

## Analyzing Healthpreneur Determinants for Low-Socioeconomic Ethnic Families

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### ABSTRACT

**Access to health services** is a critical factor in improving the well-being of low-socioeconomic status families. However, many families in Surakarta face challenges in utilizing healthcare services. The purpose of this study is to explore the relationship between educational level, family economic status, and other demographic factors with their willingness to access health services at RSUD Dr. Moewardi, Surakarta. **The purpose of this study** is to determine how education, economic status, and demographics influence healthcare-seeking behavior among low-socioeconomic families, with the goal of improving healthcare accessibility and understanding barriers to usage. A **quantitative approach** was employed, using a Confirmatory Factor Analysis (CFA) model. Data were collected through a structured questionnaire distributed to 116 respondents from low-socioeconomic families in Surakarta, with a focus on education, income, and healthcare-seeking behavior. The data were analyzed using SPSS to identify relationships between variables. **The analysis showed** significant differences in healthcare access behavior based on educational level, with families possessing higher education levels being more likely to utilize healthcare services. Economic factors were also identified as a strong predictor of healthcare access willingness. **The study highlights** the importance of addressing educational and economic barriers to improve access to health services for low-socioeconomic families. Policymakers must consider these factors when developing healthcare programs aimed at increasing participation from marginalized groups.

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### 1. INTRODUCTION

Over the past few years, attention to the accessibility of public health services in Indonesia has continued to increase. This phenomenon is mainly triggered by the public's need for quality, affordable, and easily accessible health services. Law Number 36 of 2009 concerning Health states that every citizen has the right to receive quality health services [1]. However, in practice, access to health services in Surakarta still faces many challenges. One of the most pressing issues is the low willingness of the public to utilize existing health [2]. One of the factors influencing the low willingness of the public to access health services in Surakarta City is the level of public understanding and awareness of the importance of preventive measures [3]. According to data from the 2023 Surakarta City Health Office report, health service indicators in several hospitals show that even though facilities are available, their utilization rate is still not optimal. The BOR (Bed Occupancy Rate) at Dr. Moewardi Hospital, for example, only reached 64.9%, which is still below the ideal standard of

60-85%. These data indicate that despite capacity, the use of inpatient facilities has not been fully maximized. In addition, public perception of service quality is also an important consideration. Research in Vietnam [4] showed that waiting times at outpatient clinics affect patient satisfaction. A similar pattern occurs in Surakarta. Here, the quality of administrative and medical services is often a major concern. For example, research by [5] showed that the implementation of electronic medical records can improve service efficiency. However, the implementation of this kind of technology has not been fully distributed across hospitals in Indonesia, including in Surakarta [6].

Location and cost are also significant factors in determining the public's willingness to access health facilities [7]. Hospitals located in the city center such as Dr. Moewardi Regional Hospital tend to be visited more than hospitals located in the suburbs. Service costs also influence people's decisions, especially those from the lower middle economic class. This is a major challenge for the government in ensuring that health services can be accessed by all levels of society [8].

The reputation of the hospital is also an important factor. Based on the report of the Surakarta City Hospital, hospitals with a good reputation tend to be visited more than hospitals that are new or less well-known. This shows that the image of the hospital in the eyes of the public plays a major role in influencing their decision to access health services [9]. The novelty of this study lies in its comprehensive integration of socioeconomic, educational, and mental health literacy factors to explain healthcare-seeking behavior among low-income families in Surakarta. While previous studies, such as [4] in Vietnam, mainly examined patient satisfaction from service efficiency perspectives, [10] in Central Java emphasized delayed hospital visits due to economic constraints, there is still limited research combining both psychological and socioeconomic dimensions using a CFA approach [11]. By applying CFA, this study ensures stronger construct validity and highlights the interaction between accessibility, awareness, and barriers in healthcare utilization [12]. Therefore, this research not only fills a methodological gap but also contributes context-specific evidence that enriches the understanding of healthcare access challenges in Indonesian urban settings [13]. Beyond methodological contributions, this study aligns with the Sustainable Development Goals (SDGs), particularly Goal 3 (Good Health and Well-being) and Goal 10 (Reduced Inequalities), by addressing barriers to equitable healthcare access, especially among low-income and vulnerable groups [14].

