

THE BARRIERS AND ACCESSIBILITY OF KLANG VALLEY RESIDENTS IN ACCESSING HEALTHCARE

Inss Emelda Teo Redzuan Teo¹

Christabelle Jemin James²

Bong Lai Zhi³

Liau Ling Shing⁴

Yusma Fariza Yasin⁵

¹Faculty of Management, Universiti Teknologi Malaysia (UTM), Malaysia,
(E-mail: inssemeldateo@graduate.utm.my)

²Faculty of Built Environment And Surveying, Universiti Teknologi Malaysia (UTM), Malaysia
(E-mail: jemin2001@graduate.utm.my)

³Faculty of Science, Universiti Teknologi Malaysia (UTM), Malaysia,
(E-mail: laizhi@graduate.utm.my)

⁴Faculty of Science, Universiti Teknologi Malaysia (UTM), Malaysia,
(E-mail: liaushing@graduate.utm.my)

⁵Faculty of Social Science and Humanities, Universiti Teknologi Malaysia (UTM), Malaysia,
(E-mail: yusmafariza@utm.my)

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Abstract: *This research examines the barriers and accessibility challenges faced by Klang Valley residents in accessing healthcare services. With a growing population and diverse socioeconomic groups, the Klang Valley presents a unique case for exploring how healthcare accessibility is influenced by factors such as geographic location, affordability, availability of healthcare professionals, and insurance coverage through online questionnaires. The study identifies key obstacles such as long waiting times, high out-of-pocket expenses, limited healthcare coverage, and transportation issues, which affect residents' ability to obtain timely medical care. Through survey data and analysis, this research reveals the significant role of digital health solutions, including mobile health applications, in improving access to healthcare, especially during the COVID-19 pandemic. The findings underscore the importance of expanding healthcare infrastructure, increasing the availability of healthcare personnel, and implementing cost-effective strategies to address these barriers. By addressing these issues, the research aims to provide recommendations for policymakers and healthcare providers to enhance the accessibility and quality of healthcare services in urban areas like Klang Valley.*

Keywords: *Accessibility, Barriers, Klang Valley, Malaysian Healthcare*

Introduction

Access to good healthcare services is one of life's fundamental rights that could impact the overall well-being of individuals and communities, since this is essential for disease prevention and improving quality of life. Limited access to healthcare illuminates that they are experiencing poverty. Abu Bakar, Sahimin, Lim, Ibrahim, & Mohd Zain (2023) mentioned that poverty in health may lead to poor health outcomes and usually, poverty relates to a lack of finance in fulfilling basic needs that can be categorised between food and non-food categories, whereby "health" is in the non-food category. Limitations in accessing the right healthcare service are one of the examples of health poverty. Access to healthcare is one of the multidimensional poverty dimensions (Abd Wahab et al., 2020), and it is one of the crucial benchmarks to measure the country's development performance (Abd Wahab et al., 2022). In the "*Pelan Strategik KKM 2021-2025*" by the Ministry of Health (MOH), it was emphasised on the ways to allow accessibility of healthcare including, improving healthcare service, improving health financing, raising awareness of the importance of health literacy to the community and utilising the technology and innovation being introduced in the health sector (Seksyen Perancangan Dasar dan Pelan Kesihatan, 2021).

Malaysia's healthcare system is a dual structure comprising both public and private sectors. The public healthcare system, primarily funded through general taxation and orchestrated by MOH, covers health promotion, disease prevention, curative care, and rehabilitative care that is accessible to citizens in both urban and suburban areas (Panichella, 2019). The private healthcare system, on the other hand, is a privately owned practice and is mainly funded by out-of-pocket (OOP) patients' expenditures (Ong et al., 2022). Access to healthcare means receiving services from healthcare providers whether it is medical check-ups, buying prescribed medication, health screening for early detection or receiving treatment for a disease to maintain good health conditions. However, when the individual is incapable of accessing healthcare, the individual is experiencing health poverty, which results in poor health outcomes. The difficulty accessing healthcare services can be depicted as "barriers".

Based on the Model of Monitoring Access by the Institute of Medicine (IOM), the three major types of barriers when accessing healthcare are "financial", "structural" and "personal". These barriers are inextricably intertwined (Abd Wahab et al., 2022). Usually, financial barriers relate to the socioeconomic background of the individuals. This barrier is faced by individuals who cannot pay for healthcare services either because they were not insured or the cost is too expensive, preventing them from receiving proper treatment, which could lead to poorer health outcomes. Structural barriers relate to the deficiency problem of the healthcare system's structure and facilities, such as healthcare centre location, availability of transportation, overburdened healthcare structure and the number of healthcare facilities (Abd Wahab et al., 2022) in the urban region. Personal barriers relate to individual acceptance and management in accessing healthcare, including their awareness of the healthcare services available in the area. This gap in health literacy and healthcare awareness leads to a lack of motivation or perceived necessity to seek preventive care, thus increasing risks of undiagnosed or unmanaged health issues, and this can be supported by a statement from Mohd Noh, Jawahir, Tan, Ab Rahim, & Tan (2022) mentioned that a lack of health literacy may result in negative effects. This research uncovers the barriers to accessing healthcare in the Klang Valley area. It is believed that this research could help policymakers improve the current policy and strengthen healthcare accessibility by identifying current barriers to accessing healthcare.

