



## Meta-Analysis: The Relationship of Age and Therapeutic Communication with Patient Satisfaction in Health Care Facilities

Widia Ayu Santoso <sup>a\*</sup>, Mohamad Isa <sup>b</sup>, Syamsul Arifin <sup>b</sup>, Eko Suhartono <sup>b</sup>, Rosihan Adhani <sup>c</sup>

<sup>a</sup>Master of Public Health Science Study Program, Faculty of Medicine, Lambung Mangkurat University, Indonesia

<sup>b</sup>Faculty of Medicine, Lambung Mangkurat University, Indonesia

<sup>c</sup>Faculty of Dentistry, Lambung Mangkurat University, Indonesia

\*Email: [widya120797@gmail.com](mailto:widya120797@gmail.com)

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### ABSTRACT

Customer satisfaction is a feeling that arises in a customer, whether it is a feeling of pleasure or disappointment after the customer compares the results of the desired product or service with the results obtained. Patient characteristics are age, education, occupation, ethnicity, socio-economics, and disease diagnosis. Many factors affect patient satisfaction, among others, namely: product characteristics, price, service, location, facilities, image, hospital visual design, atmosphere, and communication. The purpose of this paper is to conduct a literature review explaining the relationship between age and therapeutic communication with patient satisfaction in health care facilities. There are 20 research articles related to the relationship of age and therapeutic communication with patient satisfaction in health care facilities obtained from collection through Google Scholar, Garuda Portal, and Research Gate. The type of research used is meta-analysis. It was found that there was an OR value for age with patient satisfaction of 1.88 and on therapeutic communication with patient satisfaction of 6.48. There is a significant relationship between age and therapeutic communication with patient satisfaction in health care facilities in selected journals with a combined effect size value at the age of 1.88; (95% CI: 1.44-2.50, Z=4.34, p<0.0001); and 6.48 on therapeutic communication; (95% CI: .95-10.62, Z=7.41, p<0.00001).

Keywords: age, therapeutic communication, patient satisfaction

### 1. INTRODUCTION

Customer satisfaction is a feeling that arises in a customer, whether it is a feeling of pleasure or disappointment after the customer compares the results of the desired product or service with the results obtained. The level of satisfaction of a customer will influence customer interest in reusing the same services provided by health services (Kotler, 2014). According to Wilkie in Tjiptono (2015), customer satisfaction is an emotional response to evaluating the consumption experience of a product or service.

Customer satisfaction in the health sector can be measured by satisfaction with health services, quality health services, namely those that meet the needs and desires of patients so that patients are satisfied with the services provided by hospitals by providing excellent service. Through excellent service, hospitals are expected to produce a competitive advantage with quality and efficient services (Nofiana and Sugiarsi, 2011). Patient satisfaction has long been recognized as an important component of human-centered care and an important indicator for assessing the quality of care. Several factors can affect patient satisfaction with health care services, especially patient sociodemographic characteristics, patient-provider communication, waiting time, infrastructure characteristics, and accreditation (Hemadep, 2019).

In theory, Gunarsa (1995) in Suharmiati (2007) reveals that the patient's characteristics are age, education, occupation, ethnicity, socio-economics, and disease diagnosis. Age factor is the most common factor in patient characteristics. A person's age can affect his health, where there is a decline in the structure and function of organs so that older people tend to use health services more than young people. As in elderly patients, who experience musculoskeletal disorders, will experience decreased function in bone healing, which can result in long limitations to increase dependence on others. Then, because emotions influence it, some older people with chronic diseases accept the state of physical limitations more quickly than younger people. This is because older people are generally more open so that elderly patients have lower demands and expectations than younger patients. This is what causes elderly patients to be more satisfied than younger patients.

