Survey on Medical Personnel’s Job Satisfaction in Public Hospital in China

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Abstract

Objective: To assess medical personnel’s job satisfaction and to explore the difference and improvement methods.
Methods: Prepare a questionnaire for sampling 1249 medical workers in 15 public hospitals at different levels.
Results: The medical personnel’s job satisfaction is lower on the whole, just at the level of 41.14%. Medical personnel’s social responsibility has the highest score, at 76.38%. The satisfaction is different among medical workers at the different levels and in different demographic groups (P<0.05). Conclusion: Regular evaluation of medical personnel’s job satisfaction can assist in the “people-oriented” management and help management adjustment and macro-policy regulations at intrinsic organization level and extrinsic institutional level, so as to raise medical personnel's satisfaction and patients’ satisfaction, and ultimately to improve the doctor-patient relationship.

Keywords: Medical personnel; Job satisfaction; Survey; Doctor-patient relationship

The concept of job Satisfaction was put forward by Hoppock in 1935. In recent years, it has become a hot spot for research in the field of decision-making and management science. The developed scales include MSQ, JDI, JDS and JSS(Zhang & Zhou, 2005; Lu, Shi & Yang, 2005). Conrad, etc. think that job facets that affect medical personnel’s job satisfaction include job autonomy, relation with colleagues, relation with patients, relation with organization, remuneration, working conditions, social status, intrinsic satisfaction, disposable time, administrative support and integration into the organization(Konrad, Williams & Linzer, 1999). Roter found that doctors’ perception is very important for establishing a harmonious doctor-patient relationship, because doctors’ discontent with their relationship with the patients will affect the diagnosis and treatment, therefore adversely affecting the medical service and quality(Roter, 2000). According to the fourth research report on the practice of physicians conducted by Chinese Medical Doctor Association (CMDA) from March to August in 2011, 48.51% of the medical personnel were not satisfied with the working environment. This figure is nearly half of the total number, and those satisfied with the working environment is only 19.02%. In the research, one of the indicators used by CMDA is “whether physicians hope their children to follow their footsteps”. The result showed that only 6.83% of them hoped for it and 76.01% of them did not hope for it. And 15.16% of them said it did not matter whatever they chose(CMDA, 2015).

Therefore, Chinese doctors don’t have a high approval degree with regard to their profession and industry. This reflects a harsh medical environment. With the implementation of customer service concepts, job satisfaction is valued more and more by human resource management. As the resource that has the most competitive edge in a hospital, medical personnel’s job satisfaction is a growing concern of the hospital management circle(Huang, Huo & Chen, 2011; Qiu, Liu & Yu etc., 2012; Yu, Li & Duan, 2013).

On the basis of relevant documents, this paper uses internal customer satisfaction model and compiles a set of questionnaire for job satisfaction based on job satisfaction scale and medical work characteristics. A survey has been carried out in 15 public hospitals in Sichuan, covering 1249 medical personnel.
1. Subjects and Methods

1.1 Subjects and Methods

Most of the medical service in China is concentrated at provincial, municipal and county levels. Based on stratified sampling, this paper selects 3 grade-three and first-class hospital, 3 community health service centers in Sichuan’s capital city of Chengdu, 5 grade-three and first-class hospital in prefecture-level cities of Mianyang, Guangyuan and Yibin and 4 our grade-three second-class or grade-two first-class hospitals in county-level cities of Wenjiang, Xinjin, Jiangyou and Anyue. These 15 hospitals are all public hospitals. The self-compiled job satisfaction questionnaires were used to conduct a job satisfaction survey on the medical personnel in July-September 2014.

The personnel gave out the questionnaires on the spot and recovered it soon. Any questions about it were put to and answered by the personnel. The number of the questionnaire was determined according to the size of the hospital. The total number was 1350 and 1300 pieces were recovered. After eliminating those that contained errors or were incomplete, the valid number is 1249, with the effective rate of 92.52%.

