Relationship Between Characteristics of Class 3 Inspired Patients with Service Satisfaction at Mokopido General Hospital, Tolitoli Regency

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Abstract
Patient satisfaction is a measure of service quality in hospitals. Satisfaction can be influenced by various aspects, one of which is patient characteristics. The purpose of the study was to analyze the relationship between the Characteristics of Class 3 Inpatients and Service Satisfaction at Mokopido General Hospital, Baolan, Tolitoli Regency. This type of quantitative research with a Cross-Sectional approach. The population in this study amounted to 1,178 patients; a sample of 93 patients was obtained using the slovin formula, while sampling was using the Proportionate Stratified Random Sampling technique. The analysis used was the Contingency Correlation with a value of =10%. The results of this study indicated a strong relationship between patient characteristics in the form of last education (p = 0.000) and age (p = 0.000) with service satisfaction. There is a strong relationship between age group, education and service satisfaction at Mokopido General Hospital, Baolan, Tolitoli Regency. Older respondents are more satisfied with their services. Respondents who are not educated are more satisfied with the services received. Suggestions for the empathy dimension are expected that the doctor or nurse will be able to be polite, and friendly, listen to complaints about the patient’s illness, and provide a way out in the consultation so that the patient is satisfied with the service.

Keywords: Characteristics, Patient Satisfaction, Quality of Service

Key Messages:
• Older respondents are more satisfied with hospital services
• Respondents who are not educated are more satisfied with the hospital services they receive

1. Introduction
The hospital is a comprehensive part of a medical organization whose function is to provide complete health services to the community, both treatment, and recovery. The problem of patient satisfaction this time has become a benchmark for the quality of services in hospitals. As the community's standard of living increases, the community’s desire for quality health also increases. This requires health service providers such as hospitals to improve the quality of life and provide satisfaction for consumers as users of health services (1,2). One marker of the success of health services is patient satisfaction (3,4). Satisfaction is a person's feelings of pleasure or disappointment that arise after comparing perceptions between expectations and services received for a service or product. Various aspects of satisfaction can be influenced by patient characteristics (5).
WHO (World Health Organization) states that all countries in the world must strengthen primary health care systems to increase effectiveness (better health of the population), efficiency (expenditures are always managed), equity (equal opportunities to obtain appropriate health services), and sustainable health care. Based on World health data in 2019 still shows an average patient satisfaction rate of 54% in India and patient satisfaction of 25% in China (6). The Public Satisfaction Index Survey conducted by the Ministry of Health of the Republic of Indonesia in 2018 showed the 4 highest hospitals: Hasan Sadikin Hospital with 78.74%, Fatmawati Hospital with 78.23%, Marzoeiki Mahdi Hospital with 79.95%, and Persahabatan Hospital with 78.99%. This figure has not reached the standard value set by the government according to the Regulation of the Minister of Administrative Reform of the Republic of Indonesia number 14 of 2017, the standard of patient satisfaction is 90% (7).

Measuring customer satisfaction in hospitals using the Service Quality model by making a customer satisfaction assessment survey through Tangible, Reliability, Responsiveness, Assurance, and Empathy. Based on research results (8), 3 hospitals in Central Sulawesi on "Smartphone-Based Hospital Health Service Satisfaction Monitoring" found that in Central Sulawesi, there has been a decrease in patient satisfaction levels, namely Anutapura, Anutanulako, and Luwuk Hospitals. The satisfaction results based on the dimensions of Responsiveness, Empathy, and Reality were carried out collectively from the 3 hospitals. The highest dissatisfaction was the Responsiveness dimension (86.5%, which includes the opportunity for patients to consult their illness with officers), Empathy (85.6%, which includes not distinguishing services for each patient), and Real (74.4%, which includes the availability of facilities). Monitoring service satisfaction in hospitals and responding promptly to complaints can increase public trust in hospital services.

Mokopido Regional General Hospital, Baolan, Tolitoli Regency, is one of the accredited hospitals in Central Sulawesi. Based on data on the number of outpatient visits in 2020, which amounted to 14,154 patients, it increased in 2021 to 46,721 outpatients. While inpatients in 2020 amounted to 54,213 patients until it decreased in 2021 to 1,178 inpatients. The preliminary study results conducted interviews with the Mokopido Tolitoli Hospital staff, saying that the decrease in the number of visits indicated an influence on patient satisfaction and interest in patient visits. Based on satisfaction survey data in 2021 from 10 inpatient rooms, the three included Teratai Anak room as much as 74.7%, Teratai Bedah room as much as 75.2%, and Teratai Interna room as much as 67.2%. The satisfaction survey results of the three inpatient rooms have not reached the ideal value that can be tolerated according to the standards of the Permenpan no 14 of the 2017 about Community Satisfaction Survey; it is known that the ideal value of satisfaction is 90%.