Literature Review

Background To Interest In Access To Healthcare

The interest in analysing access to healthcare stems from its profound impact on health status and the crucial role that health plays in economic development (Sethi, Mohanty, Das, & Sahoo, 2024). Improved health outcomes are essential for fostering economic growth and enhancing overall well-being (WHO, 2024). Numerous studies demonstrated that better health positively influences economic performance through various channels, including labour supply and productivity, foreign direct investment, education, and income generation (Ismahene, 2022; Ridhwan, Nijkamp, Ismail, & M. Irsyad, 2022). According to Polcyn, Voumik, Ridwan, Ray, and Vovk (2023), the relationship between health and economic development is multifaceted. A healthier population is typically more productive as they can contribute effectively to the workforce, leading to higher economic output, thereby improving living standards and reducing poverty levels. Furthermore, access to healthcare facilitates preventive measures, enabling individuals to maintain their health and ultimately decreasing long-term healthcare costs for both individuals and the economy (Aranda et al., 2021; Olatunji, Olaboye, Maha, Kolawole, & Abdul, 2024).

Improved health status is also a critical factor in enhancing the overall well-being of the population (Aranda et al., 2021). The connection between health and quality of life is well-established; individuals in good health are more likely to participate actively in the labour force, earn higher incomes, and accumulate savings (Mercier et al., 2024). This not only benefits their well-being but also contributes to a more prosperous society. In contrast, poor health can prevent individuals from working, hindering households from meeting their basic needs and increasing stress and dissatisfaction (Garnham et al., 2022). However, achieving better health outcomes depends on individuals' access to healthcare services. Evidence indicates that equitable access to healthcare, particularly in countries facing a high burden of disease, can significantly improve health outcomes (Adachi et al., 2023; Emadi, Delavari, & Bayati, 2021). This disparity in access has garnered substantial attention from policymakers and researchers seeking to identify and address barriers to healthcare accessibility. Various studies have highlighted this pressing issue in the Klang Valley, including research conducted by Abd Wahab, Satar, and Tumin (2022); Fadzil et al. (2021); Hussein et al. (2024); Yunus, Puteh, Ali, and Daud (2021) emphasising the necessity for targeted interventions to enhance access to healthcare services, ensuring that all individuals can obtain the care they need.

Definition Of Access In Healthcare

Access to healthcare is commonly defined as the capacity of individuals to access timely, affordable, and suitable healthcare services when required. It entails eliminating barriers that may hinder individuals from seeking and receiving essential care, including physical, financial, cultural, and informational obstacles (Zaman, Ghahari, & McColl, 2021). Levesque, Harris, and Russell (2013) classify healthcare access across five dimensions: approachability, availability and accommodation, affordability, and appropriateness, alongside the individual's capacity to perceive, seek, reach, pay for, and engage with healthcare services. Likewise, the Agency for Healthcare Research and Quality (AHRQ) define healthcare access as the "timely use of personal health services to achieve the best health outcomes," emphasising the significance of coverage, service availability, timeliness, and a skilled healthcare workforce. The most recent definition of access to healthcare by the World Health Organization (WHO), where healthcare access is defined within the Universal Health Coverage (UHC) framework as ensuring that all

individuals can access the full range of quality health services they need, promptly and without incurring financial hardship.

Dimensions of Access to Healthcare

Penchansky and Thomas (1981) identified five fundamental dimensions of access, which were later adapted by Obrist et al. (2007) into an analytical framework aimed at assessing and enhancing healthcare access. These dimensions, such as availability, accessibility, affordability, adequacy, and acceptability, represent critical factors essential for effective healthcare access. These dimensions encompass both the existence and accessibility of healthcare infrastructure (e.g., clinics, pharmacies, personnel, diagnostics, and medications), while also addressing organisational structure, patient acceptability, and the associated costs of healthcare services. Table 1 outlines the five dimensions of access to quality healthcare, highlighting factors that influence individuals' ability to utilise and benefit from healthcare services.

Table 1: Dimensions of Access to Healthcare

Dimensions	Definition	Questions
Availability	The physical presence of healthcare facilities for patients to access, or the availability of drugs and diagnostics for clients to purchase or use.	Which drugs and diagnostic services are available? What type of infrastructure is available, and is it adequate to meet demand? Are there adequately trained healthcare professionals?
Accessibility	The ability of patients to access, attend, and utilise the available healthcare services.	Are patients able to access existing healthcare facilities? Are transportation options available? Are healthcare services provided in the patient's preferred language? Are patients seen by a physician promptly upon arrival at the facility?
Affordability	The ability of patients to afford healthcare services, including medications.	Are the prices of medications and services affordable? Are the costs of transportation affordable? Are patients able to afford the time off work or childcare expenses?
Adequacy	The capacity of the organisational structures and processes of the healthcare provider to meet patients' needs.	Is the service tailored to accommodate patients' schedules and responsibilities? Is the facility well-maintained and functional? Are patients seen by a physician promptly?
Acceptability	The perceived appropriateness of the mode of service provision from the patient's perspective.	Do patients trust the service providers? Do patients feel welcomed and well cared for? Are local understandings and perceptions of illness, as well as social values, considered by the provider?

Source: Adapted From Access To Health Care In Contexts Of Livelihood Insecurity: A Framework For Analysis And Action By Obrist et al., 2007, p. 1586. Copyright By PLoS Medicine.

State-Of-Access to Healthcare In Klang Valley

The Klang Valley (as illustrated in Figure 1), situated in Malaysia, comprises the capital city, Kuala Lumpur, along with its neighbouring towns in Selangor. As one of Malaysia's most rapidly expanding metropolitan regions, it plays a central role in the nation's urban and

economic development. Home to approximately 7.2 million people in 2012, representing about a quarter of Malaysia's total population. This region experienced a steady annual growth rate of 1.7%, with projections suggesting a population of 8 million by 2020 (Hwan, 2023). This rapid expansion underscores the vital role of the Klang Valley's hospitals in providing essential healthcare services.