1.2 Design of the Questionnaire

The questionnaire was designed based on document research, expert consultation, and the job satisfaction model and the occupation characteristics. 180 medical personnel were surveyed and analyzed. After the reliability test and the validity test, a formal questionnaire was developed. Every item is graded using the 7 Likert scale. Those with five points or above are considered “satisfactory”. The content and the items are shown in Table 1.

| Items | Connotation indexes | Item abbreviation and description (7 Likert scale) |
|-------|---------------------|---------------------------------------------------|
| A. (JI: job itself) | Job characteristics | JI1. My work is challenging |
| B. (IE: internal environment) | Working conditions | IE1. My working condition is comfortable |
| C. (JR: job return) | Salary & bonus | JR1. I am satisfied with my income |
| D. (OA: organization and administration) | Institutional improvement | OA1. The daily management system is standardized |
| E. (WE: working environment) | Respect and understanding | WE1. Medical personnel enjoy respect and understanding at present |
| F. (SR: social responsibility) | Professional duty | SR1. Medical personnel should assume related professional duties. |
| G. (PL: professional loyalty) | Professional loyalty | PL1. I like the present work |
| H. (TI: turnover intention) | Turnover intention | TI1. If possible, I will choose early retirement or resignation. |

Table 1. Content and Items of Medical Personnel Job Satisfaction Questionnaire
2. Results

After the recovered 1249 questionnaires were entered into the database, reliability and validity tests were conducted using the SPSS 20.0 software package; score statistics was conducted using excel. One-way ANOVA method was used for difference analysis and independent sample test was used for gender difference analysis.

2.1 General Description of the Subjects

Table 2 is the descriptive statistical results of the 1249 medical personnel in the 15 medical establishments. As is shown below, the sampling is practicable and realistic.

| Variables                  | Variable values       | Frequency | Percentage |
|----------------------------|-----------------------|-----------|------------|
| Sex                        | Male                  | 370       | 29.6%      |
|                            | Female                | 879       | 70.4%      |
| Ages                       | Under 20 years of age | 21        | 1.7%       |
|                            | 20-29                 | 519       | 41.6%      |
|                            | 30-39                 | 439       | 35.1%      |
|                            | 40-49                 | 205       | 16.4%      |
|                            | 50-59                 | 61        | 4.9%       |
|                            | Aged 60 or above      | 4         | 0.3%       |
| Marital status             | Married               | 863       | 69.1%      |
|                            | Others(Divorced, widowed, etc.) | 27 | 2.2% |
|                            | Polytechnic school or below | 62 | 5.0% |
|                            | Junior college        | 418       | 33.4%      |
| Education background       | Bachelor degree       | 615       | 49.3%      |
|                            | Master degree         | 137       | 11.0%      |
|                            | Doctor degree         | 17        | 1.4%       |
|                            | Doctor                | 539       | 43.2%      |
| Work type                  | Nurse                 | 616       | 49.3%      |
|                            | Medical technicians   | 62        | 4.9%       |
|                            | Administrative & logistic staff | 32 | 2.6% |
|                            | Undecided             | 176       | 14.1%      |
| Professional title         | Medium professional title | 334 | 26.7% |
|                            | Sub-senior professional title | 146 | 11.7% |
|                            | Professional title    | 21        | 1.7%       |
|                            | 1,001–2,000 yuan      | 181       | 14.5%      |
|                            | 2,001–3,000 yuan      | 369       | 29.5%      |
|                            | 3,001–5,000 yuan      | 474       | 38.0%      |
|                            | 5,001–7,000 yuan      | 169       | 13.5%      |
|                            | 7,001–10,000 yuan     | 46        | 3.7%       |
|                            | >10,000               | 10        | 0.8%       |
| Average monthly income     | Permanent             | 708       | 56.7%      |
| Employment type            | Non-permanent         | 447       | 35.8%      |
|                            | Trainee/advanced students | 94 | 7.5% |

2.2 Classified Statistic of Scoring on Job Satisfaction

2.2.1 Job satisfaction of medical personnel of different sexes
Table 3. Statistical Results of Medical Personnel of Different Sexes

| Gender | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organization and administration (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|--------|----------------|---------------------------|------------------|--------------------------------------|-------------------------|------------------------|--------------------------|---------------------------|------------------------|
| Male   | 2.58±          | 4.22±                     | 3.65±            | 4.49±                                | 3.39±                   | 3.67±                  | 4.97±                    | 4.48±                     | 3.33±                  |
|        | 1.45           | 1.35                      | 1.68             | 1.38                                 | 1.72                    | 1.52                   | 1.37                     | 1.39                      | 1.45                   |
| Female | 2.53±          | 4.56±                     | 4.23±            | 4.86±                                | 3.95±                   | 4.03±                  | 5.06±                    | 4.71±                     | 3.4±                   |
|        | 1.25           | 1.38                      | 1.56             | 1.18                                 | 1.51                    | 1.38                   | 1.15                     | 1.17                      | 1.34                   |

| t value | -0.567 | -3.978 | -5.647 | -4.565 | -5.473 | -5.759 | -1.165 | -2.841 | -0.897 |
| p value  | 0.571  | 0.000  | 0.000  | 0.000  | 0.244  | 0.000  | 0.244  | 0.005  | 0.370  |

There is no much difference in the scores on job itself, social responsibility, professional loyalty and turnover intention with regard to different sexes. But in terms of internal environment, job returns, organization & administration and working environment, their differences have statistical significance. Overall, female’s job satisfaction is higher than that of their male colleagues (P=0.00).

