THE EFFECT OF THE QUALITY OF PHARMACEUTICAL SERVICE ON OUTPATIENT SATISFACTION OF AMELIA HOSPITAL

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Abstract: This Research is expected to know the influence of the quality of services, installation pharmaceutical, a pharmaceutical, attitude officers, speed service, the provision of information and education medicine, and the availability of medicines of satisfaction outpatients at the hospital Amelia simultaneously, partial and the dominant. The results of the study can also be used as the basis in the arrangement the development program of increasing the quality of services pharmaceutical in conformity with expectation patients and renders service IFRS Amelia be an option to obtain medicine. The research is research observational analytic with the approach cross-sectional. Data analysis to research this using analysis linear regression multiple. The research results show that all dimensions the quality of services pharmaceutical influential together to satisfaction patients. Three dimensions speed service, the provision of information and education medicine and the availability of medicines influential be partial to satisfaction patients. Factors that dominant influential the quality of services pharmaceutical to satisfaction outpatients is a factor the availability of medicines.

Keyword: Quality of Pharmaceutical Installation Service, Patient Satisfaction

Hospital is a health care institution that provides full-scale personal health services including inpatient, outpatient, and emergency care services. The process of hospital service cannot be separated from supporting unit. Supporting unit consists of a laboratory as well as a pharmacy department (IFRS). Pharmaceutical installation is a supporting unit of the hospital that plays an important role in the sustainability of hospital service. Pharmaceutical service that is not managed properly can disrupt hospital service. This department is the only department that is responsible for the pharmaceutical products circulating in the hospital (Regulation of the Minister of Health of the Republic of Indonesia, 2014). Pharmaceutical service in the hospital is one form of health services. Therefore, the pharmaceutical department as the manager of pharmaceutical products should pay attention to the safety patients by managing pharmaceutical products well. The pharmaceutical department should also protect patients from irrational drug use (Ministry of Health of the Republic of Indonesia, 2006).

The quality of hospital pharmaceutical service is a service which refers to the level of perfection...
of the service in creating patient satisfaction in accordance with the average satisfaction level in the society. There are 5 dimensions of pharmaceutical service quality, namely: 1. The speed of service, 2. Staff attitude, 3. Availability of drugs, 4. Pharmacy place, 5. Provision of drug information and education (Larson et al., 2002, Fahmi Khudair and Asif Raza, 2013). Satisfaction is one indicator of service quality used to see whether the performance of service is good or not. The level of patient satisfaction with the service provided can affect the desire to use the service again. If the patients’ expectation of service exceeds the service they get, then voluntarily they will use the service again and probably will promote to others to choose the service (Purwastuti, 2005).

Amelia Hospital is a class D - private hospital located at Pahlawan Street number 25 Pare Kediri East Java, which was established in 1994 as a maternity hospital with a total capacity of 107 beds. The vision of this hospital is “being the chosen hospital of society”; the mission is “providing high-quality and optimal service and reachable by society”; and the motto is “the satisfaction of patients and patients’ family is our pride”. This research is expected to know the effect of quality of pharmacy installation service on outpatient satisfaction at Amelia Hospital simultaneously, partially and dominantly. The results of the research can also be used as the basis for the development of pharmaceutical service quality improvement program in accordance with patient expectation, and make pharmaceutical service of Amelia Hospital the choice to obtain medicine.

METHOD

This research is an observational analytic research with cross-sectional approach. The study was conducted during October in 2016 at Amelia Hospital in Kediri Regency. The data was collected by distributing questionnaires to patients and patients’ family in the waiting room of pharmaceutical department for outpatients at Amelia Hospital during operational hours. In this study, the sample used was taken by using non-probability sampling technique and purposive sampling method. There were 75 respondents, who are patient’s family and the patients themselves. The independent variable in this research is service quality, which includes pharmacy place, staff attitude, service speed, drug communication, information, and education (KIE), and availability of medicine. The dependent variable used in this study is patient satisfaction. The scale of measurement used in this study is Likert scale (5 points). The questionnaires used have had validity test and reliability test (Cronbach’s alpha) first. In this study, the data were analyzed by using multiple linear regression analysis. This study also uses multiple correlation coefficient analysis, which is used to measure the strength of linear relationship between several independent variables and one dependent variable. Regression analysis should pass classical assumption test (normality test, multicollinearity, heteroskedasticity, and linearity). Hypothesis test in this research was conducted by using f-test and t-test.