Urbanisation has been a key driver of the Klang Valley's development, bringing about substantial demographic, economic, and environmental changes (Singaravelloo & Salih, 2022). Globally, urbanisation frequently entails the transformation of natural landscapes into urban spaces, exerting significant pressure on resources such as land, water, and forests (Dutta & Guchhait, 2022). In the Klang Valley, this transformation has been particularly pronounced, with rapid urban expansion causing a substantial loss of forests and green spaces, replaced by commercial and residential developments (Kanniah, 2017; Morris, 2016). By 2010, the Klang Valley had reached an urbanisation level of 91.4%, one of the highest in Malaysia, with further growth anticipated (Mohd Shafie et al., 2022).

Healthcare accessibility in the Klang Valley highlights the challenges stemming from rapid urbanisation and population growth. In 2011, per capita out-of-pocket health expenditure in Kuala Lumpur and Selangor amounted to MYR 1,132.84 (USD 274.96), considerably surpassing the national average of MYR 606.92 (USD 147.31) (Yunus et al., 2021). Although the region serves as a hub for advanced medical facilities, significant barriers remain, including personal, financial, and structural barriers (Abd Wahab et al., 2022). Despite the presence of state-of-the-art medical infrastructure, many residents, particularly those from lower-income groups, face challenges in affording or accessing necessary care (Lee, 2023). Geographic constraints, including limited healthcare facilities in less urbanised areas, further compound this issue, compelling residents to travel long distances or endure prolonged waiting times for medical services (Abd Wahab et al., 2022).

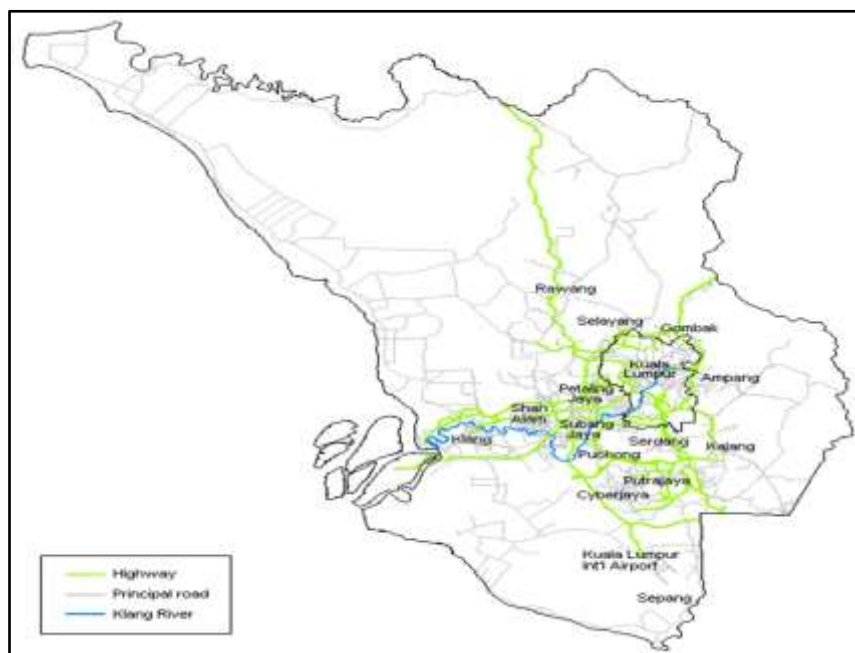


Figure 1: Geographical Territory of Klang Valley.

Source: Adopted From Web-Based Communication Model Between Teacher And Student In Foreign Language Software, By Syaifudin, Y., Rozi, I., & Asri, A., 2017. Copyright By Malaysian Construction Research Journal.

Personal Barriers

Personal barriers to accessing healthcare arise from a complex interplay of individual perceptions, attitudes, cultural beliefs, and life circumstances (Abd Wahab et al., 2022). For instance, many individuals are unaware of processes such as registration, insurance, or eligibility criteria for assistance programs, which may contribute to a perception of inaccessibility (Acharya et al., 2024). Additionally, misconceptions or misinformation are often disseminated through social networks or media, which can foster scepticism or fear, further discouraging individuals from seeking care (Tang, Lenzini, Greiff, Rohles, & Sergeeva, 2024). For example, a lack of awareness about early symptoms of chronic illnesses or distrust in modern healthcare may delay timely intervention (Jia et al., 2020).

Cultural norms and personal health beliefs play a pivotal role in shaping healthcare-seeking behaviour (Menon, Sarkar, & Kumar, 2018). Among some communities, traditional remedies or alternative practices are favoured over modern medical treatments, resulting in delays in accessing professional care (Bodeker & Graz, 2020; James, Wardle, Steel, & Adams, 2018). Gender roles and societal expectations further impact decisions, particularly for women who may prioritise their families' health over their own or hesitate to seek care from male healthcare providers (Ouahid et al., 2023). Such cultural dynamics highlight the necessity of culturally sensitive healthcare services. Motti and Berkovsky (2022) claimed that fear and stigma exacerbate personal barriers to accessing healthcare. Anxiety regarding potential treatment outcomes, invasive procedures, or side effects may deter individuals from seeking care. The stigma associated with health conditions frequently discourages individuals from seeking help due to fears of judgment or discrimination (Powell, 2023; Stangl et al., 2019). Privacy and confidentiality concerns exacerbate these issues, particularly when individuals fear the inadvertent disclosure of sensitive information by healthcare staff (Motti & Berkovsky, 2022).

