

FACTORS AFFECTING THE UTILIZATION OF HEALTHCARE SERVICES AT THE UPTD PASAR MATANGGOR COMMUNITY HEALTH CENTER, NORTH PADANG LAWAS REGENCY

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Abstract

The utilization of healthcare services is an important indicator of public health development. Low utilization of healthcare services may be influenced by various factors originating from both individuals and the healthcare service environment. This study aimed to analyze the factors influencing the utilization of healthcare services at the UPTD Pasar Matanggor Community Health Center, North Padang Lawas Regency. This study employed an analytical survey design with a cross-sectional approach. The study population consisted of all heads of households in the working area of the UPTD Pasar Matanggor Community Health Center, totaling 14,550 households, with a sample of 99 households selected using a stratified random sampling technique. Data were collected through interviews using a structured questionnaire and analyzed using univariate, bivariate, and multivariate analyses with multiple logistic regression. The results showed that beliefs regarding healthcare services ($p=0.001$), accessibility of healthcare services ($p=0.001$), and perceptions of illness ($p=0.003$) significantly influenced the utilization of healthcare services. Meanwhile, income ($p=0.086$) and health insurance membership ($p=0.532$) did not significantly influence healthcare service utilization. Although the role of healthcare workers showed a statistical association with healthcare service utilization ($p=0.012$), it was not identified as an independent significant factor in the final multivariate model. The most dominant factor influencing healthcare service utilization was accessibility to healthcare services. The findings indicate that beliefs regarding healthcare services, accessibility, and perceptions of illness are important factors influencing healthcare service utilization at the UPTD Pasar Matanggor Community Health Center, North Padang Lawas Regency, with accessibility being the most dominant factor. It is recommended that the community health center improve the accessibility and convenience of healthcare services and conduct continuous health promotion activities to increase healthcare service utilization among the community.

Keywords: Healthcare Service Utilization, Accessibility, Perception of Illness, Beliefs, Community Health Center

Introduction

Healthcare service utilization is an important component of public health development because the availability of healthcare services does not necessarily guarantee that individuals and families will access and use them when needed. Healthcare service utilization refers to the process by which individuals or families access and use available healthcare services for health promotion, disease prevention, treatment, and recovery. Optimal utilization of healthcare services is essential for achieving Universal Health Coverage (UHC), which aims to ensure that all people have access to the quality health services they need without experiencing financial hardship ^[1].

In Indonesia, the government has implemented various policies to improve equitable access to healthcare services, including the National Health Insurance Program (Jaminan Kesehatan Nasional, JKN), administered by BPJS Kesehatan. The JKN program is an important component of Indonesia's efforts to achieve UHC by providing financial protection and facilitating access to healthcare services. However, health insurance coverage alone does not necessarily result in optimal healthcare utilization. Individuals may continue to experience barriers related to geographical accessibility, socioeconomic conditions, health beliefs, perceptions of illness, and interactions with healthcare providers ^[1,2].

Primary healthcare facilities, particularly community health centers (Puskesmas), have a strategic role in delivering essential healthcare services to the community. Puskesmas provide promotive, preventive, curative, and rehabilitative services through both individual and community-based health programs. Essential community health efforts include health promotion, environmental health, maternal and child health and family planning, nutrition services, and disease prevention and control. Individual healthcare services at the primary level include outpatient care, emergency services, one-day care, home care, and inpatient care according to community needs ^[3]. Therefore, the utilization of Puskesmas services is an important indicator of the accessibility and effectiveness of primary healthcare delivery.

Healthcare service utilization is influenced by multiple factors. Andersen's Behavioral Model of Health Services Use explains that healthcare utilization is determined by three major categories: predisposing, enabling, and need factors. Predisposing factors include demographic characteristics, education, occupation, knowledge, attitudes, and health beliefs. Enabling factors include income, health insurance, availability of healthcare facilities, distance, transportation, and accessibility. Need factors include perceived health status, illness, disease severity, and perceived need for healthcare ^[4]. This model provides an appropriate framework for examining the determinants of healthcare utilization at the community level.

Accessibility is one of the important enabling factors in healthcare utilization. Accessibility involves geographical distance, transportation, availability of services, affordability, organizational arrangements, and the convenience of obtaining healthcare. Limited accessibility may discourage individuals from seeking healthcare or may result in delayed utilization, particularly among populations living in rural or geographically difficult-to-reach areas. Previous evidence has demonstrated that enabling factors, including health insurance, income, distance, transportation, and the availability of healthcare facilities, are associated with healthcare service utilization ^[5].

