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Meta-Analysis
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# Determinants of Satisfaction among Inpatients

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## ABSTRACT

**Background:** Patient satisfaction is an outcome of health services that is very important for measuring the level of quality of health services provided by a hospital, thus patient satisfaction is effective in measuring the success of hospital services. This study aims to analyze the determinants that influence the level of satisfaction of inpatients in hospitals.
**Subjects and Method:** This research is a systematic review and meta-analysis based on data obtained through various databases including Google Scholar and PubMed. This study used articles that were published from 2014 to 2022. The article search was carried out by considering the eligibility criteria defined using the PICO model. Population: inpatients. Intervention: rural residence, free type of financing, duration of hospitalization ≥7 days, and surgical ward. Comparison: urban residence, type of independent financing, duration of hospitalization <7 days, and non-surgical ward. Outcome: patient satisfaction. This article was collected within 1 month with the following keywords used: "determinants" OR "factors" AND "satisfaction" AND "inpatients" OR "hospitalization" AND "cross sectional". The articles included in this research are full text articles with a cross-sectional study design. This article was collected using a PRISMA flow diagram and analyzed using the Review Manager 5.3 application.
**Results:** Meta-analysis of 13 articles using a cross-sectional research design from the country of Ethiopia with a total sample of 4,919 research subjects. The results of meta-analysis show that patient satisfaction increases in patients who live in rural areas (aOR= 1.29; 95% CI=0.79 to 2.31; p= 0.310), type of free payment (aOR= 1.40; 95% CI=0.76 to 2.57; p=0.280), duration of hospitalization ≥7 days significant (aOR= 0.74; 95% CI=0.45 to 1.24; p=0.250), and surgical ward (aOR= 1.51; 95%CI=1.01 to 2.25; p=0.040).
**Conclusion:** Increasing inpatient satisfaction is influenced by place of residence, type of payment, duration of hospitalization, and surgical ward.

**Keywords:** patient satisfaction, payment type, duration of hospitalization, inpatient

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## BACKGROUND

Patient satisfaction has long been known as the main measure of health quality in hospitals, in addition to observable health outcomes. Over the past 20 years, many developed countries have tried to incorporate patient breadth surveys as a quality improvement tool in the healthcare market (Hu et al., 2019)

Patient-centered health care is an important component of high-quality health care. As the treatment paradigm continues to change from a disease-centered approach to a patient-centered approach (Park et al., 2022). A health care institution needs to evaluate the services they offer to patients to provide added value when compared to their competitors. Health institutions must prioritize patient satisfaction in order to meet patient needs appropriately while providing effective and accurate services. Patient satisfaction is described as a complex combination of perceived needs, healthcare expectations and care experiences. The results of patient satisfaction after using health services can show perceptions that can create patient commitment, so that patients can choose the same health institution when they need services again (Darmus and Akbolat, 2020).

The level of patient satisfaction needs to be studied routinely to assess the quality of health services and is important for the smooth functioning of the health care system. The demographic and economic status of patients as well as their expectations of services and attitudes towards satisfaction levels are several dimensions identified as having a direct influ-ence on patient satisfac-tion levels (Asamrew et al., 2020). From this explanation, the aim of this research is to analyze the determinants that influence the level of satisfaction with health services in inpatients.

## SUBJECTS AND METHOD

### 1. Study Design

This research was conducted using systematic review and meta-analysis methods by referring to the PRISMA diagram. The researcher's search for article sources relied on online article searches. Data collection was obtained from two databases, namely Google Scholar and Pubmed. The keywords used to dance the article are “determinants” OR “factors” AND “satisfaction” AND “inpatients” OR “hospitali-zation” AND “cross sectional”. This research was analyzed with RevMan 5.3.

### 2. Steps of Meta-Analysis

Meta-analysis was carried out through the following steps:

a. Formulate PICO (Population, Intervention, Comparison, Outcome). P= inpatients. I= rural residence, free type of financing, duration of hospitalization ≥7 days, and surgical ward. C= urban residence, type of independent financing, duration of hospitalization <7 days, and non-surgical ward.
b. Search for articles in several databases including Google Scholar and Pubmed.
c. Conduct screening and critical appraisal of primary studies.
d. Extracting data and analyzing effect estimates from each primary study into the RevMan 5.3 application.
e. Interpret analysis results and draw research conclusions.

### 3. Study Variables

**Inclusion Criteria**

The inclusion criteria for the articles reviewed were full paper articles published from 2014 to 2023 and published in English, using a cross-sectional study design, research results tested multivariately and reported in Adjusted Odd Ratio (aOR) and research subjects were inpatients.

**Exclusion Criteria**

The exclusion criteria for this article are articles that are not in English, published before 2014. Using cohort, case-control studies and articles that describe bivariate analysis and then report the results only showing OR, percent and mean difference.

### 4. Operational Definition

Inpatients are patients who are admitted to hospital and require a bed and are required to stay overnight for medical support purposes.