The influence of social and family support on healthcare decisions is highly significant. Insufficient emotional encouragement, transportation support, or financial backing from family members may hinder individuals from accessing healthcare (Lazar & Davenport, 2018; Schwarz, Schmidt, Bobek, & Ladurner, 2022). Social stigma surrounding specific conditions further isolates individuals, particularly those with illnesses such as HIV/AIDS or mental health disorders (Jackson-Best & Edwards, 2018). Such isolation frequently results in delays in seeking care, exacerbating negative health outcomes. Time constraints and competing responsibilities pose significant challenges, especially for individuals managing demanding work schedules, household duties, or caregiving roles (Kayaalp, Page, & Rospenda, 2021). For many, attending healthcare appointments is deprioritised amidst the pressures of daily life (Humphrey, 2023). Such logistical barriers disproportionately impact marginalised populations whose immediate needs frequently overshadow preventive healthcare.

Financial Barriers

Financial barriers present significant challenges for vulnerable populations, especially those who lack adequate insurance coverage. While insurance forms a cornerstone of healthcare access, financial constraints frequently extend beyond the mere lack of coverage. Out-of-pocket expenses and transportation fees further impede individuals' ability to access quality care (Ezzat, 2023; Keya, Sripad, Nwala, & Warren, 2018). Such financial limitations compel

individuals to make difficult trade-offs, often compromising their health and overall well-being. Vulnerable individuals frequently grapple with the ongoing challenge of allocating limited financial resources (Barron et al., 2022). Many are forced to choose between healthcare expenses and basic household necessities. For example, some individuals face the dilemma of choosing between purchasing fuel for transportation to medical appointments and obtaining essential medications (Getzen & Kobernick, 2022). Parents often prioritise their children's needs at the expense of their own (Biddell et al., 2023). Such decisions, though deeply personal, are influenced by systemic economic inequities and shaped by individuals' resilience in addressing these challenges.

The mental health burden of financial decision-making is substantial. Anxiety and uncertainty about which necessity to prioritise are common among affected individuals (Søvold et al., 2021). This burden exacerbates the stress of financial insecurity, perpetuating a vicious cycle that further undermines overall well-being. The repercussions of resource trade-offs frequently extend beyond immediate healthcare concerns (Laker, Weisz, & Vassolo, 2024). One interviewee by Biddell et al. (2023) expressed concern about their car breaking down, threatening their ability to attend medical appointments: *"If I don't pay my car loan... how will I even get to treatment?"* These ripple effects illustrate the intersection of financial barriers and logistical challenges, further intensifying the difficulties experienced by individuals with limited resources. Financial barriers not only restrict access to medical care but also compound other challenges, including mental health issues and logistical obstacles (Sarikhani, Bastani, Rafiee, Kavosi, & Ravangard, 2021). Thus, addressing these barriers holistically enables healthcare systems to better support vulnerable populations, thereby enhancing access and outcomes for those most in need.

Structural Barriers

Structural barriers to healthcare access stem from systemic inadequacies and societal inequities that hinder the efficient delivery and fair receipt of medical care. These obstacles, entrenched within healthcare systems, disproportionately impact marginalised populations, exacerbating disparities in health outcomes (Saaida & Saaidah, 2023). Geographical disparities persist as a widespread issue, particularly in rural and underserved urban regions (Taylor, 2019) whereby the challenges include accessing specialist care due to limited nearby facilities (Cyr, Etchin, Guthrie, & Benneyan, 2019; Moseley, 2023). Rural clinics are frequently understaffed and poorly equipped, compelling patients to travel long distances for even basic medical care (Moseley, 2023). During the COVID-19 pandemic, hospitals globally faced overwhelming patient volumes, with accounts of individuals waiting in hallways or parking lots for beds (Sawaly, 2021). A shortage of healthcare workers intensifies systemic challenges (Figueroa, Harrison, Chauhan, & Meyer, 2019). WHO reports a global shortage of 18 million healthcare workers, predominantly in low- and middle-income countries (Boniol et al., 2022). This shortage places immense pressure on existing staff, often resulting in reduced quality of care and decreased patient satisfaction (Winter, Schreyögg, & Thiel, 2020).

Attitudinal barriers among healthcare providers, including unprofessional conduct and discriminatory practices, further impede equitable access to healthcare (Marcelin, Siraj, Victor, Kotadia, & Maldonado, 2019). Patients frequently report feeling dismissed, judged, or subjected to condescension as individuals with obesity often encounter weight-related stigma. One patient recounted feeling "undeserving" of a surgical procedure because of their body weight (Abd Wahab et al., 2022; Reidinger, 2020). These biases undermine trust in healthcare systems and deter patients from seeking care, perpetuating cycles of poor health outcomes

(Baciu et al., 2017; Homan, 2019; Mattheis, Marín-Spiotta, Nandihalli, Schneider, & Barnes, 2022). Broader societal inequities, encompassing socioeconomic status, race, ethnicity, gender identity, and sexual orientation, interact with structural barriers to influence healthcare experiences (Weinberger et al., 2022; Williamson, 2024). Marginalised populations often face compounded disadvantages. For example, a low-income individual might postpone medical appointments due to work, while also experiencing judgment from healthcare staff about their financial circumstances (Bidmead et al., 2024; Chapman, Machado, van der Merwe, Bryson, & Smith, 2022). Limited healthcare access results in delayed treatment, often worsening health conditions and increasing financial burdens (Baciu et al., 2017; Cannon, 2020; Williamson, 2024).

