



Availability of Inclusive Health Services for Persons with Disabilities in Indonesia: An Analysis by Facility Type and Region

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Abstract. Persons with disabilities are at risk of facing structural barriers to accessing health care, yet the availability of disability-friendly services across primary and referral health facilities in Indonesia has not been comprehensively mapped at the national level by facility type and area of residence. This evidence gap limits the formulation of well-targeted health accessibility policies. Objective: This study aimed to analyze the availability of disability-specific services across four types of health facilities, namely Community Health Centers (Puskesmas), Independent Health Worker Clinics/Practices, Health Laboratories, and Hospitals, according to urban and rural area classification in Indonesia. Methods: This was a secondary data analysis employing a descriptive-analytical cross-sectional design, using household data from the 2023 Indonesian Health Survey (Survei Kesehatan Indonesia/SKI) (n=315,646 households). The availability of disability services (Yes/No/Do not know) for each facility type was analyzed according to urban–rural classification, with weighted proportion estimates accounting for sampling weights and the complex survey design (strata and cluster/PSU), followed by Rao–Scott design-adjusted tests of independence. Results: Nationally, the highest proportion of households reporting that a facility provided disability-specific services was found for Hospitals (urban 88.5%; rural 82.1%), while the lowest was found for Independent Health Worker Clinics/Practices (urban 52.3%; rural 38.4%). All facility types showed statistically significantly lower proportions in rural than in urban areas ($p<0.001$ for all facility types), with the largest urban–rural disparity observed for Independent Health Worker Clinics/Practices and the smallest for Puskesmas. Conclusion: The availability of disability-friendly services remains unequal across areas and facility types, with private or independent practices lagging furthest behind government-owned facilities. Strengthening accessibility regulation and oversight should be prioritized for non-government primary care facilities and rural areas to support equitable fulfillment of the health rights of persons with disabilities. Contribution to the SDGs: By identifying the facility types and areas in which inclusive services are least available, this study supplies disaggregated national evidence for SDG 3 (Good Health and Well-Being), particularly universal health coverage, and for SDG 10 (Reduced Inequalities), particularly the social inclusion of persons with disabilities, in line with the leave no one behind principle.

Keywords: Disability; Health Accessibility; Health Facilities; Urban–Rural Area; Indonesian Health Survey; Health Service Equity

1. Introduction

The World Health Organization (WHO) estimates that approximately 1.3 billion people, or one in six people worldwide, live with a significant disability. This population consistently experiences health inequities, including delayed or unmet access to health

services due to physical, communication, attitudinal, and institutional barriers (World Health Organization, 2022). These inequities are not explained by impairment alone; a systematic review and meta-analysis across low- and middle-income countries reported substantially higher all-cause mortality among persons with disabilities than among persons without disabilities, a gap attributed largely to unfair health system and societal conditions rather than to the underlying health condition (Smythe & Kuper, 2024). A global scoping review conducted by Gréaux et al. (2023) reinforces this evidence by demonstrating that barriers to health service access among persons with disabilities operate across multiple and interconnected levels of health systems, ranging from policy and financing to service delivery at the facility level. Kuper et al. (2024) further argue that closing these gaps requires health systems to be redesigned so that they expect, accept, and connect persons with disabilities, rather than relying on isolated and short-lived interventions.

At the national level, Statistics Indonesia reported that the number of persons with disabilities in Indonesia reached approximately 22.97 million in 2023, representing 8.5 percent of the total population (Badan Pusat Statistik, 2023, as cited in Direktorat Jenderal Bina Konstruksi, 2025). Indonesia has established a relatively strong legal framework through Law No. 8 of 2016 on Persons with Disabilities, which guarantees the right of persons with disabilities to accessibility and reasonable accommodation across all aspects of state administration and social life, including health services. This legal framework is further supported by Government Regulation No. 42 of 2020, which mandates accessibility in residential areas and public services. Nevertheless, public service compliance assessments conducted by the Ombudsman of the Republic of Indonesia through 2022 continued to show that the fulfillment of service standards for persons with disabilities, including those in the health sector, remained suboptimal and unevenly implemented in practice (Ombudsman Republik Indonesia, 2022).