2.2.2 Job Satisfaction of Medical Personnel in Different Age Groups

As shown in Table 4, there is difference in the internal environment, job returns and working environment among medical personnel in different age groups (P<0.05). Total job facet has difference, too (P=0.00). Job satisfaction of those under 30 years of age and above 50 years of age is higher than that in the 30-50 age group, which should be given priority in the management work.

Table 4. Job Satisfaction of Medical Personnel in Different Age Groups

| Age groups | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organization and administration (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|------------|----------------|---------------------------|------------------|--------------------------------------|-------------------------|------------------------|--------------------------|---------------------------|------------------------|
| Below 20   | 2.43±          | 4.98±                     | 4.75±            | 5.13±                                | 4.34±                   | 4.33±                  | 5.08±                    | 4.79±                     | 3.33±                  |
| of age     | 0.68           | 0.89                      | 0.71             | 0.87                                 | 1.19                    | 0.87                   | 0.74                     | 0.81                      | 1.00                   |
| 20-29      | 2.67±          | 4.59±                     | 4.23±            | 4.81±                                | 4.11±                   | 4.08±                  | 5.05±                    | 4.72±                     | 3.44±                  |
|            | 1.28           | 1.32                      | 1.48             | 1.20                                 | 1.49                    | 1.35                   | 1.17                     | 1.22                      | 1.32                   |
| 30-39      | 2.44±          | 4.32±                     | 3.88±            | 4.7±                                 | 3.55±                   | 3.78±                  | 4.99±                    | 4.57±                     | 3.35±                  |
|            | 1.38           | 1.45                      | 1.79             | 1.31                                 | 1.68                    | 1.52                   | 1.34                     | 1.27                      | 1.44                   |
| 40-49      | 2.5±           | 4.41±                     | 4.02±            | 4.76±                                | 3.41±                   | 3.82±                  | 5.04±                    | 4.56±                     | 3.26±                  |
|            | 1.26           | 1.34                      | 1.58             | 1.26                                 | 1.53                    | 1.39                   | 1.12                     | 1.29                      | 1.39                   |
| 50-59      | 2.54±          | 4.19±                     | 3.84±            | 4.51±                                | 3.61±                   | 3.74±                  | 5.16±                    | 4.73±                     | 3.51±                  |
|            | 1.25           | 1.44                      | 1.69             | 1.34                                 | 1.62                    | 1.47                   | 1.23                     | 1.39                      | 1.48                   |
| Above 60   | 1.5±           | 4.88±                     | 4.92±            | 5.21±                                | 4.85±                   | 4.27±                  | 5.25±                    | 4.58±                     | 3.5±                   |
| of age     | 1.00           | 1.65                      | 0.89             | 1.03                                 | 1.72                    | 1.26                   | 0.50                     | 1.17                      | 0.71                   |
| F value    | 1.999          | 3.027                     | 3.501            | 1.300                                | 9.975                   | 5.887                  | 0.318                    | 1.008                     | 0.702                  |
| P value    | 0.076          | 0.010                      | 0.004            | 0.261                                | 0.000                   | 0.000                  | 0.902                    | 0.412                     | 0.622                  |

2.2.3 Job Satisfaction of Medical Personnel in Different Age Groups

There is difference in terms of job itself, internal environment and working environment between medical personnel of different marital status (P<0.059). Overall, job satisfaction of married people is lower than that of unmarried people and other status, which shows that medical work has adverse effect on the matrimonial life of medical personnel.
Table 5. Job Satisfaction of Medical Personnel of Different Marital Status