This study aims to analyze the relationship between the characteristics of inpatients and service satisfaction at the Mokopido General Hospital, Baolan District, Tolitoli Regency.

2. Methods
The type of research is an analytical survey with a quantitative approach, the design in this study is Cross Sectional. The study was conducted in January 2022. The population in the study were 1,178 inpatients at the Mokopido Tolitoli General Hospital. The determination of the sample in this study used the Slovin formula. The results of the calculation of the formula obtained a sample of 93 people. Sampling in this study used a proportion sample technique. The sampling process was carried out by proportional stratified random sampling, namely the samples were grouped into 3 strata, namely the Children's Lotus Room, Surgical Lotus and Internal Lotus. By determining the proportion of each stratum based on the percentage of the number of samples taken. After obtaining the sample, the sampling of each stratum is done randomly and pays attention to the proportions in each, namely:

\[ n_i = \frac{N_i}{N} \cdot n \]

Ni : Number of Samples by Strata
n : Total Samples
Ni : Total Population by Strata
N : Total Population
Ruangan Teratai Anak  = \frac{20}{98} \cdot 92 = 18.7 = 19

Ruangan Teratai Beda  = \frac{37}{98} \cdot 92 = 34.7 = 35

Ruangan Teratai Interna  = \frac{42}{98} \cdot 92 = 39.4 = 39

The sampling technique of this research was taken by stratified random sampling. The inclusion criteria are willing to be respondents, inpatients >24 hours, Class 3 inpatients in Class 3 rooms who can communicate well, Family patients aged 15 to > 55 years, patients who are not illiterate. The exclusion criteria were the patient was unconscious and the patient had a mental disorder. The method of data collection is primary data obtained by researchers directly from respondents through filling out questionnaires distributed by researchers to respondents in the form of data about characteristics and satisfaction. The secondary data in this study were obtained through Medical Record Data at Mokopido General Hospital, Baolan District, Tolitoli Regency.

Variable level of satisfaction from consumers in terms of goods or services produced by producers. Satisfaction is an expression of one's feelings of pleasure or disappointment from the results of a comparison between the perceived or expected product. Patient satisfaction was measured based on questions from the questionnaire with the highest answer being given a score of 1 and the lowest answer being given a score of 0. It was calculated using the Guttman scale. Satisfaction of inpatients, namely Dissatisfied = If the total score of respondents' answers 7.5 Satisfied = If the total score of respondents' answers < 7.5.

The presentation of the data will be displayed in the form of narration and several distribution tables and followed by statistical tests of the relationship between the Independent (free) variable and the Dependent (bound) variable. Data analysis was the che-squere test with a significance level of p < 0.05.

3. Results

Based on table 1 shows that the distribution of respondents by age group with the highest frequency was in the age group >55 years, namely 48 respondents (51.6%), while the age group with the lowest frequency was in the age group 15-24 years, each of which was 17 respondents (18.3%). The distribution of respondents according to the latest education with the highest frequency was for graduating from school, with as many as 29 respondents (31.2%), while the last education with the lowest frequency was for diploma/S1 graduates, namely 13 respondents (14.0%). The distribution of respondents according to patient satisfaction; most of them were dissatisfied (51 respondents (54.8%)), while a small number of patients were satisfied, as many as 42 respondents (45.2%).

Table 1. Distribution of Respondents by Characteristics

<table>
<thead>
<tr>
<th>Age Group (Years)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;55 Year</td>
<td>48</td>
<td>51.6</td>
</tr>
<tr>
<td>25-54 Year</td>
<td>28</td>
<td>30.1</td>
</tr>
<tr>
<td>15-24 Year</td>
<td>17</td>
<td>18.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No schooling/ not yet finished elementary school</td>
<td>29</td>
<td>31.2</td>
</tr>
<tr>
<td>Primary school</td>
<td>15</td>
<td>16.1</td>
</tr>
<tr>
<td>Junior High School</td>
<td>17</td>
<td>18.3</td>
</tr>
<tr>
<td>Senior High School</td>
<td>19</td>
<td>20.4</td>
</tr>
<tr>
<td>Diploma/Bachelor degree</td>
<td>13</td>
<td>14.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Customer Satisfaction</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfied</td>
<td>42</td>
<td>45.2</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>51</td>
<td>54.8</td>
</tr>
</tbody>
</table>