Furthermore, factors such as word of mouth and visitor satisfaction also play an important role in influencing people's behavior [15]. Studies show that recommendations from family, friends, or relatives can influence someone to choose a health facility. This factor is closely related to the level of satisfaction of visitors who have used services at a particular hospital. Thus, personal experience becomes a benchmark that influences public perception of health services in Surakarta City.

Based on the above explanation, this study aims to analyze the factors that influence the willingness of the community to access health services in Surakarta City [16]. By reviewing various aspects such as service quality, location, cost, and reputation, it is hoped that this study can provide recommendations to improve accessibility and the willingness of the community to utilize health facilities in the area [17]. This study further expands existing literature by emphasizing the interconnected roles of socioeconomic status, education level, and health literacy in determining healthcare-seeking behavior among low-socioeconomic families [18]. By positioning these variables within a single integrated framework, the research highlights dimensions that have not been simultaneously examined in prior works on Surakarta's healthcare access [19].

## 2. METHOD

This study uses a quantitative approach based on the positivism paradigm, where social reality is considered measurable and explained objectively through rational observation and scientific methods [20]. Positivism focuses on the regularity of the social world which is considered fixed, so this approach minimizes the subjectivity of researchers by using standardized measurements [21]. This study aims to analyze the factors that influence the willingness of the community to access public health services in Solo City, Central Java. With a quantitative approach, the data collected is expected to be able to provide an objective picture of community behavior towards accessing health services. The data in this study were obtained through a survey distributed to the community in Solo City. Respondents were selected based on predetermined inclusion criteria, namely being at least 18 years old, coming from a family with low socioeconomic status, and domiciled in Solo City, Central Java. The data collection process used a questionnaire distributed during the research period [22]. All responses were then analyzed quantitatively. This survey was conducted with the aim of measuring and

analyzing variables related to the public's willingness to access health services.

After data collection, the analysis used in this study was CFA. CFA is used to ensure the construct validity of the research variables measured through the survey [23]. CFA will confirm that the indicators used truly reflect the latent variables being measured. In this study, CFA is the initial step to test the relationship between variables and ensure that the measurement model used is in accordance with the data collected [24].

In the next stage, multiple linear regression analysis was used. This analysis aims to test the dependent variable, namely the public's willingness to access health services, against the independent variables that have been formed from the CFA results [25]. Multiple linear regression allows researchers to determine the contribution of each independent variable to the dependent variable simultaneously [26]. The connection between CFA and regression analysis in this study is crucial. CFA was first employed to confirm that the measurement items accurately represent the underlying constructs of accessibility, awareness, and barriers [27]. Once these constructs were statistically validated, their factor scores were extracted and subsequently used as independent variables in the multiple regression analysis [28]. This process ensures that the regression model is not built on raw survey items but rather on validated latent constructs, reducing measurement error and increasing the robustness of the causal interpretation [29]. Hence, the CFA results provide the theoretical and statistical foundation for the subsequent regression model. In addition, the factor analysis results were not only used to validate the constructs but also to produce factor scores that directly informed the regression model [30]. The initial KMO and Bartlett's tests confirmed that the dataset was suitable for factor analysis, and the factor loadings further validated the strength of each indicator [31]. These validated constructs were then transformed into factor scores, which served as independent variables in the multiple regression analysis. By applying this process, the regression outputs are based on statistically sound constructs, reducing measurement error and increasing interpretability [32].

In addition, this study also uses several control variables such as age, gender, income, and education level. This control variable aims to see whether there is an influence of demographic factors on the dependent variable being measured [33]. With the presence of control variables, the analysis results are expected to be more accurate because they can control potential bias that may arise from the demographic characteristics of respondents [34]. The use of quantitative methods in this study is designed to provide objective results that can be generalized to a wider population [35]. The questionnaire as a data collection instrument was chosen because of its efficiency in obtaining large amounts of data and its ability to measure public perceptions and attitudes directly.