| Marital status | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organization and administration (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|----------------|----------------|---------------------------|------------------|--------------------------------------|-------------------------|------------------------|--------------------------|--------------------------|---------------------|
| Unmarried      | 2.7±           | 4.55±                     | 4.28±            | 4.79±                                | 4.11±                   | 4.09±                  | 5.03±                    | 4.7±                     | 3.46±                |
|                | 1.28           | 1.36                      | 1.46             | 1.20                                 | 1.52                    | 1.36                   | 1.16                     | 1.19                     | 1.32                 |
| Married        | 2.49±          | 4.39±                     | 3.95±            | 4.72±                                | 3.63±                   | 3.84±                  | 5.02±                    | 4.61±                     | 3.35±                |
|                | 1.32           | 1.38                      | 1.67             | 1.28                                 | 1.60                    | 1.45                   | 1.25                     | 1.27                     | 1.39                 |
| Others         | 2.32±          | 4.98±                     | 4.5±             | 5.27±                                | 4.3±                    | 4.27±                  | 5.42±                    | 4.94±                     | 3.26±                |
|                | 1.04           | 1.43                      | 1.94             | 0.93                                 | 1.73                    | 1.41                   | 1.10                     | 1.24                     | 1.41                 |
| F value        | 3.823          | 3.679                     | 6.050            | 2.764                                | 12.902                  | 9.210                  | 1.384                    | 1.536                    | 0.853                |
| P value        | 0.022          | 0.026                     | 0.002            | 0.063                                | 0.000                   | 0.251                  | 0.216                    | 0.426                    |                     |

2.2.4 Job Satisfaction of Medical Personnel of Different Educational Background

There is difference in the items between medical personnel of different education background (P=0.00). The difference with regard to turnover intention is relatively small (P=0.048). Overall, job satisfaction of those with master or doctoral degree is lower than those with bachelor degree or below, which shows priority should be given to the highly educated groups.

Table 6. Job Satisfaction of Medical Personnel of Different Educational Background

| Education background | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organization and administration (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|----------------------|----------------|---------------------------|------------------|--------------------------------------|-------------------------|------------------------|--------------------------|--------------------------|---------------------|
| Polytechnics and below | 2.68±         | 4.72±                     | 4.61±            | 5.07±                                | 4.26±                   | 4.27±                  | 4.96±                    | 4.94±                     | 3.3±                |
|                      | 0.80           | 1.31                      | 1.26             | 0.88                                 | 1.37                    | 1.12                   | 0.92                     | 1.02                     | 1.25                 |
| Junior college       | 2.49±          | 4.66±                     | 4.2±             | 4.89±                                | 4.02±                   | 4.05±                  | 5.12±                    | 4.74±                     | 3.29±                |
|                      | 1.07           | 1.27                      | 1.54             | 1.15                                 | 1.46                    | 1.30                   | 1.03                     | 1.17                     | 1.35                 |
| Bachelor             | 2.43±          | 4.43±                     | 4.05±            | 4.77±                                | 3.64±                   | 3.86±                  | 5.08±                    | 4.67±                     | 3.37±                |
|                      | 1.30           | 1.41                      | 1.67             | 1.30                                 | 1.65                    | 1.47                   | 1.27                     | 1.30                     | 1.40                 |
| Master degree        | 3.04±          | 3.93±                     | 3.48±            | 4.15±                                | 3.5±                    | 3.62±                  | 4.66±                    | 4.13±                     | 3.67±                |
|                      | 1.80           | 1.43                      | 1.66             | 1.32                                 | 1.69                    | 1.58                   | 1.47                     | 1.30                     | 1.37                 |
| Doctoral degree      | 3.72±          | 3.69±                     | 3.84±            | 4.34±                                | 3.62±                   | 3.84±                  | 4.22±                    | 4.39±                     | 3.79±                |
|                      | 2.05           | 1.21                      | 1.74             | 1.25                                 | 1.57                    | 1.56                   | 1.73                     | 0.78                     | 1.55                 |
| F value              | 10.079         | 9.371                     | 7.141            | 11.006                                | 6.186                   | 7.085                  | 6.060                    | 7.689                    | 2.403                |
| P value              | 0.000          | 0.000                     | 0.000            | 0.000                                | 0.000                   | 0.000                  | 0.000                    | 0.000                    | 0.048                |