| Total   | 93 | 100.0 |

Based on table 2, about 48 respondents aged >55 years; there were 32 satisfied respondents (66.7%) and 16 dissatisfied respondents (33.3%). Of the 28 respondents aged 25-54 years; 6 respondents (21.4%) were satisfied and 22 (78.6%) were dissatisfied. Meanwhile, from 17 respondents aged 15-24 years; there were 4
satisfied respondents (23.5%) and 13 dissatisfied respondents (76.5%). Based on the contingency-correlation test analysis results to see the magnitude of the relationship between age groups and patient satisfaction, it shows that Approx. Sig = 0.000 (<0.1) with a value of 0.608. It means a strong relationship between the age group and patient satisfaction. Based on table 4, about 29 respondents were not schooling/not yet graduated from elementary school; there were 29 satisfied respondents (100%) and no dissatisfied respondents (0%). Of the 15 respondents who were elementary school students; there were 5 satisfied respondents (33.3%) and 10 dissatisfied respondents (66.7%). Furthermore, of the 17 respondents were in junior high school; 4 were satisfied (23.5%) and 13 (76.5%) were dissatisfied. Of the 18 respondents who were in high school, there were 3 respondents (15.8%) who were satisfied and 16 respondents (84.2%) who were dissatisfied. Meanwhile, of the 13 respondents who had Diploma/Bachelor's degree; 1 respondent (7.7%) was satisfied and 12 (92.3%) were dissatisfied.

Based on the contingency-correlation test analysis results to see the magnitude of the relationship between the last education and patient satisfaction, it shows that Approx. Sig = 0.000 (<0.1) with a value of (0.603). It means a strong relationship between the last education and patient satisfaction.

<table>
<thead>
<tr>
<th>Table 2. Relationship of Age Group and education with Respondent Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction</strong></td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
</tr>
<tr>
<td>&gt;55</td>
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<tr>
<td>25-54</td>
</tr>
<tr>
<td>15-24</td>
</tr>
<tr>
<td><strong>Education</strong></td>
</tr>
<tr>
<td>Not schooling/</td>
</tr>
<tr>
<td>not yet finished</td>
</tr>
<tr>
<td>Elementary school</td>
</tr>
<tr>
<td>Primary school</td>
</tr>
<tr>
<td>Junior High School</td>
</tr>
<tr>
<td>Senior High School</td>
</tr>
<tr>
<td>Diploma/bachelor</td>
</tr>
<tr>
<td>degree</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

4. Discussion

**Relationship between Age Group and Respondent Satisfaction**

The older the emotional age will be more controlled and more able to accept physical limitations than younger people (9,10). This is because older people's demands and expectations are lower than younger patients, and the older patient's age affects nurses in providing services (11,12). Cultural values as parents are respected and given special privileges from the younger generation, which influences nurses to pay more attention to parents than young people. Older patients are generally more satisfied than younger patients. Older patients will feel satisfied with services at the hospital because their expectations are lower.

Based on the results of the research conducted, table 4 shows that of the 48 respondents aged > 55 years, respondents who were satisfied with the service had the highest number of 32 respondents (66.7%) and respondents who were dissatisfied with the service had the lowest number of 16 respondents (33.3%). This is because respondents feel that medical personnel or employees look neat and clean in the dimension of physical evidence. Respondents feel that the nurse explains the action to be taken in the reliability dimension. In the responsiveness dimension, the respondents feel that nurses are ready to serve respondents. In the dimension of assurance, respondents feel that doctors have the ability and knowledge to establish a diagnosis of the disease quite well so that they can answer each respondent's questions convincingly.

Based on the results of the research conducted, table 4 shows that of the 28 respondents aged 25-54
years, respondents who were satisfied with the service had the lowest number of 6 respondents (21.4%) and respondents who were dissatisfied with the service had the highest number of 22 respondents (78.6%). This is because respondents feel that medical personnel or employees do not look neat and clean in the dimension of physical evidence. In the reliability dimension, respondents feel that nurses do not tell the type of disease, how to treat wounds and how to take medicine. Respondents feel that nurses do not take action quickly and do not follow procedures in the responsiveness dimension. In the dimension of assurance, respondents feel that medical personnel do not provide complete medicines or medical equipment. In the empathy dimension, respondents feel that nurses do not provide services according to their wishes and understand the needs of patients.

