



THE RELATIONSHIP BETWEEN BLOOD GLUCOSE LEVELS AND SLEEP QUALITY IN PATIENTS WITH DIABETES MELLITUS

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ABSTRACT

IGD patients' dissatisfaction can occur if the service received does not meet patients' expectations. Communication style and response time from medical and non-medical personnel are factors that can affect patients' satisfaction. Objective: The objectives of this study are: 1) to determine the response time carried out by all officers in the Emergency Installation (IGD) at the Tugu Koja Regional General Hospital (RSUD) North Jakarta. 2) to determine the classification of response time of all officers in the Emergency Installation (IGD) at the RSUD Tugu Koja North Jakarta. 3) to find out the correlation of response time and patients' satisfaction level in IGD at RSUD Tugu Koja North Jakarta. 4) to find out the communication style or method of all officers in IGD at RSUD North Jakarta. 5) to find out the correlation of the communication style of all officers in IGD and patients' satisfaction level at RSUD Tugu Koja North Jakarta. Method: The subjects for this research are 175 IGD patients at RSUD Tugu Koja, North Jakarta. The sampling technique used is simple random sampling. The data collection method used is a questionnaire method aimed at IGD patients and medical and non-medical personnel. The validity test shows that all questionnaire items (Statements 1–4) have a sig. (2-tailed) value < 0.05, confirming their validity. The reliability test yields a Cronbach's Alpha of 1.000, indicating excellent consistency. The data analysis technique used is Rank Spearman correlation. Results; Based on the results of the Spearman Rank test, it is found that there is a correlation between Response Time (X1) and Patients' Satisfaction Level (Y). This is known from the sig. (2- tailed) value of 0.000 less than 0.05. However, Communication Style (X2) has no correlation with Patients' Satisfaction Level (Y). This is known from the sig. (2-tailed) value of 0.222 which is more than 0.005. Conclusion: The study concludes that Response Time (X1) is significantly correlated with Patients' Satisfaction Level (Y), while Communication Style (X2) is not.

Keywords: communication style; response time; patients' satisfaction

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INTRODUCTION

One of the government's responsibilities is to ensure the availability of high-quality, equitable, and affordable healthcare services for the public. The provision of healthcare services is not solely in the hands of the government but also involves active participation from all members of society and various private sector entities in the healthcare field. Hospitals play a crucial role in contributing to the provision of healthcare services, particularly in efforts to accelerate improvements in the overall health of the Indonesian population (Kruk et al., 2018). Hospitals are considered essential institutions for assessing patient satisfaction with healthcare services. This evaluation serves as a reference for improving services to ensure optimal patient satisfaction. In this context, patient satisfaction has become a central concept in business and management discussions. Patients, as consumers, generally expect healthcare services to meet their needs and provide a satisfying experience. Customer satisfaction shapes perceptions and can influence how a service provider is perceived. (Manzoor et al., 2019) Patient satisfaction through a contrast model, where patients enter a hospital with a set of expectations and desires. If their actual experience exceeds expectations, they will be satisfied; conversely, if their experience falls short of expectations, they will feel dissatisfied

(Bjertnaes et al., 2012). To provide high-quality healthcare services, institutions such as hospitals must focus on enhancing patient satisfaction. Patient satisfaction can be influenced by response time and communication styles used by nurses, doctors, and all healthcare providers (Sharkiya, 2023).

Response time refers to the duration from the moment a patient arrives at the hospital entrance until they receive a response from the emergency department staff, combined with the time required for treatment to be completed. Response time plays a crucial role in healthcare services, particularly in the Emergency Department (ED), which serves as the frontline for handling emergency cases (Tartila et al., 2020). Equally important is the communication style of all hospital staff, which also plays a significant role in healthcare services. Communication style serves as a window into how individuals are perceived by the world, influencing their relationships, careers, and emotional well-being. Understanding communication styles enables individuals to work more effectively and maintain composure. Sometimes, the way information is communicated is more important than the actual content of the communication. Many people understand the content well, but poor communication styles prevent messages from being effectively delivered or received (Kwame & Petrucka, 2021). A person's communication style can be observed in their verbal speech, written communication, and physical presentation. It can also be defined as a characteristic way of interacting within a particular social environment. Each individual has a unique communication style, which may not always be well-received by everyone. For example, an academic's communication style differs from that of a politician, a businessperson's style differs from an educator's, and an emotionally expressive individual communicates differently than someone who is humble and forgiving. Similarly, communication styles can vary between individuals from rural and urban backgrounds or between those with different levels of intelligence (Open Resources for Nursing & Ernstmeyer. K, 2021).