RESEARCH RESULTS

Respondents in this study are patients or family of outpatients in the outpatient department and are the users of pharmaceutical service who at least have bought drugs once in the pharmacy department in Amelia hospital. The characteristics of respondents are presented in Table 1.

Table 1  Characteristics of Respondents

<table>
<thead>
<tr>
<th>Characteristics of Respondents</th>
<th>Number</th>
<th>Percentage (%)</th>
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<tbody>
<tr>
<td>Type of respondents</td>
<td></td>
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<tr>
<td>Patient</td>
<td>40</td>
<td>53.3%</td>
</tr>
<tr>
<td>Family/company</td>
<td>35</td>
<td>46.7%</td>
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<tr>
<td>Age of respondents</td>
<td></td>
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<tr>
<td>1 - 5 years old</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>6 - 10 years old</td>
<td>0</td>
<td>0.0%</td>
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</table>
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The respondents in this study were the patients themselves (53.3%) and the patient’s family (46.7%). The majority of respondents aged more than or equal to 21 years old (90.7%), are female (86.5%), married (86.7%), and finish senior high school (48.0%). All respondents had had more than one visit and most of the respondents had visited the outpatient pharmaceutical department of Amelia hospital twice (37.3%).

Descriptive analysis of respondents’ perception of pharmacy place variable

A total of 75 respondents agree (76.0%) and strongly agree (18.7%) that the pharmacy department is easily accessible from the outpatient department; average of this indicator amounted to 4.11. This illustrates that respondents tend to agree that pharmacy department is easily accessible from the outpatient department. In the next criterion, there are 77.3% respondents who agree and 17.3% respondents who strongly agree that the waiting room of pharmacy department is comfortable; the average of this indicator amounted to 4.07. This illustrates that respondents tend to agree that the waiting room of pharmacy department is comfortable. 73.3% of respondents agree and 21.3% of respondents strongly agree that the surrounding area of pharmacy department is clean; the average of this indicator amounted to 4.15. This illustrates that respondents tend to agree that the surrounding area of pharmacy department is clean. 77.3% of respondents agree and 9.3% of respondents strongly agree that the operational hours of pharmaceutical service do not interfere with their work, with an average indicator of 3.88. This illustrates that respondents tend to agree that operational hours of pharmaceutical service do not interfere with their work.
Descriptive analysis of respondents’ perception of staff attitude variable

The result of descriptive analysis of respondent’s perception of staff attitude variable shows that 73.3% of respondents agree and 24.0% of respondents strongly agree that the staff is friendly (smile, greet, polite and courteous); the average of this indicator amounted to 4.21. This illustrates that respondents tend to agree that the staff is friendly (greet, polite and courteous). 77.3% of respondents agree and 20.0% of respondents strongly agree that the staff is responsive to what patients need; the average of this indicator amounted to 4.16. This suggests that respondents tend to agree that the staff is responsive to what patients need. 81.3% of respondents agree and 18.3% strongly agree that the staff is willing to answer the questions asked; the average of this indicator amounted to 4.19. This indicates that respondents tend to agree that the staff is willing to answer the questions asked.

Descriptive analysis of respondents’ perception of pharmacy place variable

The result of descriptive analysis of respondent’s perception of pharmacy place variable shows that 66.7% of respondents agree and 14.7% strongly agree that the time from prescription until the patients receive the medication is not too long; the average of this indicator amounted to 3.88. This suggests that respondents tend to agree that the time of prescription until the patients receive the medication is not too long. 74.7% of respondents and 10.7% of respondents strongly agree that the waiting time corresponds to the number of prescribed medications; the average indicator amounted to 3.91. This means that respondents tend to agree that the waiting time corresponds to the number of prescribed medications.