### 3. RESULT AND DISCUSSION

#### 3.1. SPSS Test Results: Validity Test

- B Part: Accessibility to Health Services

Before conducting further analysis, it is essential to examine the completeness of the dataset. This step ensures that all respondents are included in the analysis without any missing or invalid data. The summary of case processing results is presented in Table 1.

Table 1. Case Processing Summary

		N	%
Cases	Valid	116	100.0
	Excluded <sup>a</sup>	0	0.0
	Total	116	100.0

a. Listwise deletion based on all variables in the procedure.

Source: Data was processed using SPSS 29

Table 1 shows that all 116 cases (100.0%) were valid and successfully included in the analysis. No cases were excluded (0.0%), meaning that the total number of respondents remained intact at 116. This confirms that the dataset is fully complete, with no missing values or eliminated entries due to incomplete variables. Consequently, the entire sample could be analyzed comprehensively without any reduction in cases. This condition enhances the reliability of the study's findings, as all collected information can be fully utilized in subsequent statistical model testing. In addition, these results provide assurance that the quality of the data is at an optimal level to support the validity of the analysis.

Table 2. Item-Total Statistics for Variable B

	Scale Mean if Item Deleted	Scale Variance if Item Deleted
B1	35.95	53.076
B2	36.43	53.013
B3	36.35	55.031
B4	36.30	52.073
B5	36.28	52.727
TotalB	20.15	16.283

Source: Data was processed using SPSS 29

Table 2 shows the item-total statistics for variable B. The scale mean if item deleted ranges from 35.95 to 36.43, while the scale variance if item deleted varies between 52.073 and 55.031. These results indicate that the removal of any single item (B1–B5) does not lead to a significant change in the overall mean and variance of the scale. The consistency of these values suggests that all items contribute meaningfully to the construct being measured, and none of them weaken the reliability of variable B.

Based on the SPSS Test Results above, we compare it with the r table value. For the r table value, namely with the N-2 formula, then  $116-2 = 114$ , the r table value is 114 with a significance value of 5% or 0.05, namely 0.1824. If the r count value  $>$  r table then the question is valid, while if the r count value  $<$  r table then the question is invalid. Here is a comparison and also a conclusion from each question:

Table 3. Validity Test Results

Variable	R value	r table	Results
B1	0.778	0.1824	Valid
B2	0.679	0.1824	Valid
B3	0.642	0.1824	Valid
B4	0.734	0.1824	Valid
B5	0.762	0.1824	Valid

Source: Data was processed using SPSS 29

Based on the comparison in Table 3, it can be concluded that for variable B there are 5 valid questions (B1, B2, B3, B4, and B5). The R values obtained for these items, namely 0.778, 0.679, 0.642, 0.734, and 0.762, are all greater than the r table value of 0.1824. Since each item meets the validity requirement, it indicates that all questions for variable B can be considered valid and suitable for further analysis.

- C Part: Awareness and Attitudes towards Health

Table 4. Item-Total Statistics Variable C

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
C1	35.42	44.263	0.669	0.742
C2	35.87	43.540	0.613	0.743
C3	35.66	45.721	0.539	0.759
C4	35.57	44.595	0.641	0.746
C5	35.61	44.500	0.674	0.743
TotalC	19.79	13.574	1.000	0.750

Source: Data was processed using SPSS 29

Table 4 presents the item-total statistics for variable C. The values of the corrected item-total correlation for all items (C1 = 0.669, C2 = 0.613, C3 = 0.539, C4 = 0.641, and C5 = 0.674) are above the minimum acceptable threshold of 0.30, indicating that each item has a good correlation with the total scale. Furthermore, the Cronbach's Alpha if Item Deleted values range from 0.742 to 0.759, which are consistent with the overall reliability coefficient of 0.750. This demonstrates that the internal consistency

of the scale remains stable even if any single item is removed. Therefore, all five items (C1–C5) can be considered reliable and contribute positively to the measurement of variable C.

