

# Analysis of the Current Status of Human Resources Configuration of Primary Healthcare Service Institution in Chongqing

Mingjing Li<sup>1</sup>, \*, Xu Xiao<sup>2</sup>

<sup>1</sup> ChongQing Medical University

<sup>2</sup> ChongQing Medical University

\*Corresponding author. Email: 1537729844@qq.com

## ABSTRACT

This paper aims to understand the number, age, gender, title, education, preparation, working hours of primary healthcare and medical institution in Chongqing, and its training experience, skill mastery, satisfaction with salary, to analysis the current status of human resources configuration of primary healthcare and medical institution in Chongqing. Discover problems and shortcomings, and propose feasible suggestions and improvements to provide talent guarantees to promote basic public health equalization. Thus, strengthen the rationalization of the human resources of primary medical institutions and the sustainable development of primary medical institutions in Chongqing.

**Keywords:** Chongqing, primary healthcare and medical institution, human resources

## 1. THE BASIC SITUATION OF HUMAN RESOURCE ALLOCATION IN PRIMARY HEALTH SERVICE INSTITUTIONS IN CHONGQING

To meeting the growing health needs, develop and practical public health undertaking is an important measure to promote the reform of primary medical system, which is related to the quantity and quality of health services in China.

In order to scientifically and reasonably develops health care system, the quantity, structure difference and distribution of health human resources need to be fully comprehend. The proposes of this paper is to analyze the current development of the primary medical institution in Chongqing, combined with national policies and standards, clear the current problems and causes, and propose improving countermeasures, which helps the rational configuration of health human resources in primary medical institutions, thus promoting the sustainable development of the primary medical and health institutions in Chongqing.

### 1.1. The increasing number of health service personnel in primary health service institutions

As of the end of 2019, there were 20,001 primary health service institutions in Chongqing, including 96,849 primary health service personnel. Among them, there are 71,373 health technicians, including 11,718 licensed assistant physicians, 23,113 licensed physicians, 24,661 registered nurses, 3,239 pharmacists, 2,464 technicians, and 1,611 examiners.

Compared with 2017, the total number of personnel in primary health service institutions in Chongqing has increased significantly. Except for practicing assistant physicians, the rest of all types of health technical personnel have increased to a certain extent. Among them, practicing physicians and registered nurses have the most significant growth; the growth of pharmacists, technicians and inspectors is not obvious.

There are a total number of 14,060 staff in Chongqing community health service stations, of which 11,842 are health technicians, including 1,237 practicing assistant physicians, 3440 practicing physicians, 4747 registered nurses, 763 pharmacists, 627 technicians, and the proportion of medical staff. It is 67.03%, and physician to nurse ratio is 1:1.02. There are 35,496

health service personnel in township health centers of all levels and types, of which 29,903 are health technicians, including 7,059 practicing physicians, 5141 practicing assistant physicians, 9857 nurses, 1,571 pharmacists, 1583 technicians, and the ratio of doctors to nurses is 1:0.81, and the number of personnel in township health centers per 1,000 rural population is 2.14, which is greater than the national average of 1.56.

### ***1.2. The structure of various types of sanitation and technical personnel has been improved, but there is still much room for improvement***

The structure of personnel reflects the quality and rationality of human resources in primary health service institutions. As of the end of 2019, there were 71,373 health technicians in primary health service institutions in Chongqing, accounting for 73.7% of all primary health institution staff. Among them, the number of practicing physicians and professional assistant physicians is 34,831 (48.80% of all health technical personnel). Nursing staff: 24,661 (34.55%). According to interviews with relevant personnel, most of the employees in the community health service centers in the main cities are aged from 25-45 years old, more than 55%, while the staff in the township health centers are generally older. In terms of academic qualifications, the educational qualifications of primary health service personnel are generally lower than that of public hospitals, with colleges and undergraduates as the mainstay, and fewer with higher education. Among the staff in township hospitals and village clinics, college degree or below dominates, and there are almost no one has master degree or above. Among them, the number of general practitioners and public health physicians has increased, but the proportion is still low. Clinical, traditional Chinese medicine, pharmacy, and nursing still occupy the main part of the profession. In terms of the composition of professional titles, more than 80% personnel have professional titles and junior professional titles, whether it is in urban communities Health service centers, or rural township hospitals and village clinics. Followed by those with intermediate professional titles, and there are almost no senior professional titles.

