship between Outpatients and Needs By Gender

Gender-specific scores on meeting the need for outpatient visits varied (see Table 2). Men scored higher scores than women on basic needs satisfaction, safety need satisfaction, respect needs satisfaction, self-actualization needs satisfaction, and total needs satisfaction (P<0.05).

variable	man	woman	Р
Basic needs meet scores	29.5(25-30)	27(22.5-30)	0.016
Security requirements meet scores	40(34.75-40)	37(32-40)	0.02
Belonging and love needs satisfaction score	30(25.75-30)	29(24-30)	0.115
Respect needs to meet scores	25(21-25)	24(20-25)	0.035
Self-actualization needs satisfaction score	30(25.5-30)	27(24-30)	0.025
Total score for demand satisfaction	96.8(87.6-100)	92(79.2-100)	0.02

# **2.3.** The Relationship between Outpatients and Needs of Different Individuals' Monthly Income

Monthly income varies by individual in terms of meeting the demand for outpatient visits (see Table 3). The higher the monthly income of patients, the higher the scores of basic needs satisfaction, safety need satisfaction, belonging and love need satisfaction, respect need satisfaction, self-actualization need satisfaction score, and total need satisfaction score (P<0.05).

variable	≤5000	5000-10000	>10000	Р
Basic needs meet scores	27(23.75-30)	29(22-30)	30(25.25-30)	0.018
Security requirements meet scores	36(32-40)	39(32-40)	40(37-40)	0.004
Belonging and love needs satisfaction score	27(24-30)	29(24-30)	30(26.25-30)	0.022
Respect needs to meet scores	23.5(20-25)	25(20-25)	25(21.25-25)	0.028
Self-actualization needs satisfaction score	28(24-30)	30(24-30)	30(25-30)	0.022
Total score for demand satisfaction	90.4(80-100)	96.8(80-100)	99.2(90.4-100)	0.011

Table 3: Relationship between personal monthly income and demand

#### **3. Discuss**

Through the investigation and analysis of the survey data, it was found that the patients attending this clinic had the following characteristics: most of them were women, young people aged 18-44, and those from Sichuan Province, and their education level and personal monthly income were relatively high. Therefore, we should first focus on meeting the needs of the general population, and then supplement it by meeting the different needs of the minority group.

Table 2 and Table 3 show the differences in the needs satisfaction scores of different genders and individuals on income in outpatient visits, with men having higher scores than women in basic needs satisfaction, safety need satisfaction, respect needs satisfaction, self-actualization needs satisfaction, and total needs satisfaction. The higher an individual's monthly income, the higher their basic needs satisfaction score, safety need satisfaction score, belonging and love need satisfaction score, respect need satisfaction score, self-actualization need satisfaction score, and total need satisfaction score. It can be seen that the satisfaction of men and individuals with higher monthly income is higher, and we should pay more attention to women and groups with lower monthly income, and take targeted measures to continuously improve the quality of medical services and improve the satisfaction of such groups.

#### 4. Demand-Oriented Special Needs Management Model Construction

#### **4.1. Quality Medical Care**

#### 4.1.1. The Highest Quality and Comprehensive Expert Resources

In order to provide patients with the best quality medical resources, we are qualified as special needs consultants [6]. The selection of top experts in each specialty of our hospital requires to meet the conditions of doctoral supervisor and first-level expert level (if the number of specialist doctoral supervisor experts is not enough, it must meet the first-level expert level), and also meet the conditions of no patient complaints from the expert in the past 3 years, at present, there are 94 sitting experts in the special needs outpatient clinic of our hospital, including 69 who meet the conditions of doctoral supervisor and first-level experts, and 25 first-level experts, covering 30 specialties, which greatly meets the needs of patients for high-level experts [7].

#### **4.1.2. Quality Care Services**

We revolve around: (1) nursing etiquette – verbal and physical etiquette that embodies care and respect; (2) Communication - understanding needs; (3) Problem solving (coordination ability + professional skills); (4) Psychological nursing, a total of four aspects to improve the quality of nursing services, to provide patients with high-quality, efficient special needs services, special needs outpatient nurses to establish a patient-centred nursing service concept, in addition to skilled operational skills and common specialist knowledge, must also have good interpersonal communication skills and English communication skills [8]. Therefore, we develop corresponding training plans for nurses at different levels. Junior nurses focus on the cultivation of nursing operational skills, specialist knowledge and oral English ability, while senior nurses focus on knowledge updating, management ability and scientific research ability.