Descriptive analysis of respondents’ perception of variable of drug information and education

The result of descriptive analysis of respondents’ perception of variable of drug information and education shows that 73.3% of respondents agree and 21.3% of respondents strongly agree that pharmacists explain the use of prescribed medications; the average of this indicator amounted to 4.15. This means that respondents tend to agree that pharmacists explain the use of prescribed medications. 72.0% of respondents agree and 25.3% of respondents strongly agree that pharmacists explain how to consume the medicine correctly; the average of this indicator amounted to 4.23. This means that respondents tend to agree that pharmacists explain how to consume the medicine correctly. 56.0% of respondents agree and 17.3% of respondents doubt that pharmacists explain the possible side effects, with an average indicator of 3.61. This means that respondents tend to agree that pharmacists explain the possible side effects. 73.3% of respondents agree and 21.3% of respondents strongly agree that pharmacists explain how to store medicine; the average indicator amounted to 4.04. This indicates that respondents tend to agree that the patients understand the explanation given by the staff.

Descriptive analysis of respondents’ perception of drug availability variable

The result of descriptive analysis of respondent’s perception of drug availability variable shows that 70.7% of respondents agree and 26.7% of respondents strongly agree that the amount of drug the patients receive is according to prescription; the average of this indicator amounted to 4.23. This suggests that respondents tend to agree that the amount of drug the patients receive is according to prescription. 78.7% of respondents agree and 20.0% of respondents strongly agree that the prescribed medications and medical tools were available at the pharmacy department, with an average of this indicator of 4.19. This suggests that respondents tend to agree that prescription drugs and medical tools are available at the pharmacy department.
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78.7% of respondents agree and 20.0% of respondents doubt that the rules of use stated on the label are clear; the average of this indicator amounted to 4.19. This suggests that respondents tend to agree that the rules of use listed on the label are clear. 81.3% of respondents agree and 18.7% of respondents doubt that the condition and quality of medicine are good; the average of this indicator amounted to 4.19. This suggests that respondents tend to agree that the condition and quality of medicine are good. 78.7% of respondents agree and 21.3% of respondents strongly agree that patients feel happy after having pharmaceutical service at the pharmacy department; the average of this indicator amounted to 4.21. This suggests that respondents tend to agree that patients feel happy after receiving pharmaceutical service at the pharmacy department. 80.0% of respondents agree and 17.3% of respondents strongly agree that the pharmaceutical service at the outpatient pharmacy department of Amelia hospital is satisfactory; the average of this indicator amounted to 4.20. This suggests that respondents tend to agree that the pharmaceutical service at outpatient pharmacy department at Amelia Hospital is satisfactory.

Multicollinearity test shows that all independent variables yield VIF value smaller than 10 and tolerance value greater than 0.1. Thus, regression analysis in this study does not contain multicollinearity symptoms. The linearity test shows that all probabilities are < level of significant (α = 5%). This means that the relationship between the pharmacy place, staff attitude, the speed of service, the provision of drug information and education, and the availability of drugs on outpatient satisfaction is expressed linearly. Therefore, the assumption of linearity is met. Normality assumption test of the influence of pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine on outpatient satisfaction yield statistic of Kolmogorov Smirnov test amounted to 1.117; the probability amounted to 0.165. This result shows that probability > level of significant (α = 5%). This suggests that the residuals generated by the model are normally distributed. Heteroscedasticity assumption test can be seen in Glejser Test. Heteroscedasticity assumption test shows that the probability of all variables > level of significant (α = 5%). This shows that residuals are homogenous. Thus, the assumption of heteroscedasticity is met.

Estimation of the effect of pharmacy place, staff attitude, speed of service, provision of drug information and education, and availability of medicine on outpatient satisfaction.