2.2.5 Job Satisfaction of Medical Personnel of Different Work Types

In terms of work types, the evaluation items have greater difference (P=0.00). Overall, job satisfaction in decedent order: medical technicians, administrative & logistical staff, nurse, and doctor. Doctors have the lowest job satisfaction, So doctors should be one of the priorities both in internal management and external management.
Table 7. Job Satisfaction of Medical Personnel of Different Work Types

| Work type          | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organizational and administration (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|--------------------|-----------------|---------------------------|------------------|----------------------------------------|--------------------------|------------------------|---------------------------|---------------------------|-------------------------|
| Doctors            | 2.5±            | 4.16±                     | 3.67±            | 4.49±                                   | 3.43±                    | 3.65±                  | 4.93±                     | 4.5±                      | 3.29±                   |
| Nurse              | 1.39            | 1.43                      | 1.70             | 1.32                                   | 1.68                     | 1.50                   | 1.31                      | 1.32                      | 1.41                    |
| Medical technicians| 2.51±           | 4.7±                      | 4.35±            | 4.98±                                   | 4.03±                    | 4.11±                  | 5.15±                     | 4.75±                      | 3.38±                   |
|                     | 1.15            | 1.30                      | 1.51             | 1.14                                   | 1.46                     | 1.31                   | 1.08                      | 1.17                      | 1.34                    |
| Administrative & logistic staff | 3.22±       | 4.52±                     | 4.37±            | 4.75±                                   | 4.25±                    | 4.22±                  | 4.68±                     | 4.67±                      | 3.99±                   |
|                     | 1.83            | 1.35                      | 1.44             | 1.40                                   | 1.57                     | 1.52                   | 1.56                      | 1.40                      | 1.27                    |
|                     | 2.76±           | 4.51±                     | 4.43±            | 4.86±                                   | 3.79±                    | 4.07±                  | 5.14±                     | 4.74±                      | 3.83±                   |
|                     | 1.29            | 1.10                      | 1.47             | 1.21                                   | 1.42                     | 1.30                   | 1.27                      | 0.99                      | 1.25                    |
| F value             | 6.290           | 15.253                    | 19.110           | 15.246                                  | 15.246                   | 16.100                 | 23.182                    | 5.235                     | 4.307                   |
| P value             | 0.000           | 0.000                     | 0.000            | 0.000                                   | 0.000                    | 0.000                  | 0.000                      | 0.000                     | 0.000                   |

2.2.6 Job Satisfaction of Medical Personnel of Different Professional Titles

There is difference in all items on job satisfaction and professional loyalty among medical personnel of different titles (P<0.05). Those with sub-senior and senior professional titles have job satisfaction and professional loyalty lower than that of medium-level professional titles and below. So senior-professional titles should be a key point in management work.

Table 8. Job Satisfaction of Medical Personnel of Different Professional Titles

| Professional titles | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organizational and administration (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|---------------------|-----------------|---------------------------|------------------|----------------------------------------|--------------------------|------------------------|---------------------------|---------------------------|-------------------------|
| Undecided           | 2.8±            | 4.69±                     | 4.6±             | 4.95±                                   | 4.38±                    | 4.28±                  | 5.00±                     | 4.89±                      | 3.42±                   |
|                     | 1.21            | 1.30                      | 1.28             | 1.12                                   | 1.45                     | 1.27                   | 1.07                      | 1.14                      | 1.26                    |
| Primary titles      | 2.49±           | 4.52±                     | 4.05±            | 4.81±                                   | 3.88±                    | 3.95±                  | 5.08±                     | 4.64±                      | 3.37±                   |
|                     | 1.23            | 1.37                      | 1.60             | 1.19                                   | 1.55                     | 1.39                   | 1.17                      | 1.19                      | 1.36                    |
| Medium-level titles | 2.48±           | 4.36±                     | 3.96±            | 4.69±                                   | 3.57±                    | 3.81±                  | 5.02±                     | 4.63±                      | 3.41±                   |
|                     | 1.35            | 1.42                      | 1.77             | 1.33                                   | 1.63                     | 1.50                   | 1.31                      | 1.32                      | 1.40                    |
| Sub-senior titles   | 2.51±           | 4.22±                     | 3.80±            | 4.58±                                   | 3.29±                    | 3.68±                  | 5.05±                     | 4.47±                      | 3.27±                   |
|                     | 1.41            | 1.39                      | 1.61             | 1.35                                   | 1.59                     | 1.47                   | 1.30                      | 1.34                      | 1.45                    |
| Senior titles       | 3.11±           | 4.179±                    | 3.80±            | 4.183±                                  | 3.48±                    | 3.75±                  | 4.43±                     | 4.22±                      | 3.67±                   |
|                     | 2.12            | 1.39                      | 1.68             | 1.56                                   | 1.61                     | 1.67                   | 1.57                      | 1.67                      | 1.73                    |
| F value             | 3.048           | 3.205                     | 6.414            | 3.372                                   | 11.994                   | 8.979                  | 1.498                     | 3.002                     | 0.569                   |
| P value             | 0.016           | 0.012                     | 0.000            | 0.009                                   | 0.000                    | 0.200                  | 0.018                     | 0.685                     | 0.685                   |