Health Care Scheme For The B40 Group (PeKa B40)

The Healthcare Scheme for the B40 Group (PeKa B40), launched in 2019 by Malaysia's Ministry of Health (MOH), seeks to meet the healthcare needs of low-income households, with a particular focus on non-communicable diseases (NCDs), including cancer, diabetes, and mental health conditions (Mat Zuki, Isa, & Suddin, 2022). As part of the government's commitment to health equity, the scheme provides financial assistance to the B40 group, which includes households with an income below MYR 4,850 per month (approximately USD 1,177.18 in 2019). PeKa B40 provides various benefits, including health screenings, cancer treatment, and subsidies for medical equipment of up to MYR 20,000 (USD 4,854.37), as listed in Table 2 (Mat Zuki et al., 2022). Initially allocated MYR 100 million (USD 25 million), the PeKa B40 aimed to benefit 800,000 eligible individuals aged 40 years and above (Yunus et al., 2021). According to Yunus et al. (2021), this initiative has demonstrated potential in detecting previously undiagnosed conditions among participants, including diabetes (10.4%), hyperlipidaemia (29.8%), hypertension (13.8%), and mental health issues (1.6%). They also declared that the participation has remained significantly low, with only 40,119 individuals undergoing health screenings out of the 800,000 eligible. This underutilisation presents a serious concern, as it intensifies preventable morbidity and mortality within the B40 population.

Table 2: The Benefits Of PeKa B40 (Mat Zuki et al., 2022).

Benefit 1	Free health screening programme at private clinics and MOH clinics registered under the PeKa B40 scheme includes medical history assessment, physical examination, clinical breast examination for females, prostate examination for at-risk males, mental health screening, and blood and urine tests.
Benefit 2	Health aid assistance provides up to RM20,000 (USD 4,740.12) for the purchase of medical equipment required for specific procedures and treatments. Eligible medical equipment includes heart stents, pacemakers, hearing aids, artificial joint devices, prostheses, spinal implants, orthotic devices for limb bones, intraocular lenses, breathing therapy equipment, oxygen concentrators, nutritional support, and wheelchairs, which are available only to PeKa B40 recipients receiving treatment at government hospitals, with applications submitted by an MOH medical specialist.
Benefit 3	An incentive of RM1,000 (USD 237.01) is provided for completing cancer treatment in phases, corresponding to the stages of treatment at MOH hospitals. The payment is divided into two instalments: RM300 (USD 71.10) is provided upon the commencement of treatment, and RM700 (USD 165.50) is given upon its completion.

Benefit 4 A transport incentive is provided for certain selected diseases, offering up to RM500 (USD 118.50) annually in Peninsular Malaysia and RM1,000 (USD 237.01) in Sabah, Sarawak, and Labuan. The amount is determined based on the distance between the recipient's residence and the hospital, calculated at a predetermined rate, and must be applied for by the responsible medical social worker or treating medical officer.

Methodology

This study adopted a cross-sectional research design, which involves analysing data obtained from a single population at a specific point in time (Wang & Cheng, 2020). The design was chosen because it allowed the researcher to capture residents' experiences of healthcare accessibility in the Klang Valley during the study period. The data were analysed using statistical tools to generate numerical findings that reveal patterns within the population (Pregoner, 2024).

The study population comprised residents of Selangor and Kuala Lumpur. The Klang Valley was selected due to its large population and high healthcare utilisation rates. According to the *Health Indicators 2023* report, Selangor recorded 720,095 inpatients and 9,698,468 outpatients in 2022, while Kuala Lumpur recorded 334,954 inpatients and 4,683,210 outpatients. These figures show that residents actively use healthcare services, making them suitable respondents. Based on the Department of Statistics Malaysia (DOSM), the combined population of Selangor and Kuala Lumpur in January 2024 was 9.43 million.

A random sampling method was applied, and in line with Krejcie and Morgan's (1970) guidelines, the recommended sample size for a population of this scale would exceed 384 respondents. For this study, 100 complete questionnaires were collected, which provided a sufficient dataset for exploratory analysis. Primary data were obtained through a self-administered questionnaire distributed online via social media. Secondary data from official statistics, journal articles, and recent reports were also reviewed to provide context and address knowledge gaps. The results of the analysis are presented in the following section.

Analysis and Findings

The analysis and findings were obtained from the responded questionnaire that contained four sections whereby, Section A explored the Klang Valley's residents' sociodemographic and socioeconomic background, Section B discovered the key barriers to accessing healthcare, Section C on the influence of demographic, socioeconomic, and geographical factors on healthcare accessibility and Section D on the solution recommendation for overcoming the barriers accessing healthcare.

Section A: Sociodemographic And Socioeconomic Background

114 Klang Valley residents participated in this study. Table 3 presents the respondents' sociodemographic and socioeconomic characteristics. The majority were women (66.7%), Malays (43.0%), and single (59.6%), with most employed in the private sector (41.2%). The largest age group was 18–25 years (41.2%), followed by those aged 26–35 (28.1%). Educational attainment was notably high, as 81.6% had completed tertiary education. Household structures were diverse, with 47.4% reporting no dependents and 42.1% living in households with two to four members. In terms of income, 42.1% of respondents belonged to the low-income (B40) group, while 37.7% earned within the M40 range, and 20.2% reported

incomes above RM 10,959. In terms of healthcare utilisation, slightly more than half (55.3%) relied on private facilities, while 44.7% accessed government services.