According to Moison, Walter, and White in Lestari (2016) said many factors that affect patient satisfaction include: product characteristics, price, service, location, facilities, image, hospital visual design, atmosphere, and communication. The strategy in increasing patient satisfaction is to provide friendly service, timely delivery that patients easily understand, focus on achieving patient satisfaction, which means that the services provided meet patient expectations, and provide security guarantees for the services provided so that patients believe in the services provided. Communication is an important thing in service. Therapeutic communication is communication that is consciously planned, aims, its activities are focused on patient recovery. Nurses

who have communication skills will easily establish a trusting relationship with patients, prevent illegal problems, provide professional satisfaction in nursing services, and improve the image of the nursing profession and the image of the hospital (Afnuhazi, 2014).

Therapeutic communication is interpersonal communication between nurses and clients that is carried out consciously when nurses and clients gain mutual experience that aims to help overcome client problems and improve the client's emotional experience, ultimately achieving client recovery. The influencing factors are as follows; specification of communication goals, comfortable environment, privacy, self-confidence, client-focused, optimal stimulus, and maintaining optimal distance (Anjarwarni, 2016).

Several studies say that there is a relationship between age and therapeutic communication with patient satisfaction. According to Marcelina's research (2018), age and patient satisfaction ( $p=0.013$ ;  $OR=4.1$ ), Alvisa's research (2017) says that there is a significant relationship between age and patient satisfaction. patient satisfaction ( $p=0.000$ ;  $OR=0.9$ ). According to research by Vanda (2017), there is a relationship between nurse therapeutic communication techniques and patient satisfaction ( $p=0.000$ ;  $OR=43$ ), then Hizkia's research (2019) found that there is a relationship between communication and patient satisfaction ( $p=0.003$ ;  $OR=3.4$ ).

From the study results, it is known that age is related to patient satisfaction. Several studies say that age has a relationship with patient satisfaction. But on the other hand, there is an evidence gap that several studies have different odds ratios. According to Marcelina (2018), there is an OR value=4.1, meaning age is 4.1 times associated with patient satisfaction. According to Alvisa (2017), there is an OR value=0.9, meaning age is 0.9 times associated with patient satisfaction. Then according to Vanda (2017), there is an  $OR=43$ , meaning that therapeutic communication is 43 times related to patient satisfaction. According to Hizkia (2019), there is an  $OR=3.4$  value, meaning that therapeutic communication is 3.4 times associated with patient satisfaction. Therefore, a combined research result is needed to determine a greater relationship between age and therapeutic communication with patient satisfaction.

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## 2. METHOD

This study uses a meta-analysis study. This research protocol uses the concept of Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA). Data search refers to databases such as Wiley, Google Scholar, PubMed, Directory of Open Access Journals (DOAJ) adjusted to the research title. The quality or feasibility assessment is based on data (research articles) by meeting predetermined inclusion criteria, namely the type of study is quantitative, the study design is cross-sectional, the type of journal used is an original research article, the article to be analyzed consists of international journals and national journals, reputable international journals (indexed by Scopus and/or Web of Science), accredited national journals (indexed by Sinta 1 to Sinta 4), recent articles (5 - 10 years earlier), research articles with full text (full text) and value Odds Ratio (OR) and the maximum-minimum value. The statistical test used is Effect Measure Odds Ratio using a statistical application, namely Review Manager (RevMan).

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## 3. RESULT

Based on the research protocol that had been made previously using the concept of Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA), the first step was to search for data or articles from sources such as Google Scholar, PubMed, Directory of Open Access Journals (DOAJ). After searching for data or articles, screening and assessment of the quality (feasibility) of the data or articles that have been obtained related to duplicate or similar articles, not journals, cannot be downloaded and does not meet the inclusion criteria with each variable. So that data or articles that meet the requirements for meta-analysis are obtained for articles of age and with patient satisfaction in health care facilities totaling 10 articles and therapeutic communication with patient satisfaction in health care facilities totaling 10 articles. The articles that meet these requirements are then carried out a meta-analysis using the Statistical Review Manager (RevMan) 5.4 application as follows:

### 3.1 Age with patient satisfaction in health care facilities

The results of statistical tests using the Review Manager (RevMan) 5.4 application on 10 articles that meet the inclusion criteria for the age variable with patient satisfaction in health care facilities can be seen in Figure 1 below:

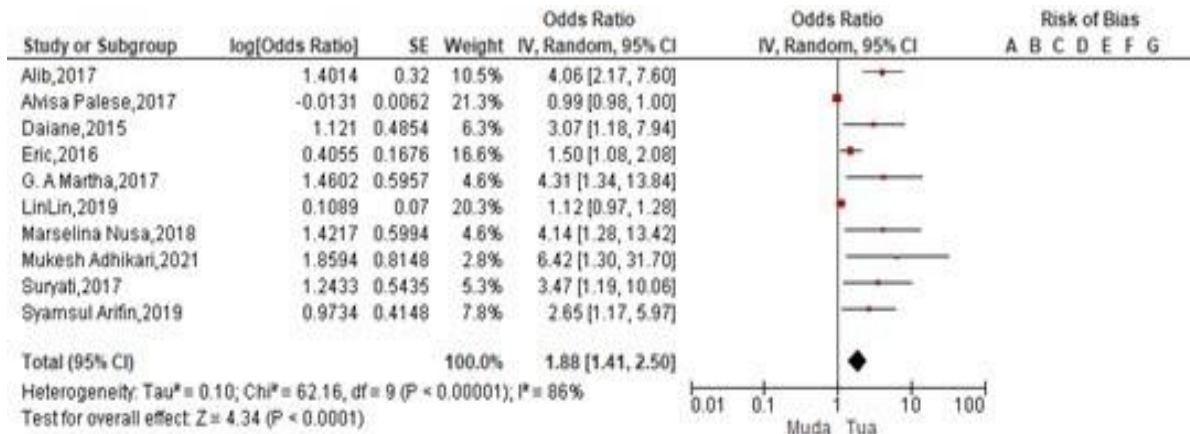


Fig. 1 Statistical test results for age variable with patient satisfaction

Based on Figure 1 above, with a 95% confidence level, it can be concluded that there is a significant relationship between age and patient satisfaction in health care facilities, with a tendency for young patients to be 1.28 times dissatisfied compared to older patients in utilizing health care facilities

3.2 Therapeutic communication with patient satisfaction in health care facilities

The results of statistical tests using the Review Manager (RevMan) 5.3 application on 10 articles that meet the inclusion criteria for the therapeutic communication variable with patient satisfaction can be seen in Figure 2 below:

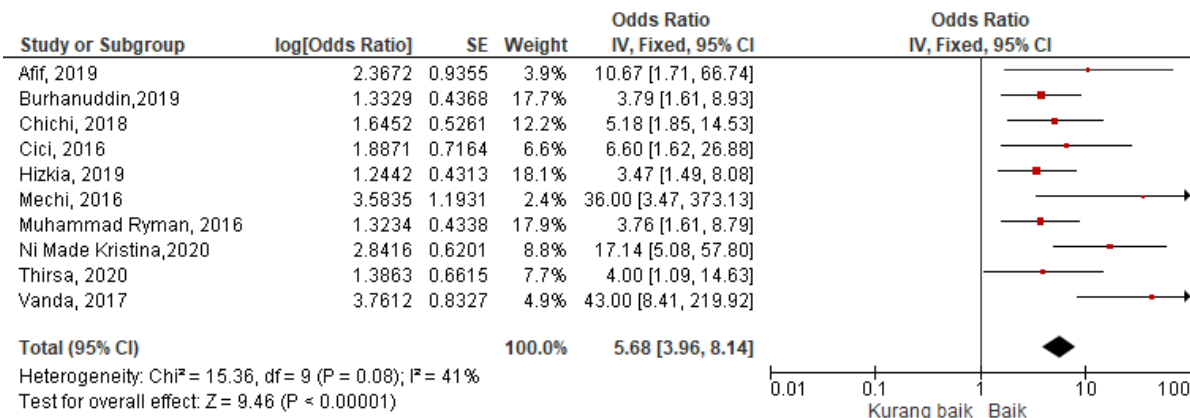


Fig. 2 Statistical test results for the therapeutic communication variable with patient satisfaction

Based on Figure 2 above with a 95% confidence level, it can be concluded that there is a significant relationship between therapeutic communication and patient satisfaction in health care facilities with a tendency for patients who receive poor therapeutic communication 3.53 times to feel dissatisfied compared to patients who get good therapeutic communication in utilizing health care facilities.