2.2.7 Job Satisfaction of Medical Personnel of Different Incomes

There is difference in job itself, job returns, total job facet and turnover intention among medical personnel of different incomes (P<0.05). Those whose income is between 7001 and 10,000 have the highest job satisfaction and greatest turnover intention.
### Table 9. Job Satisfaction of Medical Personnel of Different Incomes

| Average monthly income | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organizational and administrative (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|------------------------|----------------|---------------------------|------------------|-----------------------------------------|-------------------------|------------------------|---------------------------|--------------------------|-------------------------|
| 1001~2000 yuan         | 2.76±          | 4.44±                     | 3.96±            | 4.69±                                    | 4.02±                   | 3.97±                  | 4.87±                     | 4.68±                    | 3.27±                   |
| 2001~3000 yuan         | 2.43±          | 4.4±                      | 3.77±            | 4.69±                                    | 3.69±                   | 3.8±                   | 5.02±                     | 4.54±                    | 3.24±                   |
| 3001~5000 yuan         | 2.49±          | 4.47±                     | 4.13±            | 4.83±                                    | 3.73±                   | 3.93±                  | 5.09±                     | 4.7±                     | 3.42±                   |
| 5001~7000 yuan         | 2.62±          | 4.47±                     | 4.37±            | 4.76±                                    | 3.87±                   | 4.02±                  | 5.12±                     | 4.61±                    | 3.52±                   |
| >10000                 | 2.74±          | 4.82±                     | 4.89±            | 4.84±                                    | 4.00±                   | 4.26±                  | 5.11±                     | 4.91±                    | 4.04±                   |

F value 2.409 0.981 8.172 0.831 1.923 3.197 1.196 1.416 4.528

P value 0.048 0.417 0.000 0.506 0.104 0.013 0.311 0.226 0.001

#### 2.2.8 Job Satisfaction of Medical Personnel of Different Employment Types

There is no statistic difference in organization & administration, social responsibility and turnover intention among medical personnel of different types. But other items have difference in statistic scores (P < 0.05). Trainees and advanced students have higher job satisfaction than permanent and non-permanent medical personnel. Therefore, focus should be placed on regular staff in management.

### Table 10. Job Satisfaction of Medical Personnel of Different Employment Types

| Employment type                | Job itself (JI) | Internal environment (IE) | Job returns (JR) | Organizational and administrative (OA) | Working environment (WE) | Total job facets (TJF) | Social responsibility (SR) | Professional loyalty (PL) | Turnover intention (TI) |
|--------------------------------|----------------|---------------------------|------------------|-----------------------------------------|-------------------------|------------------------|---------------------------|--------------------------|-------------------------|
| Permanent (regular)            | 2.45±          | 4.45±                     | 4.04±            | 4.76±                                    | 3.67±                   | 3.87±                  | 5.10±                     | 4.67±                    | 3.43±                   |
| Non-permanent                  | 2.63±          | 4.38±                     | 3.95±            | 4.69±                                    | 3.75±                   | 3.88±                  | 4.93±                     | 4.53±                    | 3.34±                   |
| Trainee/advanced students      | 2.89±          | 4.81±                     | 4.74±            | 4.98±                                    | 4.80±                   | 4.44±                  | 4.99±                     | 4.91±                    | 3.15±                   |
| F value                        | 5.927          | 3.678                     | 9.244            | 1.955                                    | 21.915                  | 13.598                 | 2.760                     | 3.860                    | 1.876                   |
| P value                        | 0.003          | 0.026                     | 0.000            | 0.142                                    | 0.000                   | 0.006                  | 0.021                     | 0.154                    |                         |

#### 2.2.9 Score Results of Job Satisfaction of Medical Personnel

1) Job satisfaction of various items

According to the 7 Likert scale, those with more than five points are considered “satisfactory”, as shown in Table 11. Job satisfaction in terms of social responsibility has the highest score: 76.38%. Job itself has the lowest score: 8.16%. Working environment is only 35.54%. The average job satisfaction for the first five items is relatively low, only
41.14%. However, the overall professional loyalty reaches 57.57%, and turnover intention is only 20.41%.