Table 3: Klang Valley Residents' Profile

Variable	Prevalence	
	No.	%
Gender		
Male	38	33.3
Female	76	66.7
Age		
18-25	47	41.2
26-35	32	28.1
36-45	16	14.0
46-55	14	12.3
56-65	5	4.4
66 and above	0	0
Ethnicity		
Malay	49	43.0
Chinese	48	42.1
Indian	15	13.2
Others	2	1.7
Education Level		
No formal education	2	1.8
Primary education	1	0.9
Secondary education	18	15.8
Tertiary education	93	81.6
Marital Status		
Single	68	59.6
Married	44	38.6
Divorced	1	0.9
Widowed	1	0.9
Employment Status		
Government servant	15	13.2
Private sector	47	41.2
Self-employed	10	8.8
Housewife	2	1.8
Student	35	30.7
Retired	1	0.9
Unemployed	4	3.5
Number of dependents		
0	54	47.4
2-4	48	42.1
5-7	10	8.8
8-10	2	1.8
>11	0	0
Household income (Monthly)		
< RM 4,850.00	48	42.1
RM 4,850.00 - RM 10,959.00	43	37.7
> RM 10,959.00	23	20.2

	Healthcare service	
Government	51	44.7
Private	63	55.3
Total	114	100.0

Source: Authors' work

These findings suggest that health poverty is relatively low among Klang Valley residents, likely reflecting the availability of healthcare facilities in urban areas (Mohd Noh et al., 2022). Education appears to play a particularly important role in healthcare access. The high proportion of respondents with tertiary qualifications supports evidence that education enhances health literacy and the ability to navigate complex healthcare systems (Zegeye et al., 2021; Mainuddin et al., 2015). Higher educational attainment also correlates with improved employment prospects and income, thereby facilitating better access to healthcare (Grant, 2017). Nevertheless, disparities in access remain. While most respondents reported no major difficulties in the past year, 28% perceived healthcare access as neither easy nor difficult, and 9% described it as difficult, suggesting persistent barriers.

Section B: Key Barriers In Accessing Healthcare

Structural barriers emerged as the most pressing challenge, with long waiting times reported by more than half of respondents. Specifically, many noted experiencing delays frequently, which aligns with Abd Wahab et al. (2022), who emphasised the strain on Malaysia's healthcare system. Long queues in government facilities not only frustrate patients but also disrupt daily routines, as individuals often need to take time off work to attend appointments. These findings echo Freed, Hansberry, and Arrieta (2013), who found that understaffing and overbooking exacerbate waiting times, undermining patient satisfaction. Addressing these inefficiencies remains critical to improving service delivery.

Time-related barriers were also significant. Around one-quarter of respondents reported difficulty accessing healthcare due to competing work or family commitments. Many working adults found it challenging to attend appointments during standard operating hours, a problem well documented in international studies (Yao et al., 2015). The administrative burden of booking appointments and navigating the system further amplified these challenges.

In contrast, financial barriers were less prominent. Only 14% cited cost as their primary obstacle, reflecting the success of Malaysia's subsidised healthcare model, where fees for citizens are minimal (Abd Wahab et al., 2020). Nearly half of respondents reported never postponing care due to financial reasons, while a smaller minority still faced occasional difficulties, particularly among low-income households. Although not the dominant barrier, financial constraints continue to affect a vulnerable subset of the population, suggesting the need for more targeted assistance.

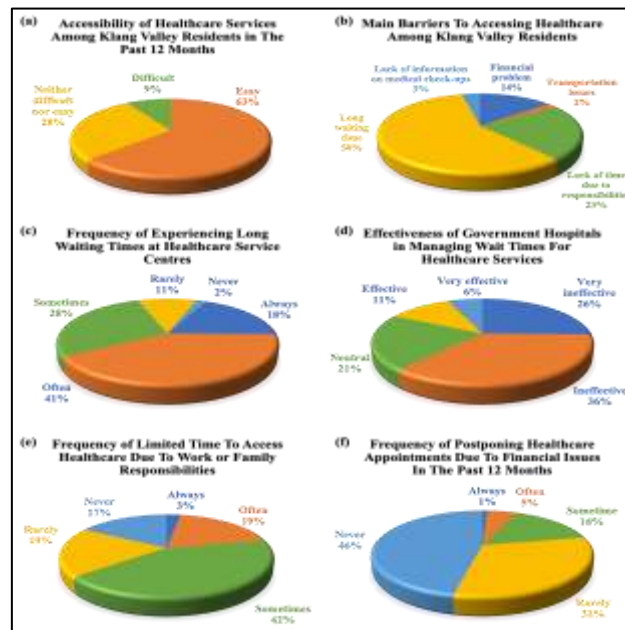


Figure 2: Results And Analysis For Section B, Key Barriers In Accessing Healthcare
Source: Authors' work

Section C: Influence Of Demographic, Socioeconomic And Geographical Factors On Healthcare Accessibility

In Malaysia, language barriers pose a significant challenge in healthcare settings, impacting the effective delivery of care across its diverse population. While Bahasa Malaysia is the official language and commonly used in healthcare facilities, many patients speak other languages such as Chinese, Tamil, and various indigenous languages. According to recent data, Figure 3(a) illustrates that 39% of respondents indicated a “High need” for improved communication skills among healthcare staff, while 33% chose “Moderate need,” highlighting the widespread recognition of this issue. A notable 15% of respondents expressed a “Very high need,” underlining the urgency of addressing these communication gaps, especially in rural areas or even in urban centres where healthcare providers may not be adequately trained in cultural sensitivity (Pocock & Suphanchaimat, 2021; Wan Ramzan et al., 2023). Cultural competence plays a critical role in overcoming these barriers. It involves understanding and responding to the cultural and linguistic needs of patients, which can significantly improve the accessibility and quality of healthcare services. Studies indicate that a lack of cultural competence among healthcare providers leads to communication breakdowns, delayed diagnoses, and patient dissatisfaction, especially within migrant populations who may have limited proficiency in the national language or English (Abdullah et al., 2016; Betancourt et al., 2003). Therefore, training healthcare staff to be culturally competent not only enhances patient care but also ensures that patients' diverse health beliefs and practices are respected.