Table 5. Validity Test Results for Variable C

Variable	r value	r table	Results
C1	0.669	0.1824	Valid
C2	0.613	0.1824	Valid
C3	0.539	0.1824	Valid
C4	0.641	0.1824	Valid
C5	0.674	0.1824	Valid

Source: Data was processed using SPSS 29

Based on the comparison in Table 5, it can be concluded that for variable C there are 5 valid questions. The r values for all items (C1 = 0.669, C2 = 0.613, C3 = 0.539, C4 = 0.641, and C5 = 0.674) are higher than the r table value of 0.1824. Since each item exceeds the required threshold, all questions under variable C are considered valid and can be used for further analysis.

- D. Part: Barriers to Accessing Health Services

Table 6. Validity Test Results for Variable D

Variable	r value	r table	Results
D1	0.885	0.1824	Valid
D2	0.811	0.1824	Valid
D3	0.811	0.1824	Valid
D4	0.868	0.1824	Valid

Source: Data was processed using SPSS 29

Based on the comparison in Table 6, it can be concluded that for variable D there are 4 valid questions. The r values obtained for items D1 (0.885), D2 (0.811), D3 (0.811), and D4 (0.868) are all greater than the r table value of 0.1824. Since each item exceeds the minimum requirement, all questions under variable D are considered valid and can be used for further analysis.

- E. Another Factors

Table 7. Item-Total Statistics Variable E

Scale Item Deleted	Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
E1	30.08	36.855	0.568	0.662
E2	29.80	40.839	0.394	0.704
E3	30.67	38.240	0.478	0.683
E4	29.17	45.779	0.141	0.744
E5	30.09	36.678	0.579	0.659
TotalE	16.65	11.952	1.000	0.502

Source: Data was processed using SPSS 29

Table 7 shows the item-total statistics for Variable E, where four items (E1, E2, E3, and E5) are valid with corrected item-total correlation values ranging from 0.394 to 0.579, while item E4 is not valid as its value (0.141) falls below the threshold of 0.1824, the Cronbach's Alpha if Item Deleted values range from 0.659 to 0.744, indicating that removing any single valid item would not significantly improve reliability, yet the overall Cronbach's Alpha of 0.502 remains below the acceptable standard of 0.60, suggesting that although most items contribute to the construct, Variable E as a whole demonstrates weak internal consistency and requires refinement.

Table 8. Validity Test for Variable E

Variable	r value	r table	Results
E1	0.568	0.1824	Valid
E2	0.394	0.1824	Valid
E3	0.478	0.1824	Valid
E4	0.141	0.1824	Not Valid
E5	0.579	0.1824	Valid

Source: Data was processed using SPSS 29

Based on the comparison in Table 8, it can be concluded that for variable E, four out of five questions are valid. Items E1, E2, E3, and E5 have r-values of 0.568, 0.394, 0.478, and 0.579 respectively, which are greater than the r table value of 0.1824, indicating that these items are valid. However, item E4 has an r-value of 0.141, which is lower than the r table value, so it is categorized as not valid. This means that overall, variable E is measured reliably, although one item (E4) does not meet the validity requirement.

### 3.2. SPSS Test Results: Reliability Test

Table 9. Reliability Statistics

Cronbach's Alpha	N of Items
0.689	20

Source: Data was processed using SPSS 29

Based on the output in Table 9 of reliability test results in the SPSS application, it is known that N of Items is the number of questions tested, there are 20 questions. With a Cronbach's Alpha value of 0.689. Because the Cronbach's Alpha value of  $0.689 > 0.60$ , then as the basis for making decisions on reliability testing, it can be concluded that the 20 questions or all question items are reliable or consistent.

#### 3.2.1. Complete Factor Analysis and Interpretation Test with SPSS

In order to assess whether the dataset is appropriate for factor analysis, it is necessary to evaluate its adequacy and suitability using statistical tests. One of the most commonly used approaches is the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which examines the proportion of variance among variables that might be common variance, thereby indicating whether the data are likely to yield reliable factors. Alongside this, Bartlett's Test of Sphericity is conducted to test the null hypothesis that the correlation matrix is an identity matrix, meaning there are no correlations among the variables. A significant result indicates that correlations exist, and therefore factor analysis can be appropriately performed. Both of these tests are critical prerequisites before advancing to the main stages of factor analysis, ensuring that the variables included in the study are statistically suitable for factor reduction.