At the facility level, disparities in access to health services for persons with disabilities between urban and rural areas have been widely documented in the global literature. Through a best-fit framework synthesis of 36 studies, Dassah et al. (2018) found that access to primary health care among persons with disabilities in rural areas was influenced by four interrelated factors: the availability of facilities and services, the acceptability of services, geographic distance, and affordability. Limited availability of facilities and services emerged as one of the most prominent barriers. A recent systematic review comparing rural and urban settings reached a similar conclusion, finding that rural disadvantage is shaped primarily by infrastructural constraints, including a smaller number of health facilities and limited provider availability, whereas urban areas are more often constrained by overcrowding and long waiting times (Mesmar et al., 2025). Facility-level evidence points in the same direction. A comparative survey of general practices in 31 countries documented large differences in physical accessibility both between and within countries, with accessibility strongly clustered by national policy context (Groenewegen et al., 2021), while a national audit of all primary health care facilities in Brazil recorded uniformly low accessibility scores, particularly for information accessibility (Pinto et al., 2021). A similar pattern may plausibly exist in Indonesia, given its extensive geographical area and decentralized health system. However, national quantitative evidence mapping the availability of inclusive health services for persons with disabilities according to both health facility type and urban and rural classification remains very limited.

Previous studies in Indonesia concerning disability and public facilities have generally taken the form of local case studies, narrative literature reviews, or normative legal analyses of the implementation of Law No. 8 of 2016. Although these studies have highlighted the gap between legal norms and actual practices, they have not provided quantitative estimates that are nationally representative. Hasibuan and Ayuningtyas (2021), for example, found through a literature review that efforts to establish inclusive public health centers for persons with disabilities across different regions of Indonesia varied considerably in terms of policy implementation as well as physical and nonphysical accessibility. However, their study was descriptive and qualitative and did not quantitatively compare the magnitude of disparities across regions. Similarly, the quantitative study conducted by Nopiah and Wahyuni (2022) on the effects of health insurance coverage and economic conditions on access to health services among persons with disabilities in Indonesia did not specifically examine the availability of inclusive services according to health facility type or regional classification. More recently, Azizatunnisa' et al. (2025) analyzed the 2021 National Socioeconomic Survey and showed that near-universal national health insurance coverage among persons with disabilities in Indonesia has not consistently translated into equitable health care utilization or financial protection; that study, however, addressed health financing rather than the availability of inclusive services at specific types of health facilities. Meanwhile, global reports such as those published by WHO (2022) and Gréaux et al. (2023), together with empirical evidence from other low- and middle-income countries (Harrison et al., 2020; Hashemi et al., 2022), are cross-national in scope and are based on qualitative literature reviews or local studies conducted outside Indonesia. Consequently, these sources cannot adequately describe the specific situation in Indonesia at the level of particular types of health facilities.

The novelty of this study lies in its use of household data from the 2023 Indonesian Health Survey, a national health survey conducted by the Health Development Policy Agency of the Ministry of Health in collaboration with Statistics Indonesia across 514 districts and municipalities in 38 provinces (Badan Kebijakan Pembangunan Kesehatan, 2023). This study provides a quantitative mapping of the availability of inclusive health services for persons with disabilities by simultaneously considering four types of health facilities, namely public health centers, clinics and independent practices of health professionals, health laboratories, and hospitals, as well as urban and rural classifications. The estimates incorporate sampling weights and the complex survey design to ensure national representativeness.

The urgency of this study is further reinforced by the fact that the 2023 Indonesian Health Survey was designed as an evidence base to support the Health Transformation agenda and monitor progress toward the Sustainable Development Goals (SDGs), which emphasize the principle of leaving no one behind, including persons with disabilities (Badan Kebijakan Pembangunan Kesehatan, 2023). Identifying the types of health facilities and regions with the lowest availability of inclusive services for persons with disabilities is therefore essential for informing the development of regulations, accreditation standards, and targeted budget allocations aimed at improving accessibility. This contribution can be stated more specifically in terms of two Sustainable Development Goals. Evidence on where inclusive services are least available supports SDG 3 (Good Health and Well-Being), particularly target 3.8 on universal health coverage, by identifying the points of care at which persons with disabilities are most likely to be excluded; and it supports SDG 10

(Reduced Inequalities), particularly target 10.2 on social inclusion irrespective of disability, by quantifying the magnitude of the urban–rural gap that inclusion policies are expected to close.

Based on these considerations, this study aims to analyze the availability of services specifically provided for persons with disabilities across four types of health facilities according to urban and rural classifications in Indonesia, using household data from the 2023 Indonesian Health Survey.

2. Method

2.1 Study Design

This study employed a descriptive-analytical, cross-sectional design using secondary data from the household microdata of the 2023 Indonesian Health Survey.

