

IS HAVING DUAL INSURANCE DEMAND FOR BETTER HEALTHCARE FACILITY?

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ABSTRACT

According to the Permenkes policy Number 3 of 2023, JKN participants can upgrade their treatment class by paying the difference either independently, through their employer, or through additional insurance. The decision to upgrade their treatment class can be influenced by several factors, such as social, personal, economic, and cultural factors. This study aims to analyze the factors that influence JKN patients' decisions to upgrade their treatment class at Dr. R. Sosodoro Djatikoesoemo Bojonegoro Regional Hospital. This study uses a quantitative cross-sectional approach. The population of this study were all JKN class 1 and 2 patients with a sample size of 92 respondents. The independent variables of this study were income, perception of services, availability of treatment rooms and ownership of additional insurance. The dependent variable was the decision to upgrade the class of care. This study used logistic regression analysis. This study was conducted at Dr. R. Sosodoro Djatikoesoemo Bojonegoro Regional Hospital. The results of bivariate analysis showed that the four independent variables had a significant effect on upgrading the in-patient care, i.e income p-value 0.000 (OR 4.312), perception of service p-value 0.000 (OR 1.362), availability of treatment rooms p-value 0.000 (OR 1.458), and ownership of additional insurance p-value 0.009 (OR 3.496). Whilst the multivariate analysis showed the most dominant factor was income p-value 0.000 (OR 4.571). In this study, it is expected that hospitals can consider service improvement strategies and understand patient segments which can later increase hospital revenue and overall service quality.

Keywords: *Consumer Behavior, Inpatient, Service Level Upgrading, Hospital*

INTRODUCTION

The National Health Insurance (JKN) is a government program that guarantees financial protection for Indonesian citizens

in meeting their basic health needs.¹ The National Health Insurance (JKN) is implemented through a mandatory social health insurance system, which requires all

people to become JKN participants and is carried out in stages.² Indonesia has implemented the National Health Insurance (JKN) program since 2014, which is managed by the Health Social Security Administration Agency (BPJS Kesehatan).³ Since its initial implementation, the number of JKN participants has continued to increase. As of October 31, 2024, the number of participants was recorded at 277,538,004 people or around 98.25% of the total population of Indonesia.⁴ BPJS Kesehatan covers almost all outpatient and inpatient services up to class 1, but still allows participants who wish to upgrade their treatment class to a higher or VIP class by paying the difference in cost. The difference in cost can be paid independently by the participant, borne by the employer, or through additional health insurance.^{5,6}

One of the health service facilities in Bojonegoro City is the Dr. R. Sosodoro Djatikoesoemo Regional General Hospital (RSUD), a class B non-teaching government hospital with a capacity of 540 beds. In providing health services, RSUD Dr. R. Sosodoro Djatikoesoemo has established partnerships with various guarantor service providers. According to Putri (2019), guarantor services are a form of health service in a hospital whose payment costs are borne by the guarantor based on a cooperation agreement that has been agreed upon with the hospital.⁷ RSUD Dr. R. Sosodoro Djatikoesoemo partners with private and government health insurance programs, one of which is BPJS Kesehatan.

At Dr. R. Sosodoro Djatikoesoemo Bojonegoro Regional Hospital, the phenomenon of JKN patients choosing to upgrade their treatment class above their rights often occurs. Data shows that during August to October 2024, it was known that

a significant increase in treatment class occurred in several units. The Anggrek Room was recorded as the inpatient room with the highest frequency of patients upgrading classes, reaching 66% of the total inpatient visits in October.

The decision to upgrade the class of care can be influenced by several factors, such as social, personal, economic, and cultural factors. According to Aisyiah (2019) patients as service users have control in determining the choice to purchase health services.⁶ When patients decide to upgrade the class of inpatient care, there are various factors to consider. This is due to differences in purchasing behavior that each individual has, according to the characteristics of each consumer. According to Palupi (2016), BPJS patients' decisions to upgrade their treatment class are influenced by income, room availability, rates, service quality, comfort, privacy, facilities, and additional insurance.⁸ Meanwhile, Purwatinugrum (2019) stated that income is the most dominant factor in influencing the decision to upgrade their inpatient class.⁹

In addition to income and service factors, insurance ownership, especially dual insurance, is also an important factor influencing patients' decisions in accessing higher class care services. Dual insurance such as National Health Insurance (JKN) and private insurance, increases patients' financial capacity and reduces concerns about the burden of costs when choosing to upgrade to a higher class of care. Research by Sultana et al. (2022) shows that individuals with dual insurance are more likely to utilize preventive services, report better health status, and access higher quality facilities than those with only one or no insurance.¹⁰ This broader coverage not only facilitates access to facilities such as

more comfortable and private treatment rooms, but also provides a sense of security and flexibility in decision-making.