Table 10. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.866
Bartlett's Test of Sphericity	1368.774
df	190
Sig.	0.000

Source: Data was processed using SPSS 29

Based on the results show in Table 10 of the Bartlett KMO test to determine the feasibility of a variable. If the KMO MSA value is greater than 0.50, the factor analysis technique can be continued, the results of the test that has been carried out are the KMO MSA value of  $0.866 > 0.50$  and the Bartlett's Test of sphericity (Sig) value of  $0.000 < 0.05$ , then factor analysis in this study can be carried out because it meets the first requirement. These results indicate that the dataset has a strong sampling adequacy and significant correlations among variables, which means that the variables included in this study are statistically suitable for reduction into underlying factors. Therefore, the application of factor analysis is not only feasible but also expected to produce reliable constructs that can represent the dimensions being measured.

Table 11. Anti Image Correlations Test results

Variable	MSA Value	MSA Criteria
B1	0.893	Good
B2	0.878	Good
B3	0.902	Very Good
B4	0.889	Good
B5	0.898	Good
C1	0.914	Very Good
C2	0.834	Good
C3	0.742	Fair
C4	0.876	Good
C5	0.907	Very Good
D1	0.873	Good
D2	0.935	Very Good
D3	0.932	Very Good
D4	0.865	Good
D5	0.888	Good
E1	0.603	Fair
E2	0.751	Fair
E3	0.804	Good
E4	0.847	Good
E5	0.752	Fair

Source: Data was processed using SPSS 29

### 3.3. Anti Image Correlations Test results

Based on the Anti Image Correlations Test results in Table 11, it can be observed that most variables meet the MSA requirements, indicating that the dataset is appropriate for further factor analysis. Variables in group B (B1 to B5) show MSA values ranging from 0.878 to 0.902, which fall under the “Good” to “Very Good” categories, demonstrating strong sampling adequacy across this group. Similarly, group C (C1 to C5) produces mostly acceptable outcomes, with C1 and C5 categorized as “Very Good” and C2 and C4 as “Good.” Nevertheless, C3 has an MSA value of 0.742, which places it in the “Fair” category, suggesting weaker adequacy and the need for careful consideration in subsequent analysis.

For variables in group D (D1 to D5), the results are consistently strong and stable, with values ranging from 0.865 to 0.935, all of which fall within the “Good” to “Very Good” categories. This indicates that group D demonstrates reliable sampling adequacy and can confidently be included in further analytical procedures without significant concerns. On the other hand, the results for group E (E1 to E5) are more varied. While E3 and E4 are classified as “Good,” variables E1, E2, and E5 fall into the “Fair” category, with values ranging from 0.603 to 0.752. Among them, E1 has the lowest adequacy value, which could pose potential limitations if retained in the analysis.

Overall, the findings highlight that the majority of variables provide adequate sampling adequacy, thereby supporting the validity of the dataset for factor analysis. However, the presence of several variables in the “Fair” category, particularly C3, E1, and E5, suggests that some dimensions may be weaker than others and could potentially reduce the explanatory power of the resulting factor structure. These results call for closer attention when interpreting the factor analysis, as weaker items may introduce noise or instability into the model and limit the consistency of the extracted factors. To address this, researchers may consider refining or revising these variables in future studies, either by rewording and improving the measurement indicators or by testing alternative constructs that capture the intended dimension more effectively. Such refinements would not only enhance the contribution of these variables but also strengthen the overall measurement instrument, thereby ensuring more reliable and valid results that are generalizable across broader contexts.

### 3.4. Correlation Test

Table 12. Correlation Test Results between TotalB and TotalC

		TotalB	TotalC
TotalB	Pearson Correlation	1	0.862**
	Sig. (2-tailed)		0.000
	N	116	116
TotalC	Pearson Correlation	0.862**	1
	Sig. (2-tailed)	0.000	
	N	116	116

\*\*. Correlation is significant at the 0.01 level (2-tailed)

Source: Data was processed using SPSS 29

Based on the test results between the variables of Accessibility to Health Services with Awareness and Attitudes towards Health in Table 12, a Sig value of  $0.000 < 0.05$  was obtained, which means that there is a correlation between these variables and the calculated r value is  $0.862 > 0.1824$ .