4. DISCUSSION

4.1 Age and therapeutic communication with patient satisfaction

The quality of the data on the relationship between age and patient satisfaction with a sample of relevant journal searches (n = 10) can be seen from the heterogeneity (p < 0.000001) under p < 0.05 and the value of I<sup>2</sup> = 86% so that the Random Effect Model is used. This Random Effect Model results assume that the 10 journals come from different populations from around the world, namely from Indonesia, Nepal, China, Southern Brazil, Malaysia, and the United States. In the forest plot there is an effect size of each study with a certain confidence interval from the 10 studies resulting in a p-value = 0.0001 < 0.05 and the combined effect size of the OR on the relationship between age and patient satisfaction in health care facilities of 1.88 with a wide confidence interval (95%CI) lower limit 1.44-2.50. This means that there is a significant relationship between age and patient satisfaction in health care facilities with a tendency for young patients to be 1.28 times more dissatisfied than older patients in utilizing health care facilities, seeing the magnitude of the combined effect of the 10 journals, publication bias is also necessary. seen from the results of the funnel plot. Visually, it can be seen that the distribution of Funnel plots shows that there is a publication bias marked by the asymmetry of the plots on the right and left of the vertical line where the distance between the plots is not the same. The SE (Standard Error) values on the left are 0.3 and 0.4 and the SE values on the right are 0.5 and 0.8. This means that there is publication bias in the sample. This is because satisfaction is influenced by age and can also be influenced by other individual

characteristics, gender, social status, and education. Related to age, it is explained that the older one gets, the lower one's expectation level, so that they feel satisfied faster (Gunarsa and Gunarsa, 2007).

This is in accordance with the research of Marselina Nusa (2018) that elderly patients are more satisfied than younger patients because older people often and more often ask health workers about their health conditions, in contrast to people who are more careful to ask health workers. According to Situmpol (2012), young people are more sensitive and open to conditions in the field and are more daring to express their dissatisfaction, while the older ones tend just to accept the services they get.

Alib Birwin's research (2017) says that age is one of the internal factors influencing patient satisfaction. Patients at a young age will be more likely to demand many things in the context of service excellence compared to old age. This is because emotionally in old age will generally be more open so that elderly patients have lower demands and expectations than younger patients. This is what causes elderly patients to be more satisfied than younger patients (Azwar, 2010).

Research by Syamsul Arifin (2019) says that people have greater demands and expectations at a younger age/young age than old age. Young people, in general, are more aggressive in seeking information which can eventually make them better the services they get at the community health center with one another.