2.2 Study Setting and Period

The 2023 Indonesian Health Survey data were collected nationally across 38 provinces and 514 districts and municipalities in Indonesia from August to early October 2023 (Badan Kebijakan Pembangunan Kesehatan, 2023). Data analysis for the present study was conducted in 2026 using the 2023 Indonesian Health Survey household dataset obtained by the researchers.

2.3 Population and Sample

The study population comprised all households in Indonesia included in the sampling frame of the 2023 Indonesian Health Survey. The study sample consisted of all households in the 2023 household dataset with complete data on regional classification, totaling 315,646 households.

The number of households included in the analysis for each type of health facility varied according to the number of households that provided a valid response, namely Yes, No, or Do Not Know, to the question regarding the availability of services for persons with disabilities at the respective health facility. The analytical samples comprised 311,492 households for public health centers, 250,921 households for clinics and independent practices of health professionals, 83,877 households for health laboratories, and 286,114 households for hospitals.

2.4 Sampling Technique

The 2023 Indonesian Health Survey employed a multistage stratified probability sampling design, with census blocks serving as the primary sampling units. The sampling design was developed in collaboration with Statistics Indonesia using the sampling frame of the National Socioeconomic Survey (Badan Kebijakan Pembangunan Kesehatan, 2023).

Each selected household was assigned a survey weight to account for unequal probabilities of inclusion and nonresponse. The application of these weights enabled the resulting estimates to be representative at the national level.

2.5 Study Variables and Operational Definitions

The independent variable was the classification of the household area of residence, represented by variable B1R5 and categorized as urban or rural.

The dependent variable was the availability of dedicated services for persons with disabilities at health facilities, represented by variable K6. This information was collected separately for four types of health facilities: public health centers, clinics and independent practices of health professionals, health laboratories, and hospitals. Each variable had three response categories: Yes, No, and Do Not Know.

Operationally, the availability of inclusive health services for persons with disabilities was defined as the respondents' perceptions and knowledge regarding whether the respective health facility provided dedicated services for persons with disabilities. Therefore, this variable did not represent the results of a direct physical accessibility audit of the facility buildings conducted by the enumerators.

2.6 Research Instrument

The research instrument was the household questionnaire of the 2023 Indonesian Health Survey, particularly Block B5 concerning access to health care facilities. The questionnaire was developed by the Health Development Policy Agency of the Ministry of Health in collaboration with Statistics Indonesia. Field data collection was conducted by trained enumerators who had completed at least a three-year diploma in a health-related discipline (Badan Kebijakan Pembangunan Kesehatan, 2023).

2.7 Data Collection Procedures

The data were collected through structured face-to-face interviews between enumerators and household respondents using an electronic questionnaire. The interviews were conducted as part of the 2023 Indonesian Health Survey, which also included anthropometric measurements and biomedical examinations among selected subsamples.

2.8 Data Analysis

The raw data in SPSS format were extracted using Python and the pyreadstat library to select the variables relevant to the study. Subsequent statistical analyses were conducted using R and the survey package to account for the complex sampling design.

The survey design object was constructed by incorporating the primary sampling unit cluster variable, the STRATA stratification variable, and the household sampling weight variable, identified as *wrt*. Weighted proportions and their standard errors for the availability of services for persons with disabilities according to area of residence were estimated using the *svyby* function.

The association between area classification and the availability of services for persons with disabilities for each type of health facility was examined using the Rao–Scott chi-square test with a second-order correction, expressed as a design-adjusted F statistic, through the *svychisq* function. Statistical significance was determined at an alpha level of 0.05.

2.9 Ethical Considerations

This study used secondary household data from the 2023 Indonesian Health Survey. The original data collection procedures had received ethical approval from the survey organizer, namely the Health Development Policy Agency of the Ministry of Health of the Republic of Indonesia.

3. Results and Discussion

Table 1 presents the weighted proportions of households reporting that health facilities provide dedicated services for persons with disabilities, according to health facility type and area classification, together with the results of the Rao–Scott test of independence. The same weighted estimates are presented graphically in Figure 1, which displays the proportion of households reporting that dedicated services were available and the size of the urban–rural gap for each facility type.