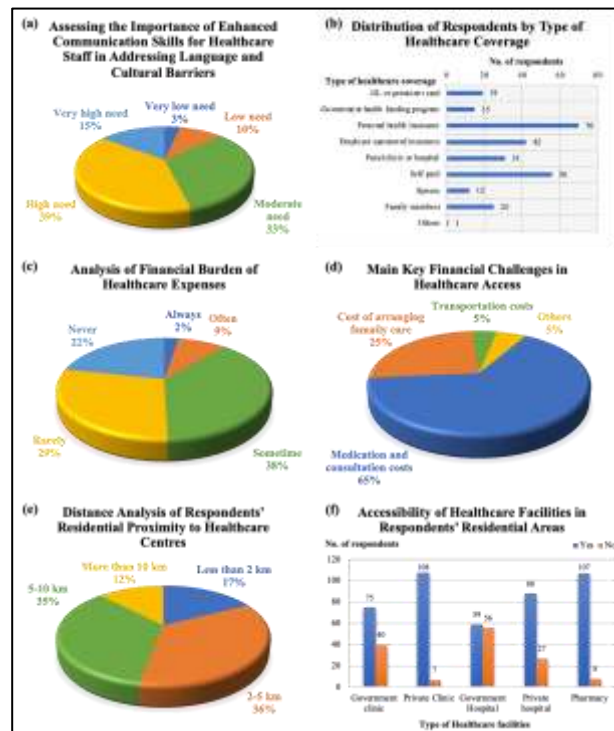


Figure 3: Analysis And Findings For Section C, Influence Of Demographic, Socioeconomic And Geographical Factors On Healthcare Accessibility

Source: Authors' work

Language and culture remain important determinants of healthcare access in Malaysia. While Bahasa Malaysia is widely used, many patients still communicate primarily in Mandarin, Tamil, or other dialects. Only a small minority (13%) reported little need for improved communication, while most respondents recognised gaps in this area. These findings emphasise the importance of cultural competence in healthcare delivery, as communication barriers often result in misdiagnoses, delays, and dissatisfaction, particularly for minority and migrant groups (Abdullah et al., 2016; Betancourt et al., 2003). Training providers in cultural sensitivity is therefore critical to ensure patients feel respected and understood (Pocock & Suphanchaimat, 2021; Wan Ramzan et al., 2023).

Financial protection is another area shaped by socioeconomic conditions. Government employee schemes and pensioner cards benefit only a small group (Ismail et al., 2023), while MySalam and PeKa B40 extend support to low-income households but face issues of eligibility and awareness (Aziz et al., 2022). Private insurance, covering nearly one-quarter of respondents, reflects demand for faster care among higher-income groups (Chee et al., 2021), while employer-sponsored insurance (14%) serves formal workers but excludes those in precarious jobs (Rahman et al., 2021). Around one-fifth of respondents paid out of pocket, exposing them to heavy financial burdens, with some relying on family support that is unsustainable in emergencies (Wan Ismail et al., 2022). Almost half reported experiencing financial strain “often” or “sometimes,” particularly for chronic disease management. Medication costs, identified by 65% as a major burden, remain a key driver of household health spending (Sivasampu et al., 2020), while high consultation fees in private facilities discourage timely visits (Lim et al., 2018). Caregiving responsibilities also added pressure for one-quarter of respondents, consistent with findings that women disproportionately shoulder unpaid care roles (Wan Puteh et al., 2020).

Geography further shaped access. Although the Klang Valley is better served than rural regions, only 17% of respondents lived within 2 km of a healthcare centre. Most reported distances of 2–10 km, where congestion and limited transport often delayed care (Noor et al., 2021; Ahmad et al., 2020). Those in peri-urban areas such as Rawang and Setia Alam faced greater obstacles, while respondents in Hulu Selangor or Banting, living more than 10 km away, frequently postponed treatment due to prohibitive travel costs (Abdullah et al., 2019; Hassan et al., 2020). Facility distribution reinforced these disparities: 65% reported access to government clinics, but 35% did not, reflecting uneven infrastructure. Urban sprawl has not been matched by public investment, leaving many peri-urban neighbourhoods underserved (Ismail et al., 2020; Wan Ismail et al., 2022). In contrast, private clinics (94%) and pharmacies (93%) were highly accessible (Yusof et al., 2021; Roslan et al., 2020), while government hospitals were less accessible (51%), with centralisation in major urban cores increasing reliance on private hospitals (77%) despite higher costs (Rahman et al., 2021).

Taken together, these findings reveal that while healthcare in the Klang Valley is broadly accessible, inequities persist. Cultural and linguistic gaps, uneven insurance coverage, financial burdens, and geographic disparities combine to limit access for vulnerable groups, underscoring the need for more inclusive health financing and better distribution of public facilities.

Section D: Solution Recommendation For Overcoming The Barriers To Accessing Healthcare

The top priority identified by respondents in improving healthcare accessibility is reducing waiting times. As illustrated in Figure 4(a), nearly two-thirds (64%) recommended increasing the number of healthcare personnel through targeted hiring, better workforce allocation, and competitive incentives to attract and retain staff (Ismail et al., 2020). Digital health solutions followed closely, supported by 57% of respondents, who recognised the potential of telemedicine and mobile platforms to reduce reliance on physical facilities and make care more affordable (Yusof et al., 2021). Expanding healthcare centres in underserved suburban areas was another frequently cited recommendation (50%), as was extending clinic hours to evenings or 24-hour pilot programmes, which 49% believed would support working adults (Rahman et al., 2021; Roslan et al., 2020). Affordability also remained a concern for 44% of respondents, pointing to the need for expanded subsidies, wider insurance coverage, and stronger collaborations between public and private providers (Wan Ismail et al., 2022). While transportation was less pressing in the Klang Valley, 38% highlighted the value of improved transit links and subsidised fares, especially in suburban zones (Rahman et al., 2021). Addressing demand in fast-growing areas such as Subang Jaya was also suggested, with feasibility studies recommended to guide facility expansion (Ismail et al., 2020). Collectively, these solutions aim to build a healthcare system that is more equitable, accessible, and responsive to the needs of Klang Valley residents.