This type of financing is the method used by patients to make administrative payments during hospitalization.

The duration of hospitalization is the length or time span required by the patient during the hospitalization.

The ward is a place where patients receive medical treatment during hospitalization which is classified according to the patient's needs..

**5. Study Instrument**

This research was conducted using PRISMA flow-chart guidelines and quality assessment in this study used the Critical Appraisal Skills Program (CASP).

**6. Data Analysis**

Data analysis in this study used the RevMan 5.3 application to calculate aOR. Forest plots and funnel plots were used to determine effect size and data heterogeneity.

## RESULTS

An initial article search from 2 databases yielded results from 6,776 to 13 articles.

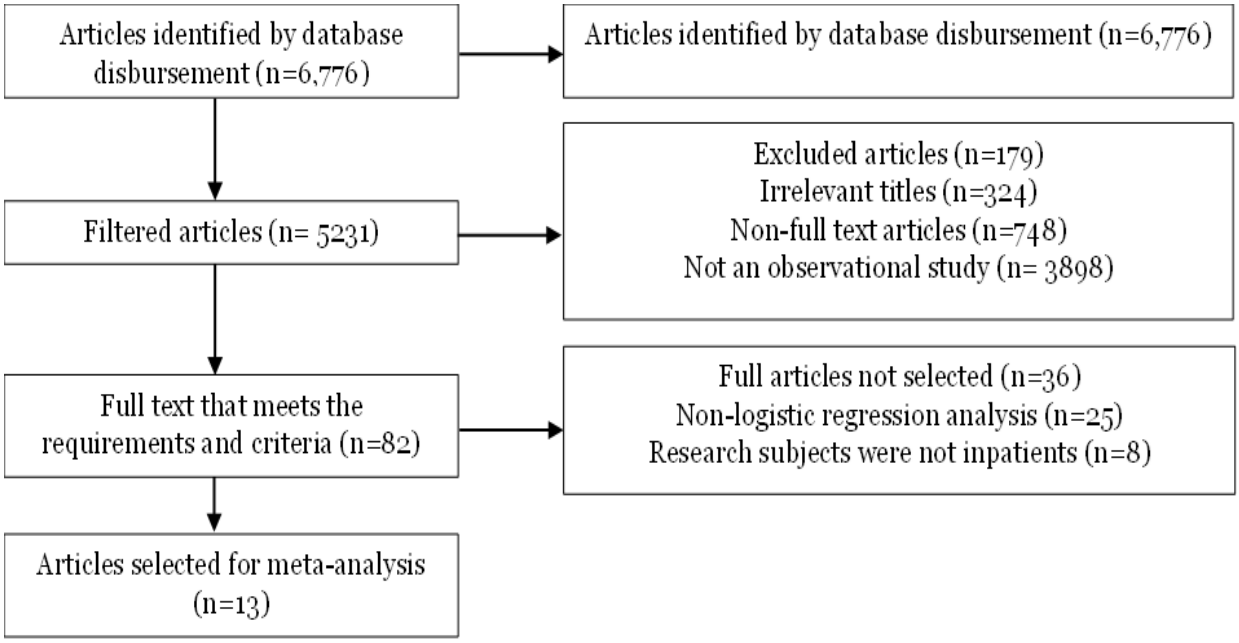


**Figure 1. PRISMA flow diagram**



**Figure 2. Research area of cross-sectional study of determinants that influence the level of satisfaction with health services in inpatients**

**Table 1. Critical appraisal of cross-sectional studies of determinants of the influence of inpatient satisfaction levels**

| Author (Year) | Appraisal Criteria | | | | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1a | 1b | 1c | 1d | 2a | 2b | 3a | 3b | 4 | 5 | 6a | 6b | 7 | |
| Adema et al. (2023) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Bogale et al. (2022) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Marama et al. (2017) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Mensa et al. (2017) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Negash et al. (2014) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Shewahdinad dan Sayih et al. (2018) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Teka et al. (2022) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Aga et al. (2021) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Alemu et al. (2020) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Bogale et al. (2022) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Wudu et al. (2021) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Ahmed (2014) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |
| Molla et al. (2014) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 26 |

**Description of question criteria:**

**1. Formulation of research questions in the acronym PICO**

a. Is the population in the primary study the same as the population in the PICO meta-analysis?

b. Is the operational definition of intervention, namely the exposed status in the primary study, the same as the definition intended in the meta-analysis?

c. Is the comparison, namely the unexposed status used in the primary study, the same as the definition intended in the meta-analysis?

d. Are the outcome variables examined in the primary studies the same as the definitions intended in the meta-analysis?

**2. Method for selecting research subjects**

a. In analytical cross-sectional studies, do researchers choose samples from the population randomly (random sampling)?

b. As an alternative, if in a cross-sectional analytical study the sample is not selected randomly, does the researcher select the sample based on outcome status or based on intervention status?