Ensuring high-quality and effective healthcare services, particularly in the Emergency Department, requires improvements in response time and communication styles. These improvements can be achieved through training programs or by assigning personnel according to their skills and competencies. Enhancing healthcare service quality will lead to increased patient satisfaction, higher patient expectations, stronger patient loyalty, and an improved hospital reputation (Bhati et al., 2023). However, despite the critical role of response time and communication style in patient satisfaction, there is still a lack of research examining their direct impact in Indonesian hospital settings, particularly in emergency departments. Given the urgent nature of emergency care, where every second counts, and the crucial role of effective communication in patient outcomes, this study is essential to identify areas for improvement and develop evidence-based strategies to enhance healthcare services. Addressing these factors will not only improve patient experiences but also strengthen hospital performance and overall public health outcomes. Therefore, the aim of this study was to investigate the relationship between response time and communication style on patient satisfaction in the emergency unit at Tugu Koja Hospital, North Jakarta, Indonesia.

METHOD

This study employs a descriptive-analytic design with a cross-sectional approach, aiming to explore the relationship between variables. The cross-sectional method involves collecting data on independent and dependent variables at a single point in time. The research is a correlational survey that investigates the relationship between response time (X1) and communication style (X2) with patient satisfaction (Y). Data collection will be conducted through questionnaires, quantified using the Likert or Guttman scale. The analysis will follow the Product Moment Correlation if the normality test confirms a normal distribution;

otherwise, the Rank Spearman method will be applied. Furthermore, multiple regression analysis will be performed using SPSS software to examine the relationship between the independent variables (response time and communication style) and the dependent variable (patient satisfaction). A random sampling technique will be used, with the sample size determined using the Isaac and Michael table at a 10% margin of error. The study population consists of emergency department (ED) patients at RSUD Tugu Koj, North Jakarta, aged 15 and above, ensuring their ability to complete the questionnaire. The sample will include 480–500 ED patients admitted between August and November 2024. Confidentiality of participants' personal information, such as names and contact details, will be strictly maintained.

The study applies inclusion and exclusion criteria to define its sample. Inclusion criteria require that patients be registered at RSUD Tugu Koj and be conscious, free from severe psychiatric conditions, and not under coercion. Those unwilling to complete the questionnaire or failing to meet eligibility conditions are excluded. For data collection, standardized questionnaires will measure communication style and patient satisfaction, aligning with prior research. Patient characteristics such as gender, age, insurance type, and occupation will also be recorded. Response time, measured in minutes, follows The Australian Council of Healthcare Standards (ACHS) triage system, categorizing urgency levels from immediate resuscitation to non-urgent cases, with specific time frames for medical intervention (Santoso, 2016). The study examines three variables: response time (X1) and communication style (X2) as independent variables, and patient satisfaction (Y) as the dependent variable. Operational definitions clarify key concepts, with patient satisfaction assessed across five dimensions—tangibles, reliability, responsiveness, assurance, and empathy. Response time is defined as the time from ED entry to receiving appropriate care, while communication style encompasses verbal and non-verbal interactions, including message exchange and information delivery.

The research will be conducted over 16 weeks at Tugu Koj Hospital, divided into preparatory, data collection, and reporting phases. Data analysis will follow a structured framework, using both parametric and nonparametric methods to determine relationships between variables. The validity test results indicate that for each questionnaire item, from statement No. 1 to statement No. 4, the sig. (2-tailed) value is less than 0.05. Therefore, each statement in the questionnaire is considered valid and capable of measuring the intended variables. However, the reliability test results show that the Cronbach's Alpha value is 1.000, which is higher than 0.06. This means that the research instrument for communication style is not reliable and cannot be used for future studies, but it remains applicable for this particular research. Ethical considerations are integral to the study. Participants will receive verbal explanations before signing consent forms, and confidentiality will be maintained. Institutional approval will be sought before data collection.

RESULT

Based on the respondent characteristics table, the number of female respondents is higher, totaling 106 individuals or 60.57% of the total sample. Regarding education, level high school graduates constitute the largest group of respondents 60.5% of the total sample (105 respondents). In terms of age the majority of respondents fall within the 20–40 years age group, 60.57% of the total sample (106 respondents).