Based on the results of research conducted, table 4 shows that of the 17 respondents aged 15-24 years, respondents who were satisfied with the service had the lowest number of 4 respondents (23.5%) and respondents who were dissatisfied with the service had the highest number of 13 respondents. (76.5%). This is because respondents feel that the inpatient room is not neatly arranged, clean and comfortable in the dimensions of physical evidence. In the dimension of reliability, medical personnel does not provide services that are careful and not on time as promised. Respondents feel nurses are not ready to serve patients in the responsiveness dimension. In the assurance dimension, respondents feel that medical personnel do not provide complete medicines or medical equipment. In the empathy dimension, the doctor does not listen to complaints about the respondent's illness and does not provide a solution in his consultation.

After the statistical analysis contingency correlation test between the age group and respondent satisfaction was obtained, a value of Approx. Sig = 0.000, so that (<0.1) with a value of (0.608), then Ho in this study was rejected, meaning that it has a strong relationship between the age group and service satisfaction at Mokopido General Hospital, Baolan District, Tolitoli Regency. The results showed that respondents aged > 55 years were more satisfied with health services. (Table 4) compared to other age groups because the older a person is, the more emotionally controlled they will be and can accept physical limitations, so they feel satisfied with the services provided. Meanwhile, young respondents have greater demands and expectations for the ability of medical personnel, so they tend to criticize the services they receive (13).

This research is in line with Muhammad et al (2020) research in Sekarwangi Hospital on "Evaluation of Patient Satisfaction Levels with Pharmaceutical Services at Sekarwangi Hospital, Cibadak, Sukabumi Regency," which stated that young people were dissatisfied with the bathroom space. The age group with respondent satisfaction obtained a value of Approx. Sig = 0.000 (<0.1), there was a relationship between age and respondent satisfaction (14). This research is not in line with the research of Suratris et al (2018) at the Indonesian Hospital on "Patient Satisfaction with the Quality of Outpatient Service at 7 Provincial Hospitals in Indonesia," which stated that young people were satisfied with the comfort of waiting times for consultations with doctors. The age group with respondent satisfaction obtained a value Approx. sig = 0.436 (> 0.1), meaning there is no significant relationship between age group and respondent satisfaction in Indonesian Hospitals (15).

Relationship between Last Education and Respondent Satisfaction

Ng et al (2021) stated that Education influences patients' expectations and perceptions of health services (16). The higher a person's level of education, the greater his desires and expectations, then a high level of education will lead to a low level of satisfaction, so high-quality services are needed to get satisfaction. The results obtained from the research location showed that of the 5 respondents, who had a diploma/S1 education, respondents were satisfied with the service, the lowest number was 1 respondent (7.7%) and respondents were dissatisfied with the service having the highest number of 12 respondents (92, 3%). This is because respondents feel that the inpatient room is not neatly arranged, clean and comfortable in the dimensions of physical evidence. Regarding reliability, medical personnel does not provide careful, careful, and timely service as promised, and nurses do not tell the type of disease, how to treat it and how to take medicine. Respondents feel that nurses do not take action quickly and according to procedures in the responsiveness dimension. In the dimension of assurance, respondents feel that medical personnel do not provide complete medicines or medical devices, and doctors do not have the ability and knowledge to establish a disease diagnosis is not good, so they cannot answer every patient's questions convincingly. In the empathy dimension, the doctor does not listen to complaints about the respondent's illness and does not provide a solution in his consultation.
Based on the results of the research conducted, table 5 shows that of the 19 respondents with high school education, respondents who were satisfied with the service had the lowest number of 3 respondents (15.8%) and respondents who were dissatisfied with the service had the highest number of 16 respondents (84.2%). This is because respondents feel that the inpatient room is not neatly organized and comfortable in the dimensions of physical evidence. In the reliability dimension, respondents feel that nurses do not tell the type of disease, how to treat wounds and how to take medicine. Respondents feel that nurses do not take action quickly in the responsiveness dimension.Besides, the nurses also do not follow procedures, are not willing to respond to respondents’ complaints, and not ready to serve patients. In the assurance dimension, respondents feel that doctors do not have the ability or knowledge to determine disease diagnoses is not good, so they are unable to answer every patient’s questions convincingly. Meanwhile, medical personnel does not provide complete medicines or medical devices and does not have patient medical records. In the empathy dimension, the doctor does not listen to complaints about the respondent’s illness and does not provide a solution in his consultation.