**3. Methods for measuring exposure (intervention) and outcome variables?**

a. Are the exposure and outcome variables measured with the same instruments (measuring tools) in all primary studies?

b. If the variable is measured on a categorical scale, are the cutoffs or categories used the same across primary studies?

**4. Design-related bias**

If the sample was not selected randomly, has the researcher made efforts to prevent bias in selecting research subjects? For example, selecting subjects based on outcome status is not affected by exposure status (intervention), or selecting subjects based on exposure status (intervention) is not affected by outcome status.

**5. Methods to control confounding**

Whether the primary study investigators have made efforts to control the influence of confounding (for example, conducting a multivariate analysis to control for the influence of a number of confounding factors).

**6. Statistical analysis methods**

a. Did the researcher analyze the data in this primary study with a multivariate analysis model (for example, multiple linear regression analysis, multiple logistic regression analysis).

b. Does the primary study report the effect size or association of the results of the multivariate analysis (adjusted OR).

**7. Conflict of Interest**

Is there no possibility of a conflict of interest with the research sponsor, which could cause bias in concluding the research results?

**Assessment Instructions:**

1. Total number of questions = 13 questions. Answer "Yes" to each question gives a score of "2". The answer "Undecided" gives a score of "1". The answer "No" gives a score of "0".
2. Maximum total score= 13 questions x 2= 26.
3. Minimum total score = 13 questions x 0 = 0. So the range of total scores for a primary study is between 0 and 26.

If the total score of a primary study is >= 22, then the study can be included in the meta-analysis. If the total score of a primary study.

**Table 3. Description of primary studies on the influence of place of residence on the level of satisfaction of inpatients**

| Author (year) | Country | Study design | Sample Size | P | I | C | O |
|---|---|---|---|---|---|---|---|
| Teka et al 2022 | Ethiopia | Cross-sectional | 423 | Inpatients were aged 18–64 years | Rural residence | Urban residence | Patient satisfaction |
| Marama et al 2018 | Ethiopia | Cross-sectional | 413 | Inpatients | Rural residence | Urban residence | Patient satisfaction |
| Negash et al 2014 | Ethiopia | Cross-sectional | 374 | Inpatients | Rural residence | Urban residence | Patient satisfaction |
| Mensa et al 2017 | Ethiopia | Cross-sectional | 323 | Inpatients | Rural residence | Urban residence | Patient satisfaction |
| Bogale et al 2022 | Ethiopia | Cross-sectional | 422 | Inpatients | Rural residence | Urban residence | Patient satisfaction |
| Adema et al 2023 | Ethiopia | Cross-sectional | 181 | Inpatients | Rural residence | Urban residence | Patient satisfaction |
| Shewasi-nad dan Sayih 2018 | Ethiopia | Cross-sectional | 300 | Inpatients | Rural residence | Rural residence | Patient satisfaction |

**Table 4. Adjusted Odd Ratio data on the influence of place of residence on the level of satisfaction of inpatients**

| Author (year) | aOR | 95% CI | |
|---|---|---|---|
| | | Lower limit | Upper limit |
| Teka et al 2022 | 2.16 | 1.28 | 3.63 |
| Marama et al 2017 | 2.39 | 1.16 | 4.92 |

| Author (year) | aOR | 95% CI | |
|---|---|---|---|
| | | Lower limit | Upper limit |
| Negash et al 2014 | 0.69 | 0.42 | 1.12 |
| Mensa et al 2017 | 1.13 | 1.13 | 2.03 |
| Bogale et al 2022 | 1.08 | 0.53 | 2.20 |
| Adema et al 2023 | 3.12 | 1.53 | 6.25 |
| Shewahdinad dan sayih 2018 | 0.53 | 0.31 | 0.90 |

### a. Forest plot

The forest plot in Figure 2 shows that place of residence influences the level of satisfaction of inpatients. Inpatients who live in rural areas are 1.29 times more satisfied with health services compared to patients who live in urban areas, but the statistical results are not significant (aOR= 1.29; CI95%=0.79 to 2.31; p=0.310). High heterogeneity of effect estimates between primary studies $I^2$=79%; p=0.001.