This study is important because JKN patients' decisions to upgrade their inpatient class not only reflect individual preferences, but also have direct implications for the inpatient class policy (KRIS) in the JKN reform, the flow of costs for BPJS and hospitals, and the equity and quality of healthcare services. Understanding the determinants of upgrade decisions is crucial for designing policies that maintain equitable access, optimize hospital financing and cash flow, and prevent unexpected cost burdens on patients and the JKN system. Therefore, the analysis is limited to four main factors: income, perception of service, availability of treatment rooms, and ownership of additional insurance to provide a more focused and in-depth analysis, allowing for relevant recommendations for hospital service management.

RESEARCH METHOD

This study uses a quantitative approach with a descriptive design cross-sectional, which is data collection conducted from April to June 2025. The type of research used is an analytical observational study with the dependent variable being the JKN patient's decision to upgrade their care class, and the independent variables including income, perception of service, availability of treatment rooms, and ownership of additional insurance. Data were collected using an instrument in the form of a questionnaire that had been prepared based on research variable indicators and tested for validity and reliability before being used in data collection.

The population in this study were all JKN class 1 and 2 participants who were hospitalized at Sosodoro Djatikoesoemo Bojonegoro Hospital during the period of October 2024, and met the inclusion criteria. From this population, a sample size of 92 respondents was determined using the Slovin formula with a margin of error of 10% to obtain a representative sample size. Furthermore, respondent selection was carried out using a purposive sampling technique, which is a sampling technique based on certain considerations or criteria deemed relevant to the research objectives, so that the sample obtained truly matches the characteristics to be studied. Statistical analysis with logistic regression. The results of the study are presented in the form of tables and narratives to make it easier for readers to understand the research findings.

This study involved inpatients as respondents; thus, its implementation took into account research ethics aspects. This study has obtained ethical approval from the Research Ethics Committee of the Faculty of Health, Muhammadiyah University of Lamongan, with the number: 140/EC/KEPK-S2/04/2025. The committee stated that this study is feasible to be carried out because it does not endanger the research subjects and guarantees the confidentiality of patients' personal data. All respondents were provided with information regarding the purpose and procedures of the study, and they voluntarily agreed to participate through a consent form.

RESULT AND DISCUSSION

The results of data analysis show that of the 92 respondents in the study, 61% were female and 39% were male. Almost

half of the respondents were aged 36-45 years (27%). Among them, 46% had completed undergraduate education and worked as employees (27%). The socio-demographic details of the respondents are shown in Table 1.

Based on the results of the bivariate test presented in Table 2 and the multivariate test in Table 3, it is known that all independent variables, namely income p-value 0.000 (OR 4.312), perception of service p-value 0.000 (OR 1.362), availability of treatment rooms p-value 0.000 (OR 1.458), and ownership of additional insurance p-value 0.009 (OR 3.496) have a significant effect on the decision of JKN patients to upgrade their treatment class. While in multivariate,

income p-value 0.000 (OR 4.571) is the most dominant factor influencing the decision.

These findings indicate that patients with higher income levels tend to have greater financial ability to choose higher class services, even though they already have certain class rights from JKN. Income has the strongest influence and is the dominant factor in influencing JKN patients' decisions to upgrade their care class. In line with the theory of consumer behavior which states that purchasing power greatly influences purchasing decisions, in this case the decision to upgrade.¹¹

Table 1. Socio-Demographic Characteristics of Respondents (n=92)

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	36	39
Female	56	61
Age		
17-25 years	17	18,5
26-35 years	21	23
36-45 years	25	27
46-55 years	9	10
56-65 years	14	15
> 65 years	6	6,5
Education		
SD	2	2
SMA	38	41
Diploma	10	11
Masters	42	46
Work		
Self-employed	21	23
Employee	25	27
Teacher	5	5
Indonesian National Armed	18	20
Indonesian National Police	3	3
Other	20	22
Total	92	100

Table 2. Bivariate Test Results with Logistic Regression Analysis

Variable	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I for EXP (B)	
							Lower	Upper
X1	1.461	.279	27.352	1	.000	4.312	2.494	7.457
Constant	-3.822	.864	19.568	1	.000	.022		
X2	.309	.079	15.223	1	.000	1.362	1.166	1.591
Constant	-3.890	1.110	12.274	1	.000	.020		
X3	.377	.098	14.679	1	.000	1.458	1.202	1.768
Constant	-5.060	1.432	12.483	1	.000	.006		
X4	1.251	.482	6.744	1	.009	3.496	1.359	8.989
Constant	-.035	.265	.018	1	.895	.966		

Table 3. Multivariate Test Results with Logistic Regression Analysis

Variable		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1 ^a	X1	1.470	.346	18.071	1	.000	4.349	2.208	8.564
	X2	.276	.110	6.313	1	.012	1.318	1.063	1.635
	X3	.070	.135	.264	1	.607	1.072	.822	1.397
	X4	.012	.675	.000	1	.986	1.012	.269	3.803
	Constant	-8.738	2.151	16.506	1	.000	.000		
Step 2 ^a	X1	1.472	.329	20.050	1	.000	4.357	2.288	8.298
	X2	.276	.108	6.594	1	.010	1.318	1.068	1.628
	X3	.069	.134	.268	1	.605	1.072	.825	1.392
	Constant	-8.739	2.150	16.528	1	.000	.000		
Step 3 ^a	X1	1.520	.319	22.714	1	.000	4.571	2.447	8.539
	X2	.303	.095	10.080	1	.001	1.354	1.123	1.632
	Constant	-8.241	1.884	19.140	1	.000	.000		

The results of this study are in line with the research of Nur et al (2018) which states that the community in determining the class of care in JKN is very dependent on the amount of income they get.¹² In his study, it was proven that there was a significant relationship ($p\text{-value } 0.001 < \alpha 0.05$) between the amount of income and the selection of the class of care in JKN. The higher the income, the higher a person wants to get the best health services and the lower the income a person will get health services that are in accordance with their income.