## **2. THE PROBLEMS AND POSSIBLE CAUSES**

### ***2.1. Existing problems***

#### ***2.1.1. Less number of personnel and relatively lower in education level compared with developed regions***

As of 2019, a total number of 39,202 in Beijing community health service Center, including: 32,818

sanitary technicians, 2,244 practicing physicians, 2094 assistant physicians, 10333 registered nurses, 3817 pharmacists, 1,668 technicians, and medical nurses. The proportion of personnel is 62.9%, and the physician to nurse ratio is 1:0.72. There are 36,797 staff in Shanghai community health service center, of which 31,397 are health technicians, 11,937 licensed physicians, 1402 licensed assistant physicians, 11806 registered nurses, 2,728 pharmacists, and 1,520 technicians. The proportion of medical staff is as follows: 68.3%, the physician to nurse ratio is 1:1.88. In comparison, the number of community health service personnel in Chongqing is significantly less than the two economically developed municipalities directly under the central government, which has a certain relationship with the total number and scale of community health service centers. At the same time, the physician to nurse ratio of township hospitals is 1:0.81, 1:1.02 in urban community health service centers in Chongqing. Compared with the physician to nurse ratio of community medical institutions needs to be 1:1 stipulated in the "Guiding Opinions of the State Council on the Development of Urban Community Health Services", the urban community health service centers in Chongqing meets the requirements, however the township health centers does not. The further attention should be paid to the development and construction of the nursing team. Although the number of health technicians in township hospitals and the number of personnel in township hospitals per 1,000 rural population are among the top in the country, there is still a gap compared with the first place in Jiangsu Province.

The level of education and professional titles of personnel are generally low appears to be a common problem whether in urban or rural primary health service institutions. Among them, the overall educational background of health technicians in community health service centers is relatively higher than that of township health centers. There are few high-educated and senior professional titles, and there are a few cases of low-educated and high-level titles. The overall educational level of nursing staff is lower than that of sanitation technicians, among which junior college degree accounts for a larger proportion, which is even more pronounced in township hospitals.

#### ***2.1.2. less motivated and less satisfaction***

In the process of investigating the staff structure of primary health service institutions, 40 primary staff and health technicians who had worked in community health service centers were randomly selected for interviews. There are 5 Guanyinqiao Community Health Service Center, 6 Guanyinqiao Taoyuan Community Health Service Center, 4 Huaxin Street Community Health Service Center, 3 Wulidian Community Health Service Center, 6 Qixinggang Community Health Service

Center, 2 from Shiqiaopu Street Community Health Service Center, 2 from Kowloon Community Health Service Center, 5 from Longshan Community Health Service Center, 3 from Longtousi Community Health Service Station, and 4 from Songpai Road Community Health Service Station. It is found that there are common problems of low work enthusiasm and low job satisfaction. From the results of the interviews, among the 40 health technicians interviewed, 72.5% are basically satisfied with their current positions and jobs, 25% are satisfied, and only 1 person is satisfied with their current positions. And dissatisfied with the work. A staffed health technician can basically achieve equal pay for equal work, and the salary and benefits can basically meet individual needs. However, due to the trivial and repetitive daily work, some employees are not motivated to work. In addition, there are many daily contact with patients, heavy workload, high negative emotions and psychological pressure, insufficient personal time and other benefits, causing some staff members to believe that their efforts are not proportional to their gains, lead to lower satisfaction. On the whole, the satisfaction of the staff who officially budgeted posts is generally greater than others. The higher the title and education level, the lower their satisfaction<sup>[1]</sup>.