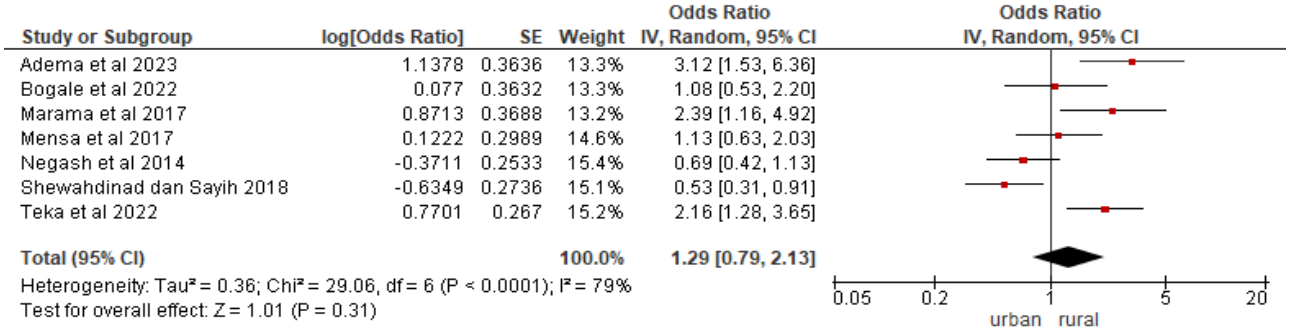


**Figure 3. Forest plot of the influence of place of residence on the level of satisfaction of inpatients**

### b. Funnel plot

The funnel results show that the distribution of data is more to the left of the vertical mean estimation line than to the right, which indicates there is publication bias. Because the publication bias tends to be to the left of the average vertical line which is in a different direction from the location of the diamond shape in the forest plot, the publication bias tends to reduce the effect of actual place of residence on the level of satisfaction of inpatients (underestimate).

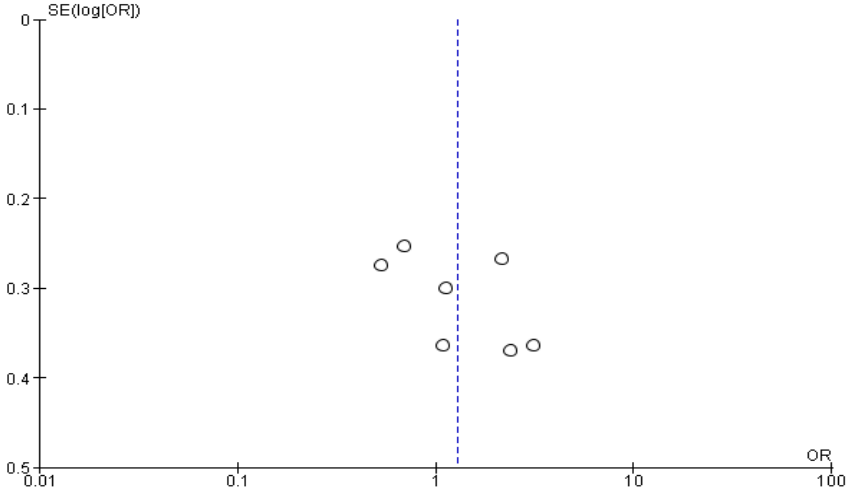


**Figure 4. Funnel plot of the influence of place of residence**

**on the level of satisfaction of inpatients**

**Table 5. Description of primary studies on the influence of payment type on inpatient satisfaction levels**

| Author (year) | Country | Study design | Sampel Size | P | I | C | O |
|---|---|---|---|---|---|---|---|
| Negash et al 2014 | Ethiopia | Cross-sectional | 374 | Inpatients | Free | Pay | Patient satisfaction |
| Alemu et al 2020 | Ethiopia | Cross-sectional | 407 | Inpatients | Free | Pay | Patient satisfaction |
| Bogale et al | Ethiopia | Cross-sectional | 422 | Inpatients aged >18 years | Free | Pay | Patient satisfaction |
| Shewahsinad dan sayih 2018 | Ethiopia | Cross-sectional | 300 | Inpatients | Free | Pay | Patient satisfaction |
| Wudu et al 2021 | Ethiopia | Cross-sectional | 244 | Inpatients | Free | Pay | Patient satisfaction |
| Aga et al 2021 | Ethiopia | Cross-sectional | 334 | Inpatients | Free | Pay | Patient satisfaction |

**Table 6. Adjusted Odd Ratio data on the influence of place of residence on the level of satisfaction of inpatients**

| Author (year) | aOR | CI 95% | |
|---|---|---|---|
| | | Lower limit | Upper limit |
| Negash et al., 2014 | 2.10 | 1.27 | 3.48 |
| Alemu et al., 2020 | 1.37 | 0.76 | 2.47 |
| Bogale et al., 2022 | 6.65 | 2.68 | 16.51 |
| Shewahdinad dan sayih, 2018 | 1.13 | 0.60 | 2.12 |
| Wudu et al., 2021 | 0.47 | 0.14 | 1.56 |
| Aga et al., 2021 | 0.63 | 0.33 | 1.20 |

### a. Forest plot

The forest plot in Figure 4 shows that the type of payment influences the level of satisfaction of inpatients. Inpatients with free payment types were 1.29 times more satisfied with health services compared to patients with inpatients who paid, but the statistical results were not significant (aOR= 1.40; 95% CI=0.76 to 2.57; p=0.280). High heterogeneity of effect estimates between primary studies I2=78%; p<0.001.