Based on the results of the research conducted, table 5 shows that of the 17 respondents with junior high school education, respondents who were satisfied with the service had the lowest number of 4 respondents (23.5%), and respondents who were dissatisfied with the service had the highest number of 13 respondents (76.5%). This is because, on the dimensions of physical evidence, respondents feel that the hospital building does not look beautiful and clean, the inpatient room is not neatly arranged, and medical personnel or employees do not look neat and clean. In the reliability dimension, respondents feel that medical personnel do not provide thorough, careful, not timely services as promised, and nurses do not explain the actions to be taken. In the responsiveness dimension, respondents feel that nurses are not ready to serve and respond to the patients, do not take action quickly, and do not follow procedures. In the dimension of assurance, respondents feel that medical personnel do not have a patient’s medical record. Respondents feel that nurses are not polite and unfriendly in the empathy dimension in serving patients.

Based on the results of the research conducted, table 5 shows that of the 15 respondents with elementary education, respondents who were satisfied with the service had the lowest number of 5 respondents (33.3%) and respondents who were dissatisfied with the service had the highest number of 10 respondents (66.7%). This is because, in the dimensions of physical evidence, respondents feel that the hospital building does not look beautiful and clean, the inpatient room is not neatly arranged, and medical personnel or employees do not look neat and clean. In the reliability dimension, respondents feel that medical personnel do not provide thorough, careful, not timely services as promised, and nurses do not explain the actions to be taken. In the responsiveness dimension, respondents feel that nurses are not ready and willing to serve patients, do not take action quickly, and do not follow procedures. In the dimension of assurance, respondents feel that medical personnel do not have a patient’s medical record. Respondents feel that nurses are not polite and unfriendly in the empathy dimension in serving patients.

Table 4 shows that of the 29 respondents who did not go to school/had not finished elementary school, all respondents were satisfied with the service, namely 29 respondents (100%). This is because, on the dimension of evidence, respondents feel that the inpatient room is neat, clean, and comfortable. In the reliability dimension, respondents feel that medical personnel provide careful, careful, and not timely services as promised. In the responsiveness dimension, respondents feel that nurses are willing to respond to respondents’ complaints and are not ready to serve patients. In the dimension of assurance, respondents feel that doctors have the ability and knowledge to establish a diagnosis of the disease quite well so that they can answer each patient’s questions convincingly. In the empathy dimension, respondents feel that nurses are polite and friendly in serving patients in their consultations.

After the statistical analysis contingency correlation test between the last education and respondent satisfaction was carried out, the value of Approx was obtained. Sig = 0.000 (< 0.1) with a value of (0.603), so it can be concluded that there is a strong relationship between recent education and patient satisfaction. The results showed that respondents who did not attend school were 100% satisfied with health services. (Table 4.) Compared to higher education levels, due to the lack of accessible information, they lack knowledge about health services. So, they tend only to accept the health services provided while respondents with higher education have much information so that their satisfaction level is lower because they access much information, have hope and great knowledge of services so that they can consider service quality and find it difficult to be satisfied (17).
This research is in line with the research of Hakim & Suryawati (2019) (18) at Kendal General Hospital on "The Relationship between BPJS Patient Characteristics and BPJS Participants' Patient Satisfaction with Inpatient Services at X General Hospital," which stated that educated people were dissatisfied with incomplete health equipment. The last education with respondent satisfaction obtained approx. sig = 0.000 (<0.05); meaning a significant relationship between the last education and service satisfaction at Kendal General Hospital. This research is not in line with the research of Prihartini et al (2020) (19) at the Indonesian Hospital on "Outpatient Satisfaction with Pharmaceutical Services in Hospitals and Health Centers in 11 Provinces in Indonesia," which stated that educated respondents were satisfied with visiting hours at the hospital. Approx obtained the last education with respondent satisfaction. Sig = 0.996 (> 0.05), meaning there is no significant relationship between recent education and service satisfaction at Indonesian Hospitals.

5. Conclusion

There is a strong relationship between age group, education and service satisfaction at Mokopido General Hospital, Baolan, Tolitoli Regency. Older respondents are more satisfied with the services received. Respondents who are not educated are more satisfied with the services received. The suggestions from the results of this study are in the empathy dimension; it is expected that doctors or nurses will be able to be polite, friendly, listen to complaints about the respondent’s illness, and provide a way out in the consultation so that respondents are satisfied with the services at Mokopido General Hospital, Tolitoli Regency.

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Conflicts of Interest: The authors declare no conflict of interest.

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