The contribution of pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine to outpatient satisfaction can be known through the coefficient of determination (adj R²), amounted to 0.855. This shows that the diversity of outpatient satisfaction can be explained by pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine amounted to 85.5%. In other words, the contribution of pharmacy place, staff attitude, the speed of service, provision of drug information and education, and drug availability to outpatient satisfaction amounted to 85.5%. The remaining contribution of 14.5% is a contribution of other variables which are not examined in this study.

The criteria of simultaneous hypothesis test state that if F_{count} \geq F_{table}, or probability < level of significance (α), thus there is the simultaneous significant influence of pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine on outpatient satisfaction. Simultaneous hypothesis testing yields F_{count} of 88.601, with a probability of 0.000. The test result shows that probability < level of significance (α = 5%). This indicates that there is a simultaneous significant influence (together and at the same time) of pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine on outpatient satisfaction.
The criteria of partial hypothesis test state that if \( t_{\text{count}} \geq t_{\text{table}} \) or probability < level of significance (\( \alpha \)), thus there is the partial significant influence (pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine on outpatient satisfaction).

Partial hypothesis testing of pharmacy place yields \( t_{\text{count}} \) value of 0.639, with a probability of 0.525. The test result shows that probability > level of significance (\( \alpha = 5\% \)). This means that there is no significant effect of pharmacy place on outpatient satisfaction. Partial hypothesis testing of staff attitude yields \( t_{\text{count}} \) value of 0.310, with a probability of 0.758. The test result shows that probability > level of significance (\( \alpha = 5\% \)). This means that there is no significant influence of staff attitude on outpatient satisfaction.

Partial hypothesis testing of service speed yields \( t_{\text{count}} \) value of 2.060, with a probability of 0.043. The test result shows that probability < level of significance (\( \alpha = 5\% \)). This means that there is a significant influence of service speed on outpatient satisfaction.

Partial hypothesis testing of the provision of drug information and education yields \( t_{\text{count}} \) value amounted to 1.991, with the probability of 0.050. The test result shows that probability = level of significance (\( \alpha = 5\% \)). This means that there is a significant effect of drug information and education on outpatient satisfaction.

Partial hypothesis testing in a variable of the drug availability yields \( t_{\text{count}} \) value of 11.937, with probability, amounted to 0.000. The test result shows that probability < level of significance (\( \alpha = 5\% \)). This means that there is a partial significant effect of drug availability on outpatient satisfaction.

Regression equation from result of estimation of multiple linear regression analysis found is \( Y = 0.221 + 0.033 X_1 + 0.020 X_2 + 0.065 X_3 + 0.096 X_4 + 0.744 X_5 \). The constant of 0.221 indicates that if pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine are constant (unchanged), then the amount of change in patient satisfaction amounted to 0.221. The coefficient of pharmacy place amounted to 0.033 indicates that the pharmacy place has a positive effect on outpatient satisfaction. The coefficient of staff attitude amounted to 0.020 indicates that staff attitudes have a positive effect on outpatient satisfaction. The coefficient of service speed amounted to 0.065 indicates that service speed has a positive effect on outpatient satisfaction. The coefficient of the provision of drug information and education amounted to 0.096 indicates that provision of drug information and education has a positive effect on outpatient satisfaction. The coefficient of medicine availability amounted to 0.744 indicates that the availability of medicine has a positive effect on outpatient satisfaction.

The dominant influence of independent variables on outpatient satisfaction can be seen through the largest standardized coefficient, which is found in the medicine availability variable, amounted to 0.758. This means that medicine availability has the most dominant influence on outpatient satisfaction.

**DISCUSSIONS**

**Characteristics of Respondents**

Most of the respondents were outpatients of Amelia Hospital. The majority of respondents aged over 21 years, which means that the respondents are in the productive age with high workload; utilization of preventive health service starts from the middle age to late adulthood (Anderson and Andersen in Gehrt and Pinto, 1993). Service procedure, poly queue, and other supporting services including pharmaceutical service require considerable physical strength; therefore, at that age, patients and patients’ family/company still have good mobility. Female respondents dominate the results of this study because the number of men working is still high in Pare city and surrounding areas. Hospital, which is previously a public maternity hospital, may be one of the supporting factors of the majority of female respondents. More than 80% of women hold household financial control (Magnadi and Indriani, 2013).
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and also hold a strategic role in decision making (Kartajaya, 2014). Gehrt and Pinto said that women are also more dominant than men in terms of utilizing healthcare facilities. Some of the respondents in this study are married; patients and patients’ family/company are already in the age of married. Since the majority of respondents are female, married women can act as influencers and decision makers in purchasing a product/service, including decision in choosing a health service (Magnadi and Indriani, 2013)

