**Influencing Factors of** **Anger Induced by Patients in Medical Situations**

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**Abstract:** Objective: This study was made to explore the inducing factors of patients’ anger in medical treatment in order to provide a solid and reliable theoretical basis for preventing doctor-patient conflicts, improving doctor-patient relationship, and promoting doctor-patient harmony and social harmony. Method: develop the “Questionnaire of the Inducing Factors of Anger in the Doctor-patient Relationship”and use the State-Trait Anger Expression Inventory-2 (STAXI-2) to survey the 111 patients that had experienced medical disputes or doctor-patient conflicts and actually got angry in the conflicts in the Hospital of Dali University.The SPSS22.0 statistical software was used to establish database and analyze the obtained data. Result: 1. The Influence of demographic variable on the anger of patients. The anger of the patients between 46-55 years old was significantly higher than that of patients below 25, between 25-35 or above 66. Patients with junior high school degree or lower had the highest emotion of anger, and then those with senior high school degree (including technical secondary school) followed. Patients with no jobs had the highest emotion of anger, and then farmers and workers followed, which were significantly higher than that of patients engaged in other occupations. Patients with the monthly income of RMB 2000 yuan or lower had the highest emotion of anger, and then those with no stable source of income followed, which were significantly higher than those with higher monthly income. 2. The anger of patients was significantly negatively correlated to their trustfulness in medial workers, but significantly positively correlated to medical costs, the communication with medical workers, their cognition of the medical condition, medical workers’ disclosure of patients’ condition, the medical treatment effect, medical workers’ problem-solving ability, medical facilities and environment and medical workers’ professional level. Conclusion: In the medical treatment, the main inducing factors that may evoke the anger of patients are: the communication with medical workers; the attitude of medical workers; medical treatment effect; medical workers’ professional level.

**Keywords:** Medical Treatment; Patients’ Anger; Inducing Factor

**Introduction**

Medical disputes have become one of the major social problems that seriously restrict the development of medical and health care in China today. The doctor-patient relationship in the field of medical service is increasingly tense, and the number of medical disputes shows a rising trend of diversification [1]. The study shows that in [2] 33.48% of doctors have experienced disputes in the past 12 months, 20.86% have experienced riots, 48.52% have experienced verbal violence, and 5.84% have experienced physical violence. The study pointed out that anger is one of the most intolerable negative emotions, the greatest impact on interpersonal and social harmony, and the most closely related to disease [3-4]. The anger of the patient can damage the doctor-patient relationship, and even occur aggressive behavior [5]. Therefore, this study through the Dali university affiliated hospital patients and their families medical disputes or the situation and the influencing factors analysis, understand the influence factors of anger in medical situation, to prevent the occurrence of doctor-patient conflict, improve the doctor-patient relationship, promote doctor-patient harmony and social harmony provide a solid credible theoretical basis.

1. Objects and Methods

1.1 Study subjects

Patients from the six departments of Yunnan Dali University (Cardiovascular Department, Respiratory Department, General surgery Department, Orthopedics Department, Obstetrics and Gynecology Department, Pediatrics Department) who met the following inclusion criteria were selected as the research subjects. Inclusion criteria: (1) Patients and their families who have experienced medical disputes or doctor-patient conflicts.(2) Can communicate and communicate normally, without mental illness.(3) Volunteer to participate in this study.

This study was reviewed by the Ethics Committee of the Affiliated Hospital of Dali University in Yunnan Province, and all respondents signed informed notices.

1.2 Survey tools

1.2.1 Questionnaire on inducing factors of anger in medical situation

A self-compiled questionnaire was used to collect the inducing factors of anger in the doctor-patient relationship, including gender, age, educational background, occupation, monthly family income, and attending doctor. The questionnaire was used for one-to-one visits to 10 randomly-selected patients who had experienced medical disputes or doctor-patient conflicts, the questionnaire was modified according to the answers of the interviewees, and 5 experts from our hospital were invited to discuss and modify the questionnaire.

1.2.2 State Trait Anger Expression Questionnaire STAXI-2

The Spielberger (State-Trait.Anger.Expression.Inventory., STAXI-2) [6] This scale of 57 items is used to assess anger personality traits (trait anger scale), situational anger scale (state anger scale) and anger expression scale (anger expression scale). The scale has a Cronbach'sα coefficient of 0.83.

1.3 Investigation method

In this study, a face-to-face questionnaire was used in the six departments (cardiovascular, respiratory, general surgery, orthopedics, obstetrics and gynecology, and pediatrics departments of the Affiliated Hospital of Dali University in Yunnan Province. Before the survey, the study subjects were informed about the investigation purpose and signed the informed consent form.