Table 11. Job Satisfaction of Various Items

| Items                              | Job itself(JI) | Internal environment(IE) | Job return(JR) | Organization & administration(OA) | Working environment(WE) | Social responsibility(SR) | Professional loyalty(PL) | Turnover intention(TI) |
|------------------------------------|----------------|--------------------------|----------------|-----------------------------------|-------------------------|--------------------------|--------------------------|------------------------|
| Total sample                       | 2.55±          | 4.45±                    | 4.06±          | 4.75±                             | 3.78±                   | 5.03±                    | 4.64±                    | 3.38±                  |
|                                    | 1.31           | 1.38                     | 1.62           | 1.25                              | 1.59                    | 1.22                     | 1.25                     | 1.37                   |
| Grade 3 and first-class hospitals  | 3.07±          | 3.89±                    | 3.64±          | 4.23±                             | 3.50±                   | 4.66±                    | 4.09±                    | 3.54±                  |
| in the capital city                | 1.86           | 1.40                     | 1.60           | 1.28                              | 1.67                    | 1.54                     | 1.14                     | 1.13                   |
| Grade 3 and first-class hospitals  | 2.28±          | 4.63±                    | 4.11±          | 4.93±                             | 3.97±                   | 5.15±                    | 4.88±                    | 3.24±                  |
| in the prefecture city             | 0.89           | 1.23                     | 1.50           | 1.14                              | 1.57                    | 1.00                     | 1.16                     | 1.30                   |
| Grade 3 and second-class           | 2.08±          | 5.40±                    | 5.03±          | 5.56±                             | 3.91±                   | 5.69±                    | 5.33±                    | 3.89±                  |
| hospitals in county-level cities   | 0.86           | 1.38                     | 1.77           | 1.33                              | 1.50                    | 0.98                     | 1.27                     | 1.58                   |
| Grade 2 and first-class hospitals  | 2.75±          | 4.77±                    | 4.64±          | 4.83±                             | 4.45±                   | 5.07±                    | 4.79±                    | 2.80±                  |
| in county-level cities             | 1.05           | 1.19                     | 1.37           | 1.18                              | 1.54                    | 1.00                     | 1.20                     | 1.10                   |
| Community health centers           | 2.35±          | 3.86±                    | 3.14±          | 4.52±                             | 2.96±                   | 4.80±                    | 4.34±                    | 3.44±                  |
|                                    | 0.81           | 1.03                     | 1.20           | 0.73                              | 1.08                    | 0.99                     | 1.17                     | 1.33                   |
| F value                            | 27.555         | 51.641                   | 41.839         | 41.171                            | 22.083                  | 24.452                   | 41.003                   | 15.760                 |
| P value                            | 0.000          | 0.000                    | 0.000          | 0.000                             | 0.000                   | 0.000                    | 0.000                    | 0.000                  |

(2) Comparative analysis of job satisfaction of medical personnel at different-level hospitals

Statistics was conducted on the scores of medical personnel at different-level medical establishment and 7 Likert scale was used to score it. The result is shown in Table 12. There is difference in job satisfaction of the items for medical personnel at different-level medical establishment (P=0.00). Grade 3 and first-class hospitals in the capital city have the highest score in terms of job itself. Grade 3 and second-class hospitals in counties and cities have the highest score in internal environment, job returns, organization & administration and professional loyalty. Community health service centers have job satisfaction significantly lower than that of medical establishments of other types in terms of job returns and working environment. Grade 2 and first-class hospitals have the lowest turnover intention. This indicates differential measures should be adopted for hospitals at different levels.

Table 12. Ob Satisfaction of Medical Personnel at Hospitals at Different Levels

| Items                              | Job itself(JI) | Internal environment(IE) | Job return(JR) | Organization & administration(OA) | Working environment(WE) | Social responsibility(SR) | Professional loyalty(PL) | Turnover intention(TI) |
|------------------------------------|----------------|--------------------------|----------------|-----------------------------------|-------------------------|--------------------------|--------------------------|------------------------|
| Total sample                       | 2.80±          | 5.17±                    | 4.74±          | 4.83±                             | 4.45±                   | 5.07±                    | 4.79±                    | 2.80±                  |
|                                    | 1.05           | 1.19                     | 1.37           | 1.18                              | 1.54                    | 1.00                     | 1.20                     | 1.10                   |
| Community health centers           | 2.35±          | 3.86±                    | 3.14±          | 4.52±                             | 2.96±                   | 4.80±                    | 4.34±                    | 3.44±                  |
|                                    | 0.81           | 1.03                     | 1.20           | 0.73                              | 1.08                    | 0.99                     | 1.17                     | 1.33                   |
| F value                            | 27.555         | 51.641                   | 41.839         | 41.171                            | 22.083                  | 24.452                   | 41.003                   | 15.760                 |
| P value                            | 0.000          | 0.000                    | 0.000          | 0.000                             | 0.000                   | 0.000                    | 0.000                    | 0.000                  |