The last education of the majority of respondents is senior high school. The level of education is important to be concerned because it is likely to affect the responsiveness of patients in dealing with questions in the questionnaire, information provided, knowledge, willingness, and ability in answering the questionnaire given. It also shows that the higher a person’s education, the higher his concern for his health. Consumers with a high level of education are generally more critical and more difficult to satisfy than consumers with low education and the moderate level of education because consumers with the high level of education have the better capability in analyzing a product or service (Kotler, 2000). Most respondents have visited Amelia Hospital twice and more than five times. This indicates that the respondents have been satisfied with the service procedure of Amelia hospital so that they have no doubt in having physical examination routinely in this hospital.

Quality of Pharmaceutical Service Simultaneously Affects Patient Satisfaction at Amelia Hospital

The dimension of pharmacy place, the speed of service, provision of information and drug education, and the availability of medicine significantly affect outpatient satisfaction. This supports the results of previous research which was conducted by Sa’adah et al. (2015), which have similarities to this study, in the dimension of location, staff attitude, the speed of service, and availability of medicine. The results of other studies also stating that pharmaceutical service has a positive and real effect on patient satisfaction were conducted by Khudair and Raza (2011), Panvelkar et al. (2009), Larson et al. (2002), Kamei et al. (2001), Briesacher and Corey (1997). A research which was conducted by Khudair and Raza (2011) states that good pharmacy place, staff attitude, the speed of service, the provision of drug information and education, and the availability of medicine will tend to increase outpatient satisfaction. Consumers who receive services beyond their expectations will say that the service provider is qualified, which will turn to satisfaction of service providers, and vice versa.

Quality of Pharmaceutical Service Partially Affects Outpatient Satisfaction of Amelia Hospital

Three dimensions of service quality that partially affect patient satisfaction the dimension of service speed, provision of drug information and education, and medicine availability at Amelia Hospital. The dimension of service speed partially affects outpatient satisfaction of Amelia Hospital. The similar result is also obtained from the research which was conducted by Herjunianto and Dewanto (2014), that waiting time affects patient satisfaction. This dissatisfaction can affect overall assessment of the quality of service offered by the hospital. The patient’s expectation of the speed of pharmaceutical service is very high; therefore, the waiting time should be managed as well as possible. The dimension of the provision of drug information and education can influence patient’s satisfaction. Patients who are provided with sufficient information about medicine to be consumed will feel comfortable in consuming the medicine, which also affects patient satisfaction. Similar results are also found in studies which were conducted by Kurniawan et al. (2009), and Mayefis et al. (2015). Medicine availability partially affects outpatient satisfaction of Amelia Hospital. If all medicines needed are available, patients will be able to get them without having to look at other hospital or pharmacy. This is also one of the hospital’s strategies in competing with other hospitals (Rahmawati and Wahyuningsih, 2016). The clear description of rules of use on the drug label can make patients feel comfortable about the medicine to be consumed and will affect their
satisfaction and willingness in maintaining their health, so that the purpose of therapy can be achieved (Mayefis et al., 2015).

There are two dimensions that have no significant effect, namely dimension of pharmacy place and staff attitude. Complete facility and infrastructure provided will lead patients to feel comfortable while waiting to be served. The hospital which is capable of providing good services in accordance with patient expectations will lead patients to use the hospital services as a place of treatment again (Aprilia, 2008). The majority of respondents agree that the staff of hospital are friendly (smile, greet, polite, and courteous), responsive to what the patients need and willing to answer questions asked. This is because medical staff at Amelia Hospital has been equipped with training on effective communication to patients.