1.4 Statistical analysis

The SPSS22.0 statistical software was used to establish the database, and two people checked the data. Statistical description by frequency, rate, and mean ± standard deviation, Univariate analysis was performed by univariance analysis, multiplicity analysis by non-conditional Logistic regression model P <0.05 as statistically significant.

2. Result

2.1 Basic information of the study subjects

A total of 111 survey respondents were included in this study. The sex ratio between men and women is about half each. In terms of age, 27.9% were 26–35 years old, and 24.3% were 36–45 years old. In terms of the highest degree, 31.5% of the surveyed patients had high school education (including technical secondary school), and 26.1% had the highest bachelor's degree. In this survey, staff and workers accounted for a relatively high proportion, with 35.1% and 27.9% respectively.58.6% of the patients lived with their families. More than half (63.1%) of the patients' medical expenses were covered by medical insurance.39.6% of the patients who participated in the survey were charged by chief physician or professor . The monthly income of 28.8% of the patients was 2001-5000 yuan.

2.2 Demographic variables of patient anger

The results of one-way variance analysis showed that patients who aged 46-55, junior high school or below, no work, other living conditions, self-funded, personal monthly income of less than 2000 yuan were more likely to have anger mood(P <0.05).

2.3 Descriptive analysis of patient anger

With patient angry, illness severity, the degree of trust in doctors, medical price, communication situation, the cognitive level of the patient's condition, degree of disease notification , medical effect, medical ability to deal with problems, medical attitude, medical equipment and environment and medical professional level all items plus average, get the following results. Compared with the mean size of each factor,the average value of the communication situation is the highest, indicating that patients have the highest dissatisfaction with the communication. Among them, the trust degree of the medical side is the positive score, and the higher the score value indicates, the higher the satisfaction degree. See Table 1.

2.4 Multivariate analysis of patient anger

Table1 Descriptive analysis of patient anger

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Minimum | Maximum |  | *s* |
| Anger | 1.00 | 5.00 | 3.71 | .75 |
| The severity of the condition | 1.00 | 5.00 | 3.77 | 1.16 |
| The degree of trust of the medical side | 1.00 | 5.00 | 2.21 | 1.07 |
| Medical price | 1.00 | 5.00 | 3.33 | 1.03 |
| Communication situation | 2.00 | 5.00 | 3.93 | .95 |
| The cognitive level of the patient's condition | 1.00 | 5.00 | 3.78 | 1.09 |
| Degree of disease notification | 1.00 | 5.00 | 3.84 | 1.03 |
| Medical effect | 1.00 | 5.00 | 3.33 | 1.05 |
| Medical ability to deal with problems | 1.00 | 5.00 | 3.30 | 1.02 |
| Medical attitude | 1.33 | 5.00 | 3.25 | .66 |
| Medical side equipment and environment | 1.00 | 5.00 | 3.33 | 1.03 |
| Medical professional level | 1.00 | 5.00 | 3.88 | .96 |

With anger occurring as the dependent variable (0= no, 1= yes), the meaningful variables in the analysis of variance were included in the multivariate Logistic regression model. The results showed that the four factors of independent variable communication situation, pressure effect, medical professional level and medical attitude were included in the equation, and the four factors explained 77.2% of the total variation of patients' anger. Communication is a negative prediction of patient anger (β = -. 481, p<0.001), Medical effect (β =. 220, p <0.01), and the medical professional level (β =. 182, p <0.01) and the medical attitude (β =. 155, p <0.01) had a positive predictor of patients' anger. This indicates that the better the communication between doctors and patients, the lower the patient's anger; the greater the gap between the medical effect and expectations, the lower the professional level and the worse the attitude, the more angry the patients will be. See Table 2.

Table 2 Regression analysis of each factor and patient anger

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Predictive variable | *B* | *SE* | *β* | *t* | *R2* | *F* |
| Constant | .554 | .193 |  | 2.871\*\* |  |  |
| Communication situation | -.381 | .055 | -.481 | -6.892\*\*\* | .772\* | 89.837\*\*\* |
| Curative effect | .158 | .047 | .220 | 3.383\*\* |
| Medical professional level | .142 | .048 | .182 | 2.950\*\* |
| Medical attitude | .178 | .069 | .155 | 2.588\* |

3. Discussion

3.1 The effect of demographic variables on patient anger

The results of this study show that:Anger was significantly higher in patients aged 46 – 55 years than in those under 25,25 – 35 and over 66 years old patients. This is mainly due to the age group of 45-55 patients may be in menopause on the one hand who are stepping into the old age from the middle age gradually, anxiety and irritability are their psychological characteristics of this stage. On the other hand, compared with patients under the age of 25, they have more life experiences, more life pressure and work pressure,Middle-age adults who must help both their children and their aging parents. Once they get sick, it is difficult to accept no matter psychologically or physically. Unlike elderly patients aged over 66, it seems that they have had "prepared" very early , since patients under the age of 25 which many are children who with a poor understanding of the diseases and the treatment of diseases , Therefore, the patients who have better compliance with the treatment plan given by the doctor which it is not easy to produce conflict between doctors and patients, and natural anger occurs very rarely as a consequence.