Previous studies also support this finding. The results of a study by Mastuti et al. (2017) at PKU Muhammadiyah Gombong Hospital showed that income is

the most determining variable in the demand for upgrading the class of care, where patients with higher incomes tend to choose more comfortable rooms and faster services.¹³

Income is related to the concepts of Ability to Pay (ATP) and Willingness to Pay (WTP). ATP reflects a person's financial ability to pay for health services, while WTP describes an individual's willingness to pay more for convenience or better quality of service. Although income determines ATP, the decision to upgrade may be determined by WTP which can be influenced by perceptions of the service, previous experiences, or individual priorities. Therefore, even though patients have the ability (ATP), they are not

necessarily willing (WTP) to pay more to upgrade.

In addition, when patients are satisfied with the services provided, they tend to want to improve their care experience by choosing a higher class. In line with the concept of Willingness to Pay (WTP), when patients feel satisfied and confident in the quality of service provided, they tend to be willing to pay more to get better comfort and service.

In line with Darmawan's research (2018) which states that there is a relationship between tangible perceptions, reliability, responsiveness, and empathy with the decision-making process to upgrade the class of care.^{14,15} Patient perceptions are formed from experiences, expectations, and subjective assessments of the quality of service provided by the hospital. The results of Khairani et al research (2023) at Ulin Banjarmasin Hospital also showed that patient satisfaction factors that significantly influenced the decision to move the class of care were Assurance and Empathy with an overall influence of 27.5%.¹⁶

Perception of service covers various aspects such as the friendliness of the staff, the comfort of the facilities, and the speed of service received during treatment. Thus, perception of service is one of the key factors that can drive patient decisions in choosing a higher class of inpatient care because they consider that the additional costs are comparable to the benefits obtained.

On the other hand, the availability of space is a supporting factor that allows the decision to move up a class to be realized. Even if a patient has the ability and desire to upgrade, the decision is highly dependent on the availability of the desired treatment space.

The results of this study are in line with Lestarinigrum's (2019) study which found that the availability of treatment rooms that match patient preferences has a significant relationship with the patient's decision to upgrade the treatment class.¹⁷ Adequate and comfortable treatment rooms can improve the patient experience, providing a sense of security and comfort during the healing process. When patients feel appreciated and cared for in good facilities, they are more likely to choose more intensive care.

This factor also relates to the hospital bed management system and transparency of information to patients. In situations where higher classes are always full or are not clearly informed, patients may be reluctant to consider upgrading.

Meanwhile, ownership of additional insurance helps ease the burden of costs, thus providing a sense of security for patients in making decisions. Additional insurance provides access to patients to obtain better health services, such as more comfortable treatment rooms and more complete facilities. With this financial support, patients can choose the best one according to their needs.¹⁸

The results of the study showed that the variable of additional insurance ownership had a significant effect on the patient's decision to upgrade the class of care. This finding indicates that patients with additional insurance have a greater tendency to choose to upgrade the class of care. This shows that financial security from additional insurance provides a sense of security and flexibility in making decisions related to more optimal health services, especially in choosing a treatment room with more comfortable facilities, better privacy, and an environment that supports the overall healing process.

However, the results of this study contradict the research of Palupi et al (2016) which stated that additional insurance statistically did not significantly affect the choice of upgrading the class of care.⁸ This can be caused by various other factors such as patient perceptions of the quality of service in the available class, they may feel that the facilities and care provided in the class they are entitled to are adequate. In addition, previous experience with health services and recommendations from family or friends can also influence patient decisions.^{19,20}

Overall, these findings reinforce that economic factors and perceptions of service quality are key factors in JKN patients' decision-making to upgrade their care class. Hospitals can use these findings as a basis for considering service improvement strategies and understanding patient segments based on economic capacity in formulating policies for paid services outside of JKN coverage, which can ultimately increase hospital revenue and overall service quality.

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CONCLUSION

Based on the results of data analysis, the four variables, namely income, perception of service, availability of treatment rooms, and ownership of additional insurance were proven to have a significant influence on the decision of JKN patients to upgrade their class of care at Dr. R. Sosodoro Djatikoesoemo Bojonegoro Regional Hospital. Simultaneously, these four factors contribute to patient decision making, with the income variable being the most dominant factor influencing the decision. These findings indicate that the patient's financial ability plays an important role in determining the choice of higher services. Therefore, hospitals need to consider service strategies and expand access to adequate treatment rooms so that services remain evenly distributed and affordable for all JKN participants.

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