Table 1. Availability of Dedicated Services for Persons with Disabilities by Health Facility Type and Area of Residence, 2023 Indonesian Health Survey (Weighted Estimates)

Health Facility Type	Urban Yes (%)	Rural Yes (%)	Urban Do Not Know (%)	Rural Do Not Know (%)	F (Rao Scott)	df	p
Public Health Centers	79.4	75.3	17.0	19.1	68.40	1.94; 64078.23	<0.001
Clinics and Independent Practices of Health Professionals	52.3	38.4	25.5	29.2	346.67	1.97; 59609.73	<0.001
Health Laboratories	59.2	54.2	31.2	34.5	13.20	1.96; 33077.42	<0.001
Hospitals	88.5	82.1	10.3	15.9	174.07	1.94; 62300.97	<0.001

Source: 2023 Indonesian Health Survey Data

Note: Percentages are weighted estimates that account for sampling weights and the complex survey design, including strata and clusters. The percentage for the "No" category is not presented in the table but can be calculated by subtracting the percentages for "Yes" and "Do Not Know" from 100%. The Rao–Scott test applied a second-order design correction, expressed as an F statistic, to examine the independence between area of residence and the service availability category, namely Yes, No, or Do Not Know.

Overall, the ranking of the availability of inclusive services for persons with disabilities was consistent across urban and rural areas. Hospitals had the highest availability, followed by public health centers, health laboratories, and clinics or independent practices of health professionals. Hospitals reported the highest proportion of service availability among all health facility types, both in urban areas at 88.5% and in rural areas at 82.1%. In contrast, clinics and independent practices of health professionals had the lowest proportions in both settings, at 52.3% in urban areas and 38.4% in rural areas.

The Rao–Scott test showed a statistically significant association between area of residence and the availability of services for persons with disabilities across all four types of health facilities, with p values below 0.001. The magnitude of the urban–rural disparity, calculated as the percentage reporting “Yes” in urban areas minus the corresponding percentage in rural areas, varied by facility type, as illustrated in Figure 1. The largest disparity was observed for clinics and independent practices of health professionals at 13.9 percentage points, followed by hospitals at 6.4 percentage points and health laboratories at 5.0 percentage points. The smallest disparity was found for public health centers at 4.1 percentage points.

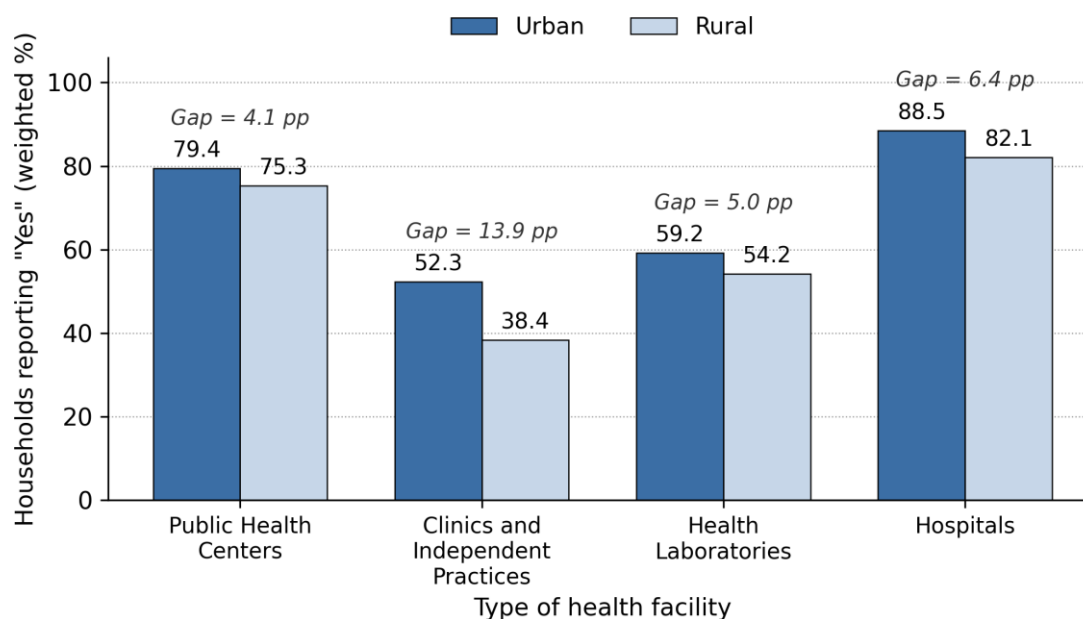


Figure 1. Weighted proportion of households reporting the availability of dedicated services for persons with disabilities, by health facility type and area of residence, 2023 Indonesian Health Survey. Gap denotes the urban-rural difference in percentage points. Source: authors' analysis of the 2023 Indonesian Health Survey household dataset.