The special needs outpatient clinic offers a number of specialties such as internal, external, mental health, oncology, ENT, etc., involving 30 subspecialties, and the specialized examination equipment is different, and the nurses in charge of the consultation room are required to be familiar with the doctors and specialties who visit every day, and prepare the consultation room materials 15 minutes before the opening of the consultation. For patients who cannot be seen on time or cancelled, the nurse should also inform the doctor in time. In addition, we conduct a needs survey of visiting experts every three months, and continuously improve the results of the survey to effectively support the logistics of experts. We collect the personal work habits of each sitting specialist, sort it out and summarize it into a book, and provide personalized services for them; SMS one day in advance to remind the visiting specialist of the number of patients to see; Properly handle the temporary suspension of specialists; Members of the department management team greet experts and visit sick experts before the holiday; The head nurse regularly collects expert opinions, etc.

#### **4.2.** A Convenient and Fast Experience

#### **4.2.1.** Convenient and Fast Source Appointments

The special needs outpatient clinic implements the expert number full appointment service mode, and opens all expert numbers for appointment 2 weeks in advance, including WeChat APP, hospital official website, telecom 114, self-service machine registration and on-site appointment. In order to ensure the patient's consultation time, all specialist number sources are limited to 15-25, and the permission to add numbers in the consultation room is removed. In the process of consultation, the

implementation of the number of the consultation, so that patients can reasonably arrange the medical plan, reduce the waiting time; improve the efficiency and quality of the consultation.

#### **4.2.2.** Continuous Improvement of the Consultation Process

We arrange special personnel to guide patients to report at 7:30 every day, conduct pre-screening and triage of infectious diseases, and triage patients waiting according to the number of patients in the hall. In order to improve the timeliness of patients' post-examination examination, a green channel for priority examination has been opened, and the guide doctor accompanies patients throughout the examination; foreign patients and family contracted members are given priority for hospitalization. For cases where some patients cannot get the test/examination report during the consultation time, we have formulated a warm notice sheet to remind the specialist to inform the patient in detail of the time and place of the next visit when issuing the bill.

Before the patient visits, remind the patient to prepare the medical card, test results/laboratory results, blood pressure records, blood glucose records, and temperature measurement in patients with suspected fever. It is necessary to visit the consultation room frequently to ensure that "one doctor, one patient", which greatly protects the privacy of patients and ensures orderly treatment [9].

#### 4.3. Comfortable and Convenient Environment

We plan the outpatient clinic into two parts: waiting hall and consultation hall. Green plants are used to separate the waiting hall from the main service desk, and self-service check-in machines, water dispensers, electronic medical record printers, medical display screens and self-service charging treasures are placed in the waiting hall. In the consultation hall, the grass-green small sofa is used to replace the old sofa, the light box prompt board is added in a prominent position, various signs are put on the wall as much as possible, and the coffee table is also placed with a medical prompt board, so that patients can quickly find the consultation room, charging room and toilet.

We also house electronic medical records, test results/laboratory results and self-service film printers in the consultation hall. A fully automatic electronic blood pressure monitor has also been added to the hall, and nurses instruct patients to measure their blood pressure by themselves. There are also special B-ultrasound examination rooms, X-ray and CT examination rooms, echocardiography rooms, etc., which are very convenient for patients with special needs to seek medical treatment and examination.

A health education information shelf has been set up for patients and their families to read while waiting for treatment. We also regularly conduct science popularization lectures such as influenza prevention, high blood pressure, diabetes, etc.

In order to ensure medical safety, in addition to the necessary medical supplies, the consultation room is also equipped with one-button alarms, and a special conversation room (with audio/video recording function) is set up in the lobby.

#### **5.** Conclusion

Even if the government's investment in medical finance increases year by year, it is still difficult to maintain the balance of public hospitals due to the abolition of drug and device addition [10], and the adjustment of medical service prices lags behind the value of medical services for a long time [11]. Public hospitals can independently price some items of special medical services, so as to better reflect the labour value of medical staff, and to a certain extent, promote the adjustment of medical service prices [12]. This clinic has built a demand-oriented special needs management model, which

has been recognized by patients (comparison of the number of patient outpatient clinics before and after joining the construction of the special needs outpatient model). I hope to share with you the experience of special needs outpatient management and promote the management and development of special needs outpatient clinics across the country. The purpose of special needs services is to provide patients with personalized needs, improve comfort, and help with better recovery, so as to achieve diagnostic and therapeutic results [13]. The experience of the special needs clinic is the patient's first impression of the special needs service, and it is also the entrance to the special needs inpatient unit, so the quality of the special needs outpatient service is very important. Demand-oriented can better provide patients with better and more humanized medical service quality, and can also drive the development of disciplines and play a leading role in disciplines. Looking forward to the focus of special needs outpatients [14-15], adopt measures such as medical guidance and early triage, leave special needs services to patients with real "special needs", and effectively provide patients with high-level medical experts, high-standard diagnosis and treatment methods and high-quality medical care services.

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