Dominant Quality which Affects Satisfaction of Outpatient at Amelia Hospital

The availability of medicine has the most dominant influence on outpatient satisfaction; if the drugs needed are not available, the satisfaction of patients will decrease. The study which was conducted by Ifmaily (2006) found that the completeness and accuracy of pharmaceutical service become the main factor in competing with other pharmacies. The awareness of pharmacy in pharmaceutical service on the availability of drugs is a major factor in competing with other pharmacies. The supply of medicines should be adjusted to the size of the need of the surrounding community because the complete supply of drugs will inhibit health services provided for society (Fakhriadi, 2011). That is different from the results of a study which was conducted by Fahmi Khudair and Asif Raza (2013), stating that there is no positive and significant influence on drug availability and patient satisfaction.

IMPLICATION OF RESEARCH RESULTS

Dimensions of outpatient service quality at Amelia hospital that affect patient satisfaction are pharmacy place, staff attitude, the speed of service, provision of drug information and education, and availability of medicine at Amelia Hospital. They affect patient satisfaction either partially or simultaneously. In the research analysis result of the partial effect of service quality, there are three insignificant dimensions, namely pharmacy place, staff attitude, and also the provision of drug information and education. Therefore, those three items need to get more attention and improvement in order to create patient satisfaction.

The dimension of quality which is dominant on the outpatient satisfaction of Amelia Hospital is the availability of drugs. Therefore, in order to increase patient satisfaction, Amelia Hospital should always try to keep the availability of drugs in the pharmacy depot complete. Overall, the dimension of service quality should be the concern of hospital management in improving its quality of service. Improving the quality of service will affect the patient satisfaction either simultaneously or partially.

RESEARCH LIMITATION

In this study, respondents who are studied are only outpatients; it has not involved inpatients so that this study only describes the effect of the quality of pharmaceutical service on outpatient satisfaction at Amelia Hospital. The second limitation is that the object of this research is only outpatient pharmaceutical service; this research does not involve the entire pharmaceutical service at Amelia Hospital, so it cannot describe the quality of pharmaceutical service at Amelia Hospital as a whole. The next limitation that may cause bias in the results of this study is the population, which is limited to outpatients who come to the outpatient pharmaceutical service at Amelia Hospital, excluding the outpatients who decide to buy medicine at other pharmacies.

CONCLUSION

Based on the results of analysis and discussion on the quality of pharmaceutical service on outpatient satisfaction in this research, it can be concluded as follows. The quality of pharmaceutical service affects patient satisfaction simultaneously. The pharmaceutical service in question includes pharmacy place, staff attitude, the speed of service, provision of drug information and education, and drug availability. The availability of drugs is the dominant fac-
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The quality of pharmaceutical services plays a significant role in patient satisfaction. After patients have treatment, they can take the medicine needed as they come home without having to buy it in another pharmacy. The majority of respondents are satisfied with the pharmaceutical services provided in this hospital.

SUGGESTIONS

The results of this study are expected to be used as a reference for Amelia Hospital in improving the quality of pharmaceutical services, especially in the following points. The management of drug distribution must be considered carefully. Many methods can be selected to maintain the availability of drugs such as ABC analysis method and Buffer Stock method. The activeness of medical staff in providing drug information and drug education needs to be considered. Provision of a special place to perform that activity is expected to improve patient satisfaction. The speed of pharmaceutical service should be improved by adding human resources in accordance with the calculation of workload.

Further research can develop other dimensions, namely price, and facility. Further research also can be developed by involving inpatients so as to describe the overall influence of the quality of pharmaceutical service on patient satisfaction at Amelia Hospital. In addition, further research also needs to involve the entire pharmaceutical installation of Amelia Hospital as the object of research, so as to describe the quality of pharmaceutical service at Amelia Hospital as a whole. The population of further research may also involve outpatients who decide to buy drugs at other pharmacies. Further research is also expected to represent all hospitals in Kediri so that all characteristics of hospitals and respondents in Kediri can be described completely.

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