The proportion of households responding “Do Not Know” regarding the availability of services for persons with disabilities was relatively high for health laboratories, reaching 31.2% in urban areas and 34.5% in rural areas. This finding may indicate lower levels of household exposure to or interaction with health laboratories compared with public health centers or hospitals.

The findings of this study demonstrate a pattern consistent with global evidence, indicating that the availability of inclusive health services for persons with disabilities tends to be lower in rural areas than in urban areas across all types of health facilities examined. This pattern is consistent with the best-fit framework synthesis conducted by Dassah et al. (2018), which identified limited facility and service availability as one of four major factors restricting access to primary health care among persons with disabilities in rural areas, alongside service acceptability, geographic distance, and affordability. Similar findings were reported in a household study conducted in rural Malawi, where inadequate facility infrastructure and long travel distances were identified as major barriers preventing persons with disabilities from obtaining appropriate health services (Harrison et al., 2020). This framework is relevant for interpreting the present findings because these four factors operate in an interconnected manner. Smaller rural facilities with limited capacity are likely to have fewer resources available for investment in accessible infrastructure, while the reach of local government supervision and technical assistance for health facilities in remote areas may also be weaker than that in urban settings. The systematic review by Mesmar et al. (2025) likewise concluded that rural disadvantage in access for persons with disabilities is driven primarily by infrastructural scarcity rather than by demand-side factors alone, which supports the interpretation that the gaps observed in the present study reflect differences in supply-side capacity between areas.

Hospitals demonstrated the highest proportion of service availability for persons with disabilities in both urban and rural areas. This pattern may be associated with the characteristics of hospitals as referral facilities with greater infrastructure and financial capacity, as well as their exposure to relatively stricter licensing and accreditation requirements than primary health care facilities. Consequently, building accessibility and infrastructure standards may receive greater institutional attention. In contrast, clinics and independent practices of health professionals had the lowest availability and the largest urban–rural disparity. These facilities are generally small in scale, often operate in rented buildings or converted residential properties, and are frequently managed by individual providers with limited financial resources. Such characteristics may make universal design modifications, including ramps, wider doorways, and accessible waiting areas, more difficult to implement than in larger health facilities, even though such features are formally required under Minister of Public Works and Public Housing Regulation No. 14/PRT/M/2017 on building accessibility requirements. Comparable evidence has been reported in other settings. An assessment of 56 primary health care centers in eastern Saudi Arabia found that centers occupying purpose-built government premises achieved a mean accessibility score of 83.2%, compared with 67.1% for centers operating in rented buildings (Yousef et al., 2023), a contrast that closely parallels the gap observed here between government-owned facilities and independent practices. This condition is consistent with the findings of Gréaux et al. (2023), who reported that accessibility barriers are often concentrated among smaller health care providers with limited resources and less stringent regulatory oversight. It is also consistent with the meta-synthesis conducted by Hashemi et al. (2022) across several low- and middle-income countries, which found that physical environmental barriers and limited facility financing repeatedly constrained access to small scale primary health care services.

The availability of services for persons with disabilities at public health centers was relatively high and showed the smallest urban–rural disparity among all types of health facilities. This pattern may reflect the position of public health centers as government-owned facilities that serve as the frontline of national health policy implementation, as stipulated in Minister of Health Regulation No. 43 of 2019 concerning Public Health Centers. It may also reflect the implementation of Law No. 8 of 2016, which mandates accessibility and reasonable accommodation, as well as the relatively standardized technical supervision provided by local health offices across regions compared with private facilities or independent practices. Nevertheless, the availability of services for persons with disabilities at public health centers has not yet been fully equitable. An exploratory qualitative study by Dwijuliasri and Pravitasari (2025) in four public health centers in Denpasar found that the implementation of disability inclusive public health centers remained constrained by shortages of health personnel, communication barriers with patients with disabilities, and limited space and funding. These findings help explain why service availability at public health centers, although relatively high, has not yet reached full coverage.