In addition to accessibility, health beliefs and perceptions of illness may influence people's decisions to seek professional healthcare. Individuals who believe that formal healthcare services are beneficial and effective may be more likely to utilize available services. Conversely, negative beliefs, previous experiences, cultural values, or limited trust in healthcare providers may reduce healthcare-seeking behavior. Similarly, individuals may respond differently to illness depending on how they perceive the severity and consequences of their symptoms. Some people may consider mild symptoms tolerable and manage them at home, whereas others may perceive similar symptoms as requiring immediate medical attention. Perceived need for healthcare is therefore an important determinant of healthcare utilization ^[4,6].

Socioeconomic conditions may also affect healthcare utilization. Income can influence the ability of individuals and families to meet direct and indirect costs associated with seeking healthcare, including transportation and other non-medical expenses. Although JKN provides financial protection, individuals who are not enrolled in health insurance may still experience financial barriers. Furthermore, the role of healthcare workers may influence utilization through communication, responsiveness, interpersonal relationships, health education, and patients' experiences with healthcare services ^[5,7].

The UPTD Pasar Matanggor Community Health Center, North Padang Lawas Regency, serves a relatively broad working area consisting of 32 villages. Healthcare services in this area are supported by community-based facilities, including 8 Village Health Posts (Poskesdes), 7 Integrated Development Posts (Posbindu), and 57 Integrated Service Posts (Posyandu). The Puskesmas also implements various promotive and preventive programs, including maternal and child health services, family planning, nutrition surveillance, immunization, vitamin A supplementation, infectious disease prevention, home visits, health promotion, and sanitation interventions. Despite the availability of these healthcare facilities and programs, the utilization of outpatient healthcare services has fluctuated and has not yet reflected optimal utilization by the population in the working area. These local data indicate that the availability of healthcare services alone may not be sufficient to ensure their utilization by the community^[8].

Several factors may contribute to the utilization of healthcare services in the working area of UPTD Pasar Matanggor Community Health Center, including household income, health insurance membership, accessibility, beliefs regarding healthcare services, the role of healthcare workers, and perceptions of illness. Geographical conditions and transportation barriers may further affect access to healthcare facilities. In addition, some community members may seek healthcare only when their illness becomes severe, which may result in delayed utilization of primary healthcare services.

Previous studies have shown that perceptions of illness are associated with healthcare utilization. Differences in how individuals interpret symptoms and assess the severity of illness can influence whether they decide to seek professional healthcare. However, the relative contribution of health beliefs, accessibility, socioeconomic factors, insurance membership, healthcare workers' roles, and perceptions of illness may vary across communities because healthcare utilization is influenced by local geographical, social, cultural, and health-system characteristics^[4,6].

Therefore, identifying the factors that influence healthcare service utilization at the local level is important for developing appropriate strategies to improve access to and use of primary healthcare services. Evidence regarding the determinants of healthcare utilization in the working area of UPTD Pasar Matanggor Community Health Center remains limited. This study aimed to analyze the factors influencing healthcare service utilization among households in the working area of UPTD Pasar Matanggor Community Health Center, North Padang Lawas Regency, with particular attention to income, health insurance membership, beliefs regarding healthcare services, accessibility, the role of healthcare workers, and perceptions of illness. The findings are expected to provide evidence for strengthening primary healthcare services and developing interventions to increase appropriate and timely utilization of healthcare services by the community.

Methods

This study employed an analytical survey with a cross-sectional design^[9]. The study population consisted of 14,550 households in the working area of the UPTD Pasar Matanggor Community Health Center, North Padang Lawas Regency. A total of 99 households were selected using stratified random sampling. Data were collected through face-to-face interviews using a structured questionnaire^[10]. The variables examined included household income, health insurance membership, beliefs regarding healthcare services, accessibility to healthcare services, the role of healthcare workers, perceptions of illness, and healthcare service utilization. Data were analyzed using univariate, bivariate, and multivariate analyses. Multiple logistic regression was used to identify the factors independently associated with healthcare service utilization and to determine the most dominant factor. Statistical significance was set at $p < 0.05$ ^[11].

Result

Table 1. Factors Associated with Healthcare Service Utilization

Variables	Exp(B)	p-value	Interpretation
Beliefs regarding healthcare services	18.200	0.001	Significant
Income	3.729	0.086	Not significant
Role of healthcare workers	8.755	0.012	Significant
Accessibility to healthcare services	23.423*	0.001	Significant
Perception of illness	9.923	0.003	Significant

Exp(B) = odds ratio from multiple logistic regression. Statistical significance was determined at $p < 0.05$. The accessibility value should be verified against the original SPSS output because the narrative in the source reports Exp(B)=25.537, whereas the regression table reports Exp(B)=23.423.