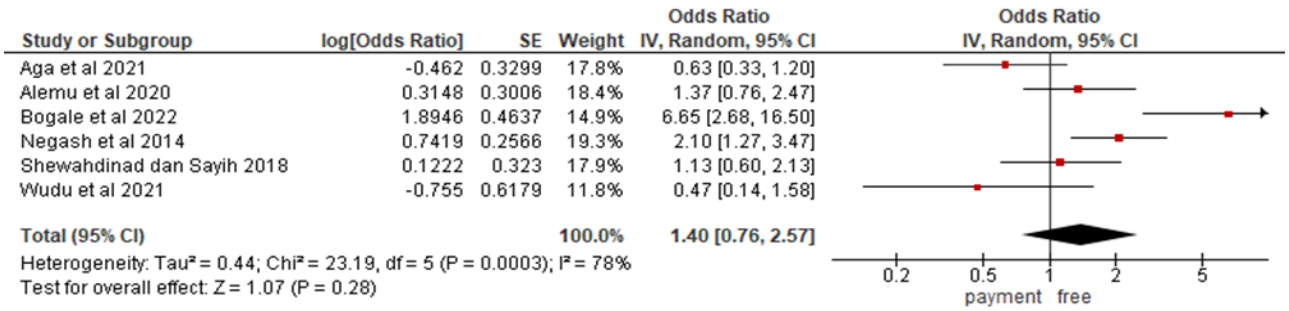


**Figure 5. Forest plot of the effect of payment type on the level of satisfaction of inpatients**

### b. Funnel plot

The funnel results show that the distribution of effect estimates is more or less asymmetric between studies to the right and left of the vertical mean estimate line. Funnel plot shows there is publication bias in the meta-analysis. Because the publication bias tends to be to the left of the average vertical line which is in a different direction from the location of the diamond shape in the forest plot, the publication bias tends to reduce the effect of the actual type of payment on the level of inpatient satisfaction (underestimate).

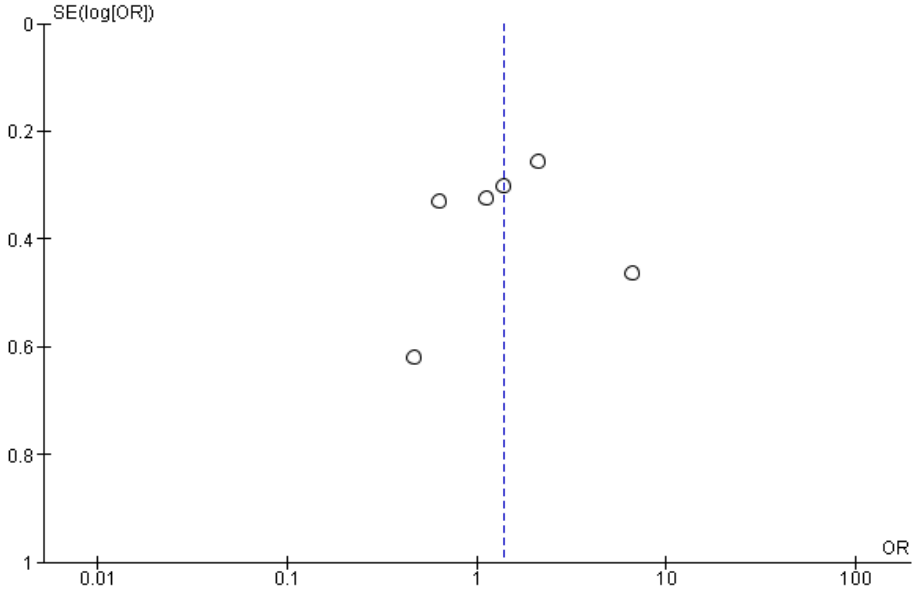


**Figure 6. Funnel plot of the effect of payment type on the level of satisfaction of inpatients**

**Table 7. Description of primary studies on the effect of length of stay on the level of satisfaction of inpatients**

| Author (year) | Country | Study design | Sampel Size | P | I | C | O |
|---|---|---|---|---|---|---|---|
| Teka et al 2022 | Ethiopia | Cross-sectional | 432 | Inpatients were aged 18–64 years | Duration of hospitalization ≥7 days | Duration of hospitalization <7 days | Patient satisfaction |
| Marama et al 2018 | Ethiopia | Cross-sectional | 413 | Inpatients | Duration of hospitalization ≥7 days | Duration of hospitalization <7 days | Patient satisfaction |
| Mensa et al 2017 | Ethiopia | Cross-sectional | 323 | Inpatients aged 25-34 years | Duration of hospitalization ≥7 days | Duration of hospitalization <7 days | Patient satisfaction |
| Adema et al 2023 | Ethiopia | Cross-sectional | 181 | Inpatients | Duration of hospitalization ≥7 days | Duration of hospitalization <7 days | Patient satisfaction |
| Shewasinad dan Sayih 2018 | Ethiopia | Cross-sectional | 300 | Inpatients | Duration of hospitalization ≥7 days | Duration of hospitalization <7 days | Patient satisfaction |

| Author (year) | Country | Study design | Sampel Size | P | I | C | O |
|---|---|---|---|---|---|---|---|
| Molla et al 2014 | Ethiopia | Cross-sectional | 374 | Inpatients | Duration of hospitalization ≥7 days | Duration of inpatient treatment <7 days | Patient satisfaction |
| Ahmed et al 2014 | Ethiopia | Cross-sectional | 528 | Inpatients | Duration of hospitalization ≥7 days | Duration of hospitalization <7 days | Duration of hospitalization <7 days |