3. Discussion and Suggestions

Research shows that compared to patient satisfaction of the same period, medical personnel overall don’t have high job satisfaction. The average job satisfaction of the job facet is only 41.14%. The social responsibility has the largest score, reaching 76.38%. There is difference in job satisfaction of various items for medical personnel at different levels. There is difference in job satisfaction of medical personnel in different demographics groups. This shows that medical personnel have a large room for improvement in job satisfaction. Their work enthusiasm should be developed. Differential management strategies should be used for internal organization & administration and
external institutional improvement at public hospitals.

A lot of researches show that doctor’s job satisfaction remains at a 40-65% level, or even at 16.6%(Sun, Qiu & Gong, 2012; Gao, Zhao & Li, 2013; Du, Xu & Xiu, 2013; Hao, Zhang & Cao, etc., 2013; Liu & Wen, 2013; Wang, Zhang & Li, 2014; Luo & Fang, 2012). That of teachers and business management is also low(Bao, Zhang & Zhu, 2011; Zhou, Du & Han, 2013). Other researches show low job satisfaction can lead to burnout, depression and anxiety, affecting medical service quality(Ai, He & Yang, etc., 2010; Govardhan, Pinelli & Schnatz, 2012; Zhang, Wang & Gao, 2011). The fourth doctor-patient relationship survey shows that 58.8% of citizens are satisfied with outpatient health service, with the satisfaction with inpatient service lower than that of outpatient service by 3%(Hou & Zhang, 2012). According to recent patient satisfaction research report, outpatients or inpatients’ satisfaction in different regions or at different hospitals is higher than that of the doctors, mostly at 80-90%. Some are lower than 63.6%, but some are higher than 90%(Zhang, Sun & Zhou, 2011; Deng & Geng, 2013; Han, Zhou & Weng, etc., 2011; Liu, Yuan & Cao, 2013).

According to the result of Research on the Relation of Job Satisfaction and Health of Occupational Population, a key research project at Henan Occupational Disease Prevention & Control Institute, risk factors affecting job satisfaction include high education background, hard work with low returns, high job requirements with low control, high psychological needs, work locus of control, low social report and low coping strategy. This result has reproducibility on different occupations and different periods. Those with low job satisfaction are two times more likely to have depression and daily feeling of tension. This result has reproducibility on different occupations and different periods(Gu, Zhou & Yu, 2015). The White Book on Chinese Physician Professional Status issued on May 28, 2015 by Chinese Medical Doctor Association shows that over-times, excessive workload, disproportionate income to the work, worsening self health and high violence risks are urgent problems with doctors that must be resolved. A 2014 survey shows that only 27.14% of the medical personnel are not exposed to violence. 73.33% of the doctors calls for protection of the interests and rights of doctors when revising the Law of the People’s Republic of China on Medical Practitioners(CMDA, 2011). Other research show that the public’s satisfaction to current doctor-patient relationship is just at the level of 51.11% and in comparison with the evaluation of other groups with various professions, the satisfaction of medical personnel is the lowest(Shi, Jiang & Hu et al., 2015).

Medical personnel form the majority of the medical service force at medical establishments. As the most important human resource, medical personnel’s physical and psychological health and job satisfaction don’t receive enough attention and protection. We promote a “people first” management model and a “patient-oriented” medical service model. If medical personnel’s job satisfaction is not included in it, we can’t really achieve the goal. The year 2015 is a year of deepening the medical reform. Any scheme that can’t mobilize the initiative of medical personnel will not be successful. Doctors have a long period of career growth, high technical and psychological requirements, large social responsibility. These, coupled with excessive work load, disproportionate income for the work and tense doctor-patient relationship, will lead to job burnout, stress, anxiety and low job satisfaction on the part of medical personnel. If this scale is used regularly to measure and analyze medical personnel’s job satisfaction, it would help to locate the internal management factors and external institutional factors, so that hospital administrators can make improvements to the management based on the internal controllable factors, and carry out guidance and training based on external institutional factors. Whereas government department in charge of health and medical service can carry out macro policy regulation based on the external factors in order to stimulate medical personnel’s enthusiasm and enhance their initiative in medical reform to ultimately improve medical service quality and patients’ satisfaction.

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