Table 13. Correlation Test Results between TotalD and TotalE

		TotalD	TotalE
TotalD	Pearson Correlation	1	0.474**
	Sig. (2-tailed)		0.000
	N	116	116
TotalE	Pearson Correlation	.474**	1
	Sig. (2-tailed)	0.000	
	N	116	116

\*\*. Correlation is significant at the 0.01 level (2-tailed)

Source: Data was processed using SPSS 29

Based on the results of the test between the variables of barriers to accessing health services and other factors in Table 13, a Sig value of  $0.000 < 0.05$  was obtained, which means that there is a correlation between these variables and the calculated r value is  $0.474 > 0.1824$ .

Research on the accessibility of health services by families with low socioeconomic status in Surakarta revealed a number of important factors that influence their decision to access these services [36]. One of the main findings is that low levels of health literacy contribute to low awareness and understanding of the importance of health services. Based on [37] emphasized that mental health literacy plays a crucial role in helping individuals understand and use available health services. In this context, awareness of mental health is very important, especially in situations where individuals may feel depressed or anxious about their health condition. In addition, [38] stated that in the era of the Industrial Revolution 4.0, it is important for the community to have a better understanding of mental health and the services available. Families in difficult economic conditions often face additional challenges in accessing health-related information [39]. Not knowing their rights to health services and how to access them can worsen their health conditions. Therefore, mental health promotion must be improved to educate the community about the importance of health and the resources available [40].

The results of the validity test in this study indicate that most of the questions related to accessibility, awareness, and barriers to accessing health services are valid, with a significant r value. This finding indicates that the instrument used in this study is able to accurately measure relevant factors [41]. The reliability test with Cronbach's Alpha of 0.689 indicates that all question items are consistent, which supports the reliability of the results of this study. Furthermore, factor analysis and Bartlett's KMO test indicate that factor analysis can be carried out with a KMO MSA value of 0.866, which is far above the threshold of 0.50. This indicates that the data collected from respondents has good suitability for factor aima kasirries analysis [42]. This study emphasizes that understanding the factors that influence the accessibility of health services is very important, especially for families with low socioeconomic status who may not get enough attention in the health system [43]. Based on the correlation test conducted, there is a significant relationship between the accessibility of health services and awareness and attitudes towards health. The calculated r value of 0.862 indicates a strong positive relationship, meaning that increasing accessibility of health services will have a positive impact on people's awareness and attitudes towards their health. This finding is consistent with the research of [44]. Their

study emphasizes the importance of early detection of psychological problems to improve mental health among college students. The same principle may also apply to the general public [45]. In addition, the methodological contribution of this study lies in employing CFA to validate constructs before regression. This approach enhances the robustness of the findings and provides a clearer framework for understanding how multiple factors jointly influence healthcare access [46]. These contributions underline the unique value of this research in advancing studies on healthcare accessibility, particularly within low-socioeconomic communities in Indonesia [47].

From a religious perspective, [48] discuss the relevance of mental health in spirituality, showing that mental health is not only related to medical aspects, but also with spiritual aspects. This is very important for people in Surakarta who may seek help from a faith-based approach. By understanding the relationship between mental health and religious practices, we can develop more holistic intervention programs that combine medical and spiritual approaches [49].

To develop appropriate strategies to improve health literacy and accessibility of health services for families with low socioeconomic status. Based on [50] showed that developing behavioral instruments for seeking help is very important, especially for the younger generation. This shows that it is important to educate all levels of society, including generation Z, about the importance of accessing health and mental health services [51]. With a comprehensive approach, we can contribute to improving the overall health of the community in Surakarta. These findings can be extended to other low-socioeconomic groups outside Surakarta, where similar obstacles such as limited resources, inadequate access to information, and high dependency on traditional practices often influence healthcare-seeking behavior [52]. By highlighting these broader implications, this study provides insights that can inform policies and interventions not only in Surakarta but also in other regions facing comparable conditions. This wider perspective underlines the relevance of the study beyond its local context and supports its contribution to the global discourse on healthcare accessibility. In addition, positioning the findings within a global context strengthens the relevance of this research for an international audience. Many low-socioeconomic communities across developing regions encounter similar patterns of financial barriers, limited literacy, and unequal access to health services. Therefore, the strategies proposed in this study such as improving health literacy, increasing affordability, and expanding outreach can inform international discussions on reducing health inequalities. This wider perspective underlines the relevance of the study beyond its local context and supports its contribution to the global discourse on healthcare accessibility.