**Table 8. Adjusted Odd Ratio data for duration of hospitalization on the level of satisfaction of inpatients**

| Author (year) | aOR | CI 95% | |
|---|---|---|---|
| | | Lower limit | Upper limit |
| Teka et al. 2022 | 0.94 | 0.57 | 16.6 |
| Marama et al. 2018 | 0.64 | 0.30 | 1.34 |
| Mensa et al. 2017 | 0.67 | 0.19 | 2.38 |
| Adema et al. 2023 | 2.10 | 1.01 | 4.27 |
| Shewahdinad and sayih, 2018 | 2.03 | 0.04 | 1.67 |
| Molla et al. 2014 | 0.27 | 0.08 | 0.82 |
| Ahmed et al. 2014 | 0.45 | 0.26 | 2.47 |

### a. Forest plot

The forest plot in Figure 6 shows that the duration of hospitalization influences the level of satisfaction of inpatients. Patients with a hospitalization duration of ≥7 days were 0.74 times more satisfied with health services compared to patients with a hospitalization duration of <7 days, but the statistical results were not significant (aOR= 0.74; 95% CI=0.45 to 1.24; p=0.250). High heterogeneity of effect estimates between primary studies I2=60%; p=0.020.

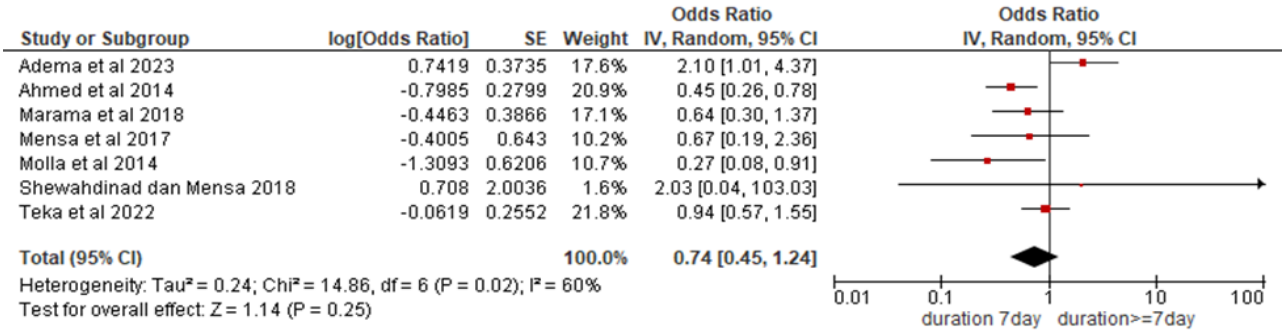


**Figure 7. Forest plot of the effect of duration of hospitalization on the level of satisfaction of inpatients**

### b. Funnel plot

The funnel plot results show that the distribution of effect estimates is more or less symmetrical between studies to the right and left of the vertical mean estimate line. The funnel plot did not show publication bias in the meta-analysis. The distribution of effect estimates tends to be located to the right of the average vertical line, which is opposite to the location of the average effect estimate

(diamond) which is located to the left, so publication bias tends to reduce the effect of the actual duration of hospitalization on the level of satisfaction of inpatients (under-estimate).

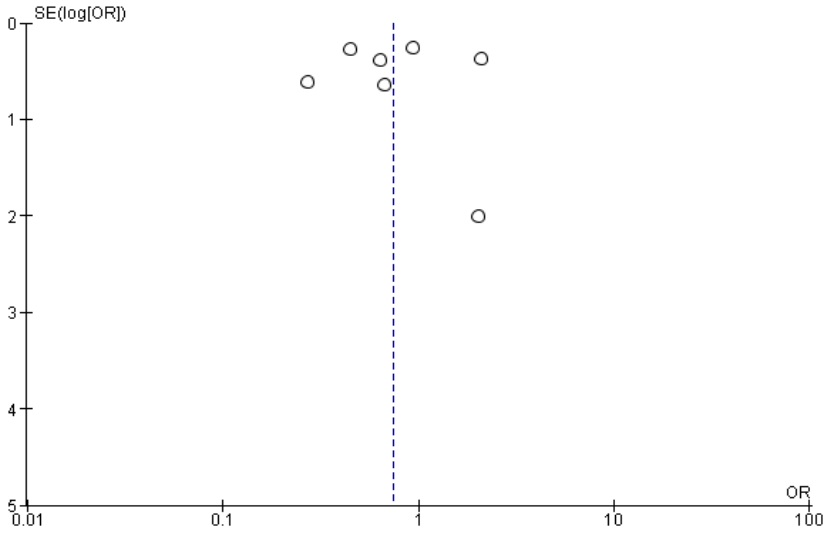


**Figure 8. Funnel plot of the effect of duration of hospitalization on the level of satisfaction of inpatients**

**Table 9. Description of primary studies on the influence of surgical wards on the level of satisfaction of inpatients**