The quality of the data on the relationship between therapeutic communication and patient satisfaction with a sample of relevant journal search results ( $n = 10$ ) can be seen from the heterogeneity ( $p = 0.08$ ) below  $p > 0.05$  and the value of  $I^2 = 41\%$  so that the Fixed Effect Model is used. This Fixed Effect Model results assume that the 10 journals come from different populations from various cities in Indonesia. There is an effect size of each study in the forest plot with a certain confidence interval from the 10 studies resulting in a  $p$ -value =  $< 0.00001$  and a combined effect size of the OR on the relationship of therapeutic communication with patient satisfaction in health care facilities is 5.68 with a confidence interval (95% CI) lower limit of 3.96-8.14. This means that there is a significant relationship between therapeutic communication and patient satisfaction in health care facilities with a tendency for patients who get poor therapeutic communication 3.53 times to feel dissatisfied compared to patients who get good therapeutic communication in utilizing health care facilities, seeing the magnitude of the combined effect of 10 journal, publication bias also needs to be seen from the results of the funnel plot. Visually, it can be seen that the distribution of Funnel plots shows that there is a publication bias marked by the asymmetry of the plots on the right and left of the vertical line where the distance between plots is not the same. The SE (Standard Error) value on the left is 0.4 and 0.7, and the SE value on the right is 0.8 and 1.1. This means that there is publication bias in the sample. This is because communication is not just a tool to talk to clients, but communication between nurses and nurses and nurses with patients has a therapeutic relationship that aims to heal clients. Nurses who have therapeutic communication skills will not only be able to build trusting relationships with clients easily, but can also prevent legal and ethical problems, and can provide professional satisfaction in nursing services, improve the image of the nursing profession and the image of hospitals in providing services (Potter, 2014).

Chichi's research (2018) concludes that by implementing good therapeutic communication, the patient feels comfortable and appreciated to lead to a sense of satisfaction in the patient. One of the factors that affect satisfaction in the service or provision of nursing care is the communication of procedures for delivering information provided by the service provider and responding to complaints from patients and how patient complaints are quickly accepted by service providers, especially nurses in responding to patient complaints (Priyanto A, 2012).

Vanda's research (2017) found that communication is a means of fostering relationships between nurses and patients, and can affect patient satisfaction with the health services provided.

Burhanuddin's research (2017) shows that nurse therapeutic communication greatly affects patient health during treatment because patients feel well-served if the health services they receive are in line with expectations. The dissatisfaction that the patient feels is caused by the patient's inability or wrong interpretation of verbal or non-verbal messages conveyed by nurses, or also the inaccuracy of time used by nurses in providing nursing actions or information to patients, so that the process of exchanging information become less effective and the risk of misinterpretation is higher. This will have an impact on patient dissatisfaction with the services provided by nurses. However, most of the patients said that the services provided by nurses were not so good to patients, resulting in patient dissatisfaction with the services provided.

#### ***4.2 Effect size of the relationship between age and therapeutic communication with patient satisfaction in health care facilities***

Based on the results above, it can be seen that therapeutic communication tends to have a greater relationship value (OR = 5.68; 95% CI = 3.96-8.14) with patient satisfaction compared to patient age (OR = 1.88; 95% CI = 1.44-2.50). This is because nurses who have good therapeutic communication skills will easily communicate with patients. Therapeutic communication can form a trusting relationship, foster empathy and caring for patients, prevent problems from occurring (Sarfika and Maisa, 2018). Effective verbal communication should manage time because time is very important to capture the message when communicating. Otherwise, the timing can hinder the recipient of the message accurately. Therefore, health workers must be sensitive to time to communicate. Likewise, verbal communication will be meaningful if the message conveyed is related to the interests and needs of the patient (Nurhasanah, 2010).

Based on these results, it is known that therapeutic communication is indeed the greatest relationship with the patient's papacy because in fostering relationships with patients, therapeutic communication becomes a must to be understood and implemented by nurses when carrying out an act of professionalism of a nurse will be realized with the ability to communicate cognitive aspects, affective and psychomotor into a single unit to meet the needs of the patient. Considering that communication is the easiest first approach for service providers to take. This should not be ruled out because a

perception will be created from within the patient from this communication. While the good and bad of perception will also have an impact on patient satisfaction.

## 5. CONCLUSION

There is an OR value for age with patient satisfaction of 1.88 and in therapeutic communication with patient satisfaction of 5.68. There is a significant relationship between age and therapeutic communication with patient satisfaction in health care facilities in selected journals with a combined effect size value of 1.88; (95% CI: 1.44-2.50,  $Z=4.34$ ,  $p<0.0001$ ); and on therapeutic communication by 5.68; (95% CI: 3.96-8.14,  $Z=9.46$ ,  $p<0.00001$ ).

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