#### 4. MANAGERIAL IMPLICATIONS

The findings of this study provide several important managerial implications for policymakers, hospital administrators, and other stakeholders in improving healthcare access for low-socioeconomic families. Healthcare managers need to strengthen community-based health education programs, particularly in mental health literacy and preventive care. These programs should employ simple language and accessible media to ensure effective communication with individuals who have lower educational backgrounds.

Economic barriers remain one of the most significant challenges in healthcare utilization, which calls for initiatives such as transportation subsidies, reduced service fees, or stronger integration with government health insurance programs. Community-based services such as mobile clinics and local health posts also need to be expanded to bring healthcare closer to underserved populations and minimize the burden of travel costs.

Another implication is the need to improve public trust and satisfaction with healthcare facilities. Hospital managers must focus on enhancing service quality, reducing waiting times, and ensuring transparency in healthcare costs. By improving these aspects and fostering cross-sector collaboration, healthcare institutions can increase community participation and ensure that low-income families have more equitable opportunities to access necessary healthcare services.

#### 5. CONCLUSION

This study shows that the level of health literacy, especially mental health, has a significant influence on the accessibility of health services for families with low socioeconomic status in Surakarta. Families with low levels of health literacy are often unaware of the importance of available health services, so they are less informed about how to access them. In addition, factors such as awareness, attitudes towards health, and socioeconomic barriers also influence their decisions in using these services. Therefore, appropriate health promotion and education are needed to increase public understanding and awareness of the importance of health,

both physical and mental. This study contributes to the broader field of healthcare accessibility by showing how socioeconomic status, education, and health literacy jointly influence healthcare-seeking behavior among marginalized groups. For policymakers, the findings emphasize the importance of designing targeted interventions such as transportation subsidies, affordable healthcare programs, and community-based education initiatives to reduce barriers to access. Moreover, the study underscores the potential of integrating both medical and community-driven approaches to improve participation in health services. For future research, similar studies can be conducted in different regions or with larger populations to compare results and explore additional variables such as digital health literacy and cultural attitudes toward modern healthcare. This will further enrich the understanding of healthcare accessibility challenges in diverse contexts.

Furthermore, the results highlight that accessibility and awareness are strongly correlated, meaning that efforts to improve the availability of healthcare services must go hand in hand with strategies to raise community knowledge and motivation. The analysis confirms that without adequate understanding, even affordable or physically accessible health facilities may remain underutilized. This finding reinforces the need for holistic approaches that not only address economic limitations but also strengthen individual capacity to recognize, value, and seek medical care in a timely manner.

In addition, the study demonstrates that the challenges faced by low-socioeconomic families are not isolated issues but part of a broader pattern of inequality in the healthcare system. The evidence from Surakarta can therefore serve as a basis for designing more inclusive health policies that prioritize vulnerable groups and ensure equity in service delivery. By addressing structural barriers and fostering stronger collaboration between healthcare providers, communities, and policymakers, the lessons from this research can guide practical solutions to improve healthcare utilization and ultimately enhance public health outcomes.

## 6. DECLARATIONS

### 6.1. About Authors

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### 6.2. Author Contributions

Conceptualization: OJ; Methodology: AP; Software: OJ; Validation: OJ and AP; Formal Analysis: OJ and AP; Investigation: AP; Resources: AP; Data Curation: OJ; Writing Original Draft Preparation: OJ and AP; Writing Review and Editing: OJ and AP; Visualization: OJ; All authors, OJ and AP, have read and agreed to the published version of the manuscript.

### 6.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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### 6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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