Table 1.
Respondent characteristics (n= 175)

Respondent characteristics	Category (year)	f	%
Age	< 20	13	7,43
	20-40	106	60,57
	41-60	32	18,29
	> 60	11	6,28
	NA	13	7,43
Gender	Male	69	39,43
	Female	101	60,57
Education	SD-SMP	29	16,57
	SMA	106	60,57
	Diploma	17	9,71
	Sarjana	22	12,58
	Pascasarjana	1	0,57

Table 2 shows that response time (Waktu Tanggap) has a correlation with patient satisfaction, as indicated by the sig. (2-tailed) value of 0.000, which is less than 0.05. However, communication style (Gaya Komunikasi) does not correlate with patient satisfaction, as the sig. (2-tailed) value is 0.222, which is greater than 0.05. Furthermore, the correlation coefficient for response time (X1) is positive (0.563), meaning that an improvement in response time will lead to an increase in patient satisfaction (Y). In other words, enhancing the response time of emergency department staff at RSUD Tugu Koja Jakarta Utara will result in higher patient satisfaction. On the other hand, the correlation coefficient for communication style (X2) is also positive (0.234), but there is no significant correlation between communication style and patient satisfaction. This indicates that whether the communication style variable has a positive or negative value, it does not influence patient satisfaction

Table 2.
Results of the Primary Analysis

Variable	Coefficient	p-value
Response Time	0.417	0.025
Communication Style	0.234	0.222

DISCUSSION

The findings of this study highlight the significant relationship between response time and patient satisfaction in the ED of Tugu Koja Hosptila, North Jakarta. The results indicate that a faster response time leads to higher patient satisfaction, whereas communication style does not significantly impact patient satisfaction. This discussion elaborates on these findings, compares them with similar studies, and explores their implications for improving healthcare services. Response time is a crucial factor in emergency medical services, as it directly influences patient outcomes and experiences. The study's results show that response time has a positive correlation with patient satisfaction. This means that when hospital staff respond quickly to patients' needs, their level of satisfaction increases. Emergency care is time-sensitive, and delays can lead to adverse medical outcomes, increased anxiety, and overall dissatisfaction among patients and their families.

Across various healthcare settings, responsiveness, including quick response to call lights and triage times, is a significant determinant of patient satisfaction. Faster response times contribute to patients feeling that they receive help as soon as possible, which enhances their overall satisfaction with the healthcare experience (Mei et al., 2020). In emergency settings, quick response times are directly linked to higher patient satisfaction. Studies show that patients are more satisfied when they receive prompt attention upon arrival at emergency rooms, highlighting the importance of efficient service delivery in critical care environments

(Della Arya et al., 2023; Munkhofid et al., 2024; Sapto Putro & Sodikin, 2020) Contrary to expectations, this study found no significant relationship between communication style and patient satisfaction. While communication remains an essential aspect of healthcare delivery, the results suggest that in emergency settings, other factors such as speed of service and medical outcomes may hold greater importance for patient satisfaction. One possible explanation for the lack of correlation in this study is that patients in emergency departments are often in distress and primarily concerned with receiving immediate medical assistance. While good communication is important, it may not significantly impact their satisfaction level if their primary concern—timely treatment—is addressed efficiently. Future studies could explore whether specific elements of communication, such as empathy or clarity, play a more significant role in non-emergency settings.

Several previous studies indicate that communication style can significantly impact patient satisfaction. Affiliative communication styles, characterized by friendliness and empathy, are generally associated with higher patient satisfaction (Ismail et al., 2020). While this study provides valuable insights, it has some limitations that should be addressed in future research. First, the study was conducted in a single hospital, which may limit the generalizability of the findings to other healthcare institutions. Future studies should consider a larger sample size across multiple hospitals to enhance external validity. Second, the study focused on quantitative measures of patient satisfaction, which may not capture the full complexity of patient experiences. Incorporating qualitative methods, such as in-depth interviews or patient feedback sessions, could provide a more comprehensive understanding of how patients perceive response time and communication style. Lastly, while response time was found to be a significant factor, future research could explore additional variables that might impact patient satisfaction, such as hospital environment, medical equipment availability, or staff empathy. Understanding a broader range of factors could help in developing more effective patient-centered healthcare strategies.

CONCLUSION

This study underscores the importance of response time in determining patient satisfaction in emergency care settings. Faster response times were associated with higher levels of satisfaction, aligning with previous research that emphasizes the critical role of timely healthcare delivery. On the other hand, communication style did not significantly impact patient satisfaction, suggesting that in emergency scenarios, patients prioritize quick and effective medical intervention over interpersonal interactions. To enhance patient satisfaction in emergency departments, hospitals should focus on reducing response times through improved staffing, efficient triage systems, and digital health solutions. While communication remains a fundamental aspect of healthcare, its impact on satisfaction may be more pronounced in non-emergency settings.

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