Table 2. Distribution of Respondents According to Key Study Variables

Variables	Category	n	%
Beliefs regarding healthcare services	Low confidence	57	57.6
	Confidence	42	42.4
Role of healthcare workers	Limited role	57	57.6
	Important role	42	42.4
Healthcare service utilization	Did not utilize	64	64.6
	Utilized	35	35.4
Beliefs regarding healthcare services	Low confidence	57	57.6
	Confidence	42	42.4
Role of healthcare workers	Limited role	57	57.6
	Important role	42	42.4
Healthcare service utilization	Did not utilize	64	64.6

The source shows that 57 respondents (57.6%) had low confidence in healthcare services and 42 (42.4%) had confidence. The distribution for the role of healthcare workers was also 57 (57.6%) with a limited role and 42 (42.4%) with an important role.

Table 3. Multivariate Logistic Regression Analysis of Factors Associated with ANC Visits

Variables	P value	Result
Beliefs regarding healthcare services	<0.001	Significant
Income	<0.001	Significant
Role of healthcare workers	0.002	Significant
Accessibility	<0.001	Significant
Perception of illness	<0.001	Significant

The available results indicate that all five variables were significant at the bivariate stage.

Discussion

The present study examined factors influencing healthcare service utilization at the UPTD Pasar Matanggor Community Health Center, North Padang Lawas Regency. The findings demonstrated that beliefs regarding healthcare services, the role of healthcare workers, accessibility to healthcare services, and perception of illness were significantly associated with healthcare service utilization in the multivariate analysis. In contrast, household income was not statistically significant. Among the significant variables, accessibility to healthcare services was identified as the most dominant factor.

Beliefs Regarding Healthcare Services and Healthcare Service Utilization

The findings showed that beliefs regarding healthcare services were significantly associated with healthcare service utilization. Respondents who had greater confidence in healthcare services were more likely to utilize healthcare services than those who had lower confidence. In the multivariate analysis, beliefs regarding healthcare services remained significant, with an odds ratio (Exp(B)) of 18.200 and a p-value of 0.001. This indicates that respondents with greater confidence in healthcare services had substantially higher odds of utilizing healthcare services.

This finding suggests that healthcare utilization is not determined solely by the physical availability of health facilities but is also influenced by how individuals perceive and evaluate the services provided. Positive beliefs may increase an individual's willingness to seek professional care, follow health advice, and consider health facilities as an appropriate source of treatment. Conversely, doubts regarding service effectiveness, quality, waiting time, or previous experiences may discourage individuals from seeking care ^[12].

This finding is consistent with the Andersen Behavioral Model of Health Services Use, in which attitudes and values toward healthcare can influence healthcare-seeking behavior. A systematic scoping review found that predisposing, enabling, and need factors all contribute to healthcare service utilization, while attitudes toward healthcare services are among the individual characteristics that may influence utilization.

The result also indicates that improving utilization at the primary healthcare level requires interventions beyond increasing service availability. Community health centers need to strengthen public confidence through responsive services, clear communication, respectful treatment, transparency regarding procedures, and consistent service quality. These efforts may improve community perceptions and subsequently encourage greater utilization of available healthcare services.

Accessibility and Healthcare Service Utilization

Accessibility was the most dominant factor associated with healthcare service utilization in this study. The multivariate analysis demonstrated a statistically significant association between accessibility and healthcare service utilization ($p=0.001$; $\text{Exp(B)}=23.423$). This finding indicates that respondents who perceived healthcare services as accessible had substantially greater odds of utilizing healthcare services than respondents who experienced difficulties in accessing services.

The dominance of accessibility is understandable because utilization requires individuals to be able to physically and practically reach healthcare services. Accessibility may include geographical distance, transportation availability, travel time, financial costs associated with reaching the facility, service schedules, and convenience of obtaining care. When these barriers are substantial, individuals may delay seeking care or choose alternative sources of treatment ^[13].

The finding is consistent with Andersen's Behavioral Model, in which accessibility is closely related to enabling factors that facilitate or constrain healthcare utilization. Previous systematic reviews have shown that enabling resources, including place of residence, financial resources, insurance, and access to healthcare facilities, are important determinants of healthcare use ^[4].

The present finding is also relevant to the geographical and socioeconomic context of rural and semi-rural communities. Even when healthcare services are formally available, they may remain underutilized if transportation is difficult, travel distances are long, or service schedules are inconvenient. Recent evidence from Indonesia also demonstrates disparities in utilization of primary healthcare services according to residence and socioeconomic characteristics, with lower utilization observed among populations living in rural regencies.

Therefore, improving healthcare utilization in the working area of UPTD Pasar Matanggor should prioritize strategies that reduce accessibility barriers. These may include improving transportation or referral mechanisms, optimizing service schedules, strengthening outreach and mobile services, and bringing selected primary healthcare services closer to communities with limited access.

Perception of Illness and Healthcare Service Utilization

Perception of illness was also significantly associated with healthcare service utilization. The multivariate analysis showed a significant relationship between perception of illness and healthcare service utilization ($p=0.003$; $\text{Exp}(B)=9.923$). Respondents with a more positive or appropriate perception of illness were more likely to utilize healthcare services than those with less appropriate perceptions.