| Author (year) | Country | Study design | Sample Size | P | I | C | O |
|---|---|---|---|---|---|---|---|
| Negash et al 2014 | Ethiopia | Cross-sectional | 374 | Inpatients | Surgical ward | Medical ward | Patient satisfaction |
| Mensa et al 2017 | Ethiopia | Cross-sectional | 323 | Inpatients aged 25-34 years | Surgical ward | Medical ward | Patient satisfaction |
| Alemu et al 2020 | Ethiopia | Cross-sectional | 407 | Inpatients | Surgical ward | Medical ward | Patient satisfaction |
| Bogale et al 2022 | Ethiopia | Cross-sectional | 422 | Inpatients aged >18 years | Surgical ward | Medical ward | Patient satisfaction |
| Molla et al 2014 | Ethiopia | Cross-sectional | 374 | Inpatients | Surgical ward | Medical ward | Patient satisfaction |
| Aga et al 2021 | Ethiopia | Cross - sectional | 334 | Inpatients | Surgical ward | Medical ward | Patient satisfaction |
| Kasa and Gedamu 2019 | Ethiopia | Cross sectional | 563 | Inpatients | Surgical ward | Medical ward | Patient satisfaction |

**Table 8. Adjusted Odd Ratio data for surgical wards care service on the level of satisfaction of inpatients**

| Author (year) | aOR | 95% CI | |
|---|---|---|---|
| | | Lower limit | Upper limit |
| Negash et al., 2014 | 0.75 | 0.42 | 1.33 |
| Mensa et al., 2017 | 0.74 | 0.30 | 1.81 |
| Alemu et al., 2020 | 2.18 | 1.28 | 2.73 |

| | | | |
|---|---|---|---|
| Bogale et al., 2022 | 0.85 | 0.22 | 3.27 |
| Molla et al., 2014 | 2.85 | 1.20 | 6.67 |
| Aga et al., 2021 | 2.60 | 1.34 | 5.03 |
| Kasa and Gedamu 2019 | 1.60 | 1.10 | 2.51 |

### a. Forest plot

The forest plot in Figure 8 shows that the surgical ward influences the level of satisfaction of inpatients. Patients treated in surgical wards were 1.51 times more satisfied with health services compared to patients treated in non-surgical wards, with statistically significant results (aOR= 1.51; 95% CI=1.01 to 2.25; p=0.040). High heterogeneity of effect estimates between primary studies $I^2$= 62%; p=0.010.