Patients with a junior high school education or below had the highest anger, followed by patients with a senior high school (including technical secondary school) education. It shows that patients with lower education background are more likely to have anger in the medical situation, and the education level of patients is directly related to anger which is consistent with the results of the study by Zhu Lin [7] et al.

Non-working patients had the highest anger mood, followed by farmers and workers, significantly higher than those in other occupations. Non-employed self-funded patients had the highest anger levels, followed by others paying, significantly higher than anger in health insurance and public patients. Patients with personal monthly income below 2,000 yuan had the highest anger, followed by patients with no stable source of income, which was significantly higher than that of other patients with personal monthly income period. Patients without work may not have a stable source of income. First of all, they cannot pay high medical expenses when they are sick, and cannot cooperate with the treatment of the disease. When they are sick, they can directly blame the society and the hospital, and vent their anger on the medical staff. Secondly,patients who without a job and a stable income are more psychologically vulnerable, like being abandoned by the society, and even think that their own existence is insignificant, once they are sick, they come to the hospital for medical treatment, it is particularly easy to produce anger motion when they cannot satisfy with the doctors and nurses communication attitude or treatment,they even hatred of social psychological [8].

3.2 The influence of each factor on the patient's anger

3.2.1 Communication situation

Doctor-patient communication is the basis of medical activities. Good doctor-patient communication helps doctors to collect patient information, give correct diagnosis or timely and effective treatment plan [9]. Looking at the current situation of medical treatment in China, the causes of medical disputes are analyzed. According to statistics, 80% of medical disputes are caused by poor communication between doctors and patients, and the remaining 20% of medical disputes are also [10] caused by the lack of communication between doctors and patients or related to medical technology. Due to the relative shortage of medical resources in China, While the people's awareness of health protection is gradually improving, medical staff workload has increased dramatically, In order to ensure the completion of the prescribed diagnosis and treatment norms and document writing, and the signature of the relevant informed consent form, In order to complete various written tasks, resulting in the time constraints for doctor-patient communication[11], The relative shortage of medical resources and the shortage of medical staff result in the lack of enough time to understand the psychological and physiological needs of patients,so it is difficult to conduct a complete and necessary doctor-patient communication[12], Some healthcare providers lack communication skills with patients and incorrect communication attitudes, These factors contribute to patients' ignorance of their own disease, Not understanding the treatment plan and care given by medical staff,even produce misunderstanding, causing the anger of patients, may also cause unnecessary conflicts between doctors and patients seriously.

3.2.2 Medical attitude

Medical attitude for patients in the process of the harmony of doctor-patient relationship plays a pivotal position, medical language blunt, indifference, Patients who are sick will feel that they are not getting the care they deserved, also think the relationship between themselves and doctors present a superior, distancely, naturally produce a resistance to doctors, some medical staff in the process of diagnosis and treatment is out of concentrated, even the attitude is very bad, and some doctors have long been numb to the pain of patients, such the attitude makes the patient feel disappointed, and even makes the patient producing angry mood [13].

3.2.3 Medical professional level and medical effect

The professional level of the medical side is directly related to the medical effect. The medical effect is restricted by various factors, including the professional level of the medical side, the moral cultivation of the medical side, the physical quality of the patient, the psychological quality of the patient, the equipment and conditions of the hospital. Of course, with the poor professional level of the medical side, the doctors themselves can not control the patient's disease freely, and can not be confident in the diagnosis and treatment of the disease, and can not clearly answer the questions of the patients, and may even be confused. However, once due to the poor professional level of the medical side, the treatment process and medical effect of the disease displease the patient, the patient's anger arises spontaneously, and even produces verbal or physical attacks, causing adverse effects.

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Fund Project: Yunnan Provincial Philosophy and Social Science Planning Project (YB2013033), Key Project of Yunnan Provincial Department of Education (2015Z152), Doctor Launch Fund Project of Dali University (KYBS201101). Huang Hui and Zhang Yixiao are mainly responsible for the collection and writing of the subject data; Fu Yanfen and Yang Lin are responsible for the guidance and revision work.