This finding indicates that an individual's interpretation of symptoms and perceived severity of illness may influence the decision to seek professional healthcare. Individuals who perceive symptoms as serious or requiring professional intervention may be more likely to visit a health facility, whereas those who perceive illness as mild, temporary, or manageable at home may delay seeking care.

The finding corresponds with the need component of Andersen's Behavioral Model, which includes perceived health status, symptoms, and perceived need for care. Reviews of the model have identified perceived symptoms and health status as important need-related factors influencing healthcare utilization^[13].

The result has important implications for health promotion at the community level. Community members need to receive understandable information regarding early warning signs, symptoms requiring professional assessment, the consequences of delayed treatment, and appropriate sources of healthcare. Health education delivered through community health workers, cadres, Posyandu activities, village meetings, and other community-based platforms may help improve individuals' ability to recognize when healthcare utilization is necessary.

Role of Healthcare Workers and Healthcare Service Utilization

The role of healthcare workers was significantly associated with healthcare service utilization in the multivariate analysis ($p=0.012$; $\text{Exp}(B)=8.755$). Respondents who perceived healthcare workers as playing an important role were more likely to utilize healthcare services than those who perceived their role as limited.

Healthcare workers represent an important link between health facilities and the community. Their role extends beyond providing clinical services to include health education, counseling, communication, follow-up, referral, and encouragement of individuals to seek appropriate care. Effective interaction between healthcare workers and community members can build trust and reduce uncertainty regarding healthcare services^[14].

This finding is supported by research applying Andersen's Behavioral Model, which identifies health professional factors as important contextual characteristics that can facilitate or impede healthcare utilization. In qualitative research using the model, factors related to healthcare professionals, including interpersonal skills and availability, were frequently identified as relevant enabling factors.

The result suggests that increasing healthcare utilization should involve strengthening the interpersonal and community-oriented functions of healthcare workers. Health workers should provide services in a respectful, responsive, and culturally appropriate manner. In addition, proactive outreach to households may be particularly important for individuals who rarely visit healthcare facilities independently.

Household Income and Healthcare Service Utilization

In contrast to the other variables, household income was not significantly associated with healthcare service utilization in the multivariate analysis ($p=0.086$; $\text{Exp}(B)=3.729$). Although the odds ratio suggested a tendency toward greater utilization among respondents with higher income, the association did not reach statistical significance at the 5% level.

This result differs from some previous studies and systematic reviews that have reported higher income as an enabling factor associated with greater healthcare utilization. One possible explanation is that the effect of income may be reduced when other enabling factors, particularly accessibility, beliefs, and the role of healthcare workers, are considered simultaneously ^[12].

The availability of public primary healthcare services may also reduce direct financial barriers to accessing basic healthcare. In addition, the presence of health insurance or government-supported healthcare financing may reduce the extent to which household income determines healthcare utilization. Therefore, income may be relevant at the initial stage of healthcare-seeking decisions but become less influential after other determinants are controlled in a multivariate model ^{[14] [15]}.

The finding should therefore not be interpreted as indicating that economic conditions are irrelevant to healthcare utilization. Rather, it suggests that within the population studied, income did not independently explain healthcare utilization after adjustment for other factors. Further research involving more detailed measurements of direct and indirect healthcare costs may provide a better understanding of the economic dimension of utilization.

Conclusion

Overall, the findings demonstrate that healthcare service utilization at UPTD Pasar Matanggor is multidimensional and cannot be explained by a single socioeconomic characteristic. The significant factors identified in this study represent different dimensions of healthcare utilization: beliefs reflect individual attitudes, perception of illness reflects perceived need, the role of healthcare workers represents provider-related factors, and accessibility represents an enabling condition.

These findings are broadly consistent with the Andersen Behavioral Model, which conceptualizes healthcare utilization as the result of interactions between predisposing characteristics, enabling resources, and perceived or evaluated need. The current study further emphasizes that accessibility can play a particularly important role within the local primary healthcare context.

From a public health perspective, interventions to increase healthcare utilization should therefore be multidimensional. Improving physical and geographical access should be accompanied by strengthening community trust in healthcare services, improving communication and interpersonal relationships between healthcare workers and community members, and increasing health literacy regarding symptoms and the appropriate timing for seeking care. Such an integrated approach may be more effective than interventions focusing exclusively on increasing the availability of healthcare facilities.

The findings also have implications for UPTD Pasar Matanggor and local health authorities. Priority should be given to identifying communities experiencing the greatest accessibility barriers and developing outreach strategies tailored to these populations. At the same time, healthcare workers should be empowered to conduct community engagement and health education activities that address

misconceptions and improve confidence in professional healthcare services. These strategies may contribute to increased utilization of primary healthcare services and support broader efforts toward equitable access to essential healthcare.

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