### *2.1.3. High staff turnover*

From the interview, nearly half of the primary health care workers had thoughts of leaving their jobs. Nearly a quarter of the staff believe that the current job promotion space is small, and they cannot reflect their own value and realize their ideals. Most of the people who have this kind of thinking are newly recruited young staff who have a strong and frequent willingness to leave. Most of them have just graduated from colleges and have strong working and learning abilities, or those with high levels of academic qualifications and professional titles. The number of turnover in primary health service institutions is quite high and causes a big problem.

## **2.2. Cause Analysis**

### *2.2.1. Low salary and low professional status*

It can be seen from the interview results of job satisfaction and job expectations that improving personal benefits and remuneration have become the focus of improving the job satisfaction of primary medical staff and reducing the willingness to leave<sup>[2]</sup>. Although most of the staff of primary medical and health institutions were satisfied with the current salary and treatment during the investigation, there was still a certain gap compared with public hospitals. The annual salary and various welfare policies are slightly weaker than that of doctors in public hospitals, and the resettlement fees are relatively low. Some institutions

have almost no resettlement fees. This stops graduates, especially those with higher academic qualifications from choosing primary health care institutions. Highly educated and high-level talents who are already employed at the primary level have similar workloads as medical workers in public hospitals, but have different remuneration and income, which will lead to unfair ideas and stronger willingness to resign. Secondly, the primary medical and health institutions are located at the lowest level of medical technology and resource ranking. The medical technology classification and medical level recognition make primary medical and health service personnel considered the lowest level and the weakest knowledge authority, so they are relatively lack of authority and status<sup>[3]</sup>. This has largely affected the introduction of high-educated primary health service personnel and the loss of talents, which directly caused the imbalance in the structure of primary health service personnel and the overall low educational level.

### *2.2.2. lack of reasonable incentive mechanism*

The personnel management of most public hospitals still implements the personnel management mode of public institutions, which is outdated and backward, and the basic health service institutions are no exception. Without an effective incentive mechanism, the work enthusiasm of the primary health service personnel is not high. Day after day repetitive and tedious work wears down the patience and motivation of the staff. Over time, continuing to learn and improving their enthusiasm will also be worn down, forming a bad work attitude, which is also a reason for the low title in primary health service personnel.

### *2.2.3. insufficient policy and fiscal investment and slow availability of local fiscal funds*

In recent years, the Chongqing Municipal Government has responded to the country's comprehensive and deepening reform of the primary-level medical and health service system, and invested a lot of energy and financial support to establish and improve the primary-level medical and health service system. All have been improved to a large extent, but many institutions still have problems such as incomplete supporting facilities, dilapidated houses, few beds, and distance from people's living areas. The bottom line is that financial support is not in place, especially in township hospitals and rural areas. In the clinics and health rooms, it is difficult to attract and retain competent health service workers without specific talent orientation and guidance policies and sufficiently attractive benefits.

### **3. COUNTERMEASURES AND SUGGESTIONS**

#### ***3.1. Strengthen re-education and on-the-job training and increase the requirements***

To improve the educational level of primary health service personnel, on the one hand, it is necessary to build a high threshold, refine the employment conditions and requirements of personnel, increase the introduction of highly educated and high-level talents, and solve this problem from the source of talents; on the other hand, Build a platform--strengthen the re-education of on-the-job staff, establish a multi-channel, high-level, and high-achievement training mechanism, encourage on-the-job primary health service personnel with low academic qualifications to take full-time or part-time education, improve academic qualifications, Higher-level hospitals have established a good "assistance system" to provide more clinical practice and further study opportunities for lower-educated health technicians in higher-level medical and health institutions<sup>[4]</sup>.At the same time, smooth the channels for promotion of professional titles, increase policy support, innovate the system for the evaluation of professional titles of primary health service personnel, appropriately reduce the rigid evaluation indicators, increase the implementation of soft incentive mechanisms, reduce the age requirement and increase the corresponding professional title level measures as appropriate, give the primary health service personnel with no professional title and low professional title the opportunity to be promoted.