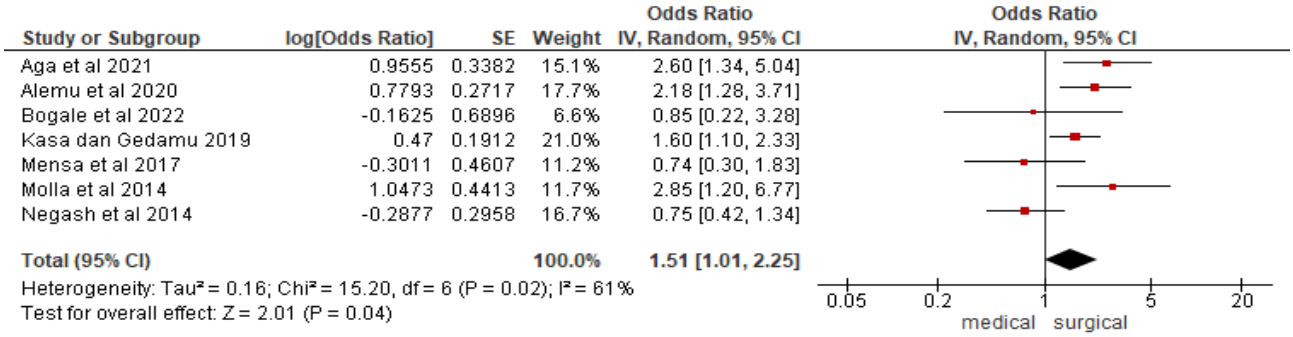


**Figure 9. Forest plot of the influence of the ward care service on the level of satisfaction of inpatients**

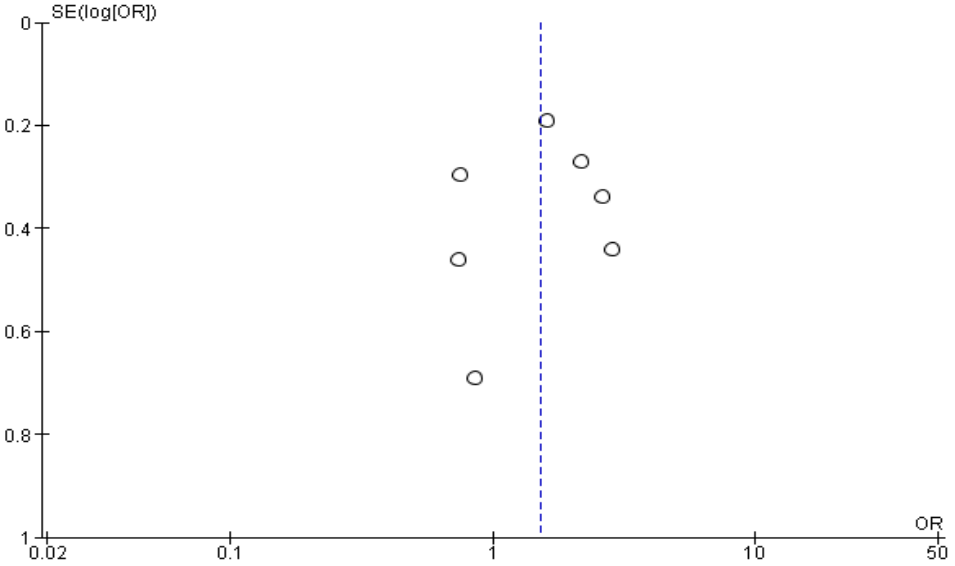


**Figure 10. Funnel plot of the influence of the surgical ward care service on the level of satisfaction of inpatients**

### b. Funnel plot

The funnel plot results show that the distribution of effect estimates is more or less symmetrical between studies to the right and left of the vertical mean estimate line. The funnel plot did not show publication bias in the meta-analysis. The distribution of effect estimates tends to be located to the left of the average vertical line, which is opposite to the location of the average effect estimate (diamond) which is located to the right, so publication bias tends to reduce the actual

ward effect on the level of satisfaction of inpatients (underestimate).

## DISCUSSION

**1. The influence of place of residence on the level of satisfaction of inpatients**

Inpatients who live in rural areas are 1.29 times more satisfied with health services compared to patients who live in urban areas, but the statistical results are not significant. The results of this study are in line with Shin and Choi (2023) that inpatients tend to give higher satisfaction ratings for health services than patients who live in urban areas.

This shows that the development of health services in urban and rural areas is unequal because health services in urban areas are experiencing more development and progress (Lee et al., 2016)

**2. The effect of payment type on the level of satisfaction of inpatients**

Inpatients with free payment types were 1.29 times more satisfied with health services compared to patients with inpatients who paid, but the statistical results were not significant. The results of this study are in line with research by Shan et al. (2018) that patients with more health insurance have higher levels of satisfaction.

Patients who do not have any insurance but receive the same services, procedures and treatment as patients who use insurance tend to be less satisfied with health services (Akbar et al., 2018).

**3. The effect of the duration of hospitalization on the level of satisfaction of inpatients**

Patients with a hospitalization duration of ≥7 days were 0.74 times more satisfied with health services compared to patients with a hospitalization duration of <7 days, but the statistical results were not significant. This is in line with research by Diwan et al, (2020) which states that the length of stay will affect patient satisfaction and even the possibility of patients to recommend the hospital to others.

Wulandari et al. (2021) also showed insignificant results between the length of stay and the quality of health services in public hospitals in Indonesia. This is caused by various factors that influence patient satisfaction or the performance of nursing staff.

**4. The influence of the ward care service on the level of inpatients satisfaction**

Patients treated in surgical wards were 1.51 times more satisfied with health services compared to patients treated in non-surgical wards, with statistically significant results. Surgery plays an important role in surgical treatment, and can cause associated complications and even lead to death. Therefore, surgical wards further improve the quality of health services (Shang et al., 2021)

Kibru et al, (2022) found that the overall level of patient satisfaction with post-operative care in the surgical ward was 96.2%. The results are close to the satisfaction levels found in some studies of greater than 90% but are higher when compared with most studies conducted in Ethiopia and worldwide.

## AUTHOR CONTRIBUTION

Deviana Tristian is the main researcher who selected topics, searched and collected articles, analyzed data, and wrote the manuscript. Alfan Muhajir helped select topics, write and analyze data. Sri Rahayu Susilowati assisted with the writing. Bhisma Murti and Rizki Aqsyari D who helped analyze data and review documents.

## CONFLICT OF INTEREST

There is no conflict of interest in this research.

## FUNDING AND SPONSORSHIP

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## REFERENCE

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