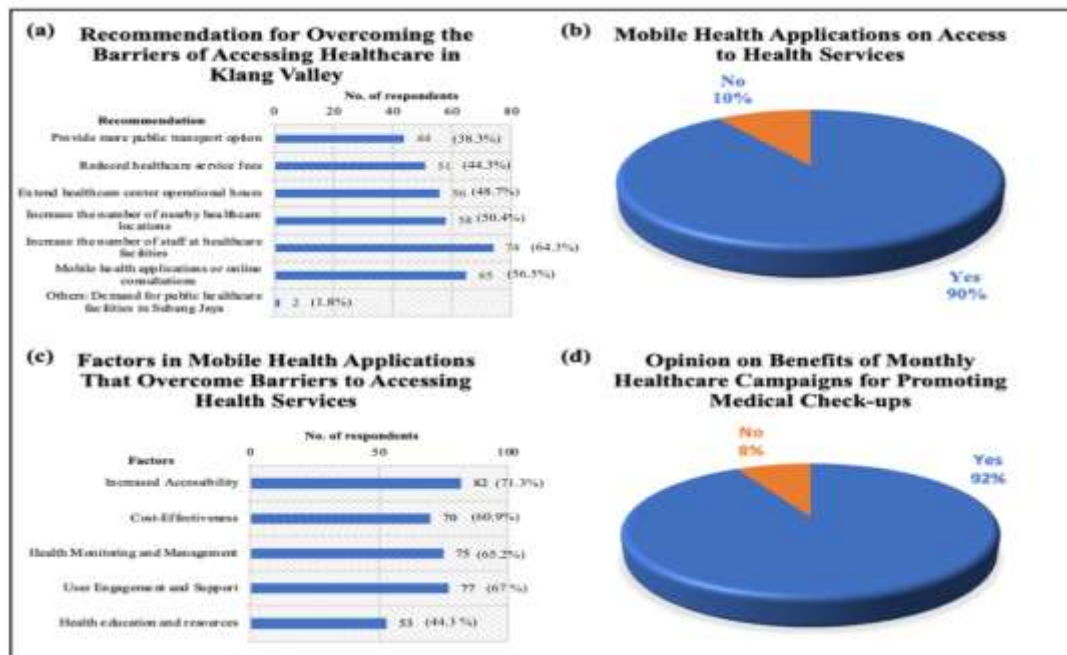


Figure 4: Analysis And Findings For Section D, Solution Recommendation For Overcoming The Barriers Accessing Healthcare

Source: Authors' work

Mobile health (mHealth) applications were highlighted as particularly transformative. This shows in Figure 4(b), where an overwhelming 90% of respondents agreed that these tools improve access by overcoming geographical barriers, reducing costs, and enhancing patient engagement. Likewise, mHealth platforms support virtual consultations, appointment scheduling, and remote follow-ups, which (71%) in Figure 4(c) were identified as especially useful for those managing chronic conditions (Lin & Bhattacharjee, 2021). Applications such as MySejahtera, DoctorOnCall, and Naluri have already expanded services from COVID-19 tracking to vaccination records, health education, and chronic disease management (Wong et al., 2021). Respondents noted specific benefits, including reduced travel and consultation costs (61%), self-monitoring features for blood pressure and glucose levels (65%), and built-in reminders that improve medication adherence (67%) (Tham et al., 2020; Tan et al., 2022). Nearly half (45%) also reported using these apps to access reliable health information, empowering them with resources for prevention and lifestyle management (Leong et al., 2021).

As the results show in Figure 4(d), community-driven approaches were also strongly supported. Almost all respondents (92%) endorsed monthly healthcare campaigns, recognising their value in raising awareness, promoting preventive behaviours, and delivering essential services closer to communities. Such initiatives can provide free screenings, vaccinations, and consultations, particularly in underserved or low-income areas (Aziz et al., 2022). Campaigns not only improve access but also build health literacy, enabling individuals to recognise symptoms early and make informed decisions about their care (Wan Ismail et al., 2021). By focusing on specific themes such as heart health, diabetes, or mental health, monthly events can encourage proactive engagement with healthcare and reduce the burden of chronic disease (Yusoff et al., 2021).

Conclusion

In conclusion, the study successfully met its objectives and generated meaningful insights into the barriers and accessibility challenges faced by Klang Valley residents in obtaining healthcare services. The findings demonstrate that structural issues, particularly long waiting times and uneven distribution of facilities, remain the most pressing obstacles, followed by time constraints linked to work and family responsibilities. Although financial barriers are less dominant, they continue to affect vulnerable low-income groups. These challenges highlight the importance of targeted interventions to strengthen equity within the healthcare system.

At the same time, the research underscores the potential of digital health innovations, especially mobile health applications, to enhance accessibility, affordability, and patient engagement. By integrating these tools into mainstream healthcare, Malaysia can reduce reliance on overstretched physical facilities while empowering individuals to take greater control of their health. Ultimately, the study contributes to ongoing policy debates by showing that combining systemic improvements with digital solutions offers a sustainable pathway towards more inclusive and responsive healthcare in the Klang Valley.

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