#### ***3.2. Reasonably increase salary and welfare policies***

Since salary packages and welfare policies are the most concerned issues of most primary health service personnel, improving personal benefits and remuneration packages is the most effective way to improve primary medical staff's job satisfaction, reduce their willingness to leave and attract high-level and high-level talents. It is recommended to increase and maintain the income of primary medical staff at 1.8 to 2.0 times the average social salary, establish a distribution system of "inclined to key positions and key talents", and establish an annual salary system for those with outstanding work performance<sup>[5]</sup>.Establish a salary distribution and incentive mechanism suitable for the unit. The final assessment is linked to performance pay, title evaluation, job appointment and dismissal, and appraisal. Provide material or honorary incentives to employees who work hard, love their jobs, and pioneering and enterprising<sup>[6]</sup>.Provide a reasonable range of resettlement fees, or provide free residence for a certain period of time, to retain and attract more

high-level talents for the primary. At the same time, increase the remuneration package of non-compilers, improve the performance evaluation mechanism, improve the rationality and fairness of the remuneration mechanism, and achieve equal pay for equal work within the maximum level<sup>[7]</sup>.Improve the satisfaction of primary health service personnel and the stability of the construction of primary health teams.

#### ***3.3. Appropriately adjust the management and incentive mechanism***

In addition to increasing the salaries and benefits of primary health service personnel, the government should also pay more attention to primary health and medical institutions. Through targeted enrollment and reduction or exemption of education loans, college graduates should be introduced to the primary and the sustainable development of primary medical and health institutions should be promoted. Establish a regular and targeted assistance mechanism; select high- and intermediate-level health technicians in major hospitals to regularly guide the corresponding community and county hospitals. At the same time, regular assessments and inspections enable primary health service personnel to feel the importance of their work, establish an effective incentive mechanism, and increase their enthusiasm for work. In addition to the training of the basic-level health team's ability and skills, to strengthen their spiritual guidance and support, and change their work concepts.

### **4. CONCLUSION**

Based on these results of this paper, three useful suggestion are proposed to improve the human resource situation in primary medical institutions in Chongqing. First, Strengthen re-education and on-the-job training and increase the requirements for medical personnel. Moreover, Reasonably increase the salary and welfare policies of doctor and nurse. Finally, adjust the management and incentive mechanism in primary medical institutions. Primary healthcare institution is fundamental in healthcare system, to improve the current status of its human resource can promote basic public health equalization, thereby promoting Chongqing Sustainable development of the city's primary medical and health institutions to better meet people's health needs.

### **REFERENCES**

- [1] Dishu Zhou, Yongzhu Xu, Lin Wei, et al. Analysis of work pressure, job satisfaction and willingness to leave and influencing factors of primary medical staff in Chongqing City[J]. *Modern Preventive Medicine*, 2020, 47(14): 2545-2549, 2574.

- [2] Lu Chang, Yutong Zhang, Weiguang Yao, et al. Satisfaction survey on the incentive mechanism of medical staff in primary medical and health service institutions: Taking S Town in Foshan City as an example[J]. *Chinese Health Service Management*, 2020, 37(4): 283-286.
- [3] Mingji Zhang, Fei Yan. The occupational status explanation of the dilemma of primary health human resources[J]. *Medicine and Society*, 2020, 33(11): 1-8, 51.
- [4] Jing Yang, Hui Wang, Shuai He, et al. Current status of talents in grassroots medical and health institutions in Sichuan Province[J]. *Digest of World Latest Medical Information*, 2019, 19(16): 232-233.
- [5] Shanshan Wang, Ya Zhu, Haiya Shao. Status Quo and Optimization of the Promotion of Senior Professional Titles in Basic-level Health Service Organizations in Jiangsu Province[J]. *Journal of Nanjing Medical University (Social Science Edition)*, 2020, 20(5): 412-417.
- [6] Chenyu Zhang. Research on Salary Management Innovation in Human Resource Management of Primary Health and Medical Institutions[J]. *Shangxun*, 2021, 239(13): 193-194.
- [7] Mei Wang, Moning Guo, Tan Peng, et al. Study on the current status of health human resources in Beijing community health service centers[J]. *Chinese General Practice*, 2021, 24(10): 1211-1217.