The relatively high proportion of “Do Not Know” responses for health laboratories should be interpreted cautiously. This pattern most likely reflects the lower frequency of direct household interaction with health laboratories compared with public health centers or hospitals, rather than simply indicating the absence of services for persons with disabilities. This finding highlights the limitation of the household perception-based indicator used in the 2023 Indonesian Health Survey, which differs from a direct physical accessibility audit

conducted by trained personnel. Mactaggart et al. (2024) showed that accessibility assessment instruments based on direct observation in primary health care facilities can identify physical barriers that often remain unnoticed by service users and household members. The national audit of 38,812 primary health care facilities in Brazil reported by Pinto et al. (2021) reinforces this point, since information accessibility, such as signage and communication support for persons with visual or hearing impairments, scored markedly lower than external physical accessibility; barriers of this kind are unlikely to be perceived at all by respondents who have not required such support. A related caution applies to the interpretation of perception-based measures more generally: Gimm and Ipsen (2022) found that rural and urban adults with disabilities differed significantly in perceived rather than in unmet need for care, indicating that such measures capture both the actual supply of services and the awareness of respondents. Therefore, combining household perception data with facility audit data in future studies would provide a more comprehensive understanding. WHO (2022) has also emphasized the importance of strengthening monitoring systems and generating more comprehensive data, including facility level data, to support the development of disability inclusive health policies.

Theoretically, these findings reinforce the understanding that access to health services for persons with disabilities is determined not only by the existence of national regulations, but also by the implementation capacity of service providers, which varies substantially according to facility ownership, type, and scale. In practical terms, policies aimed at improving the accessibility of health services for persons with disabilities should be differentiated by type of health facility rather than applied uniformly to large government-owned facilities and small independent practices. Integrating disability accessibility indicators into practice licensing requirements and accreditation standards for clinics and independent practices of health professionals, accompanied by incentive schemes or subsidies for accessibility retrofitting in rural primary health care facilities, may provide a viable policy option for reducing the disparities identified in this study. Strengthening the capacity of health professionals to communicate with and provide appropriate care for patients with disabilities is also essential, given that communication barriers and negative attitudes among health workers have been identified globally as important obstacles to health care access (Gréaux et al., 2023). This concern is further supported by Iezzoni et al. (2021), who found that some medical professionals continued to have limited understanding of the needs of patients with disabilities in clinical care. A global evidence synthesis by Rotenberg et al. (2022) indicates that disability training for health workers can improve knowledge, confidence, and attitudes, although such training is most effective when it is embedded within broader system-level reform rather than delivered as an isolated activity (Kuper et al., 2024).

From the perspective of Health Administration, this study contributes nationally representative quantitative equity mapping of the availability of inclusive health services for persons with disabilities across different types of health facilities and areas of residence. These findings may serve as an evidence base for planning licensing regulations, accreditation standards, and budget allocations aimed at improving the accessibility of health facilities. The weighted analytical approach used in this study, which accounted for the complex survey design, may also be replicated in subsequent cycles of the Indonesian Health Survey to monitor changes in equitable access to health services for persons with disabilities over time.

4. Conclusion

This study concludes that the availability of dedicated services for persons with disabilities in Indonesian health care facilities remains unequal across both areas of residence and facility types. All four types of health facilities examined, namely public health centers, clinics and independent practices of health professionals, health laboratories, and hospitals, showed significantly lower availability of services for persons with disabilities in rural areas than in urban areas. Hospitals had the highest level of service availability, whereas clinics and independent practices of health professionals had the lowest availability and the largest disparity between urban and rural areas. Public health centers demonstrated the smallest disparity among all types of health facilities.

This study contributes the first nationally representative quantitative mapping that integrates health facility type and urban and rural classification in assessing the availability of inclusive health services for persons with disabilities using data from the 2023 Indonesian Health Survey. Policy measures that may be considered include strengthening accessibility requirements in the licensing and accreditation of non government primary health care facilities, providing incentive schemes for accessibility retrofitting in rural health facilities, incorporating disability accessibility indicators into Minimum Service Standards and health facility accreditation systems, and improving the communication competencies of health professionals in providing services to persons with disabilities. Taken together, these results answer the research objective by showing which facility types and which areas are furthest from inclusive provision, and they supply disaggregated national baseline evidence for monitoring SDG 3 (Good Health and Well-Being) and SDG 10 (Reduced Inequalities) in Indonesia under the leave no one behind principle.

This study has several limitations. First, the indicator of service availability for persons with disabilities was based on household perceptions rather than direct physical audits of building accessibility. Consequently, the findings may be vulnerable to information bias, particularly for facilities with which households interact less frequently, such as health laboratories. Second, the cross-sectional design limits the ability of this study to draw causal conclusions regarding the determinants of service availability. Third, the dataset did not include other facility characteristics, such as building age, accreditation status, or maintenance budget, which may represent potential confounding factors that could not be controlled for in the analysis.

Future studies should complement household perception-based indicators with physical accessibility audit data collected at the facility level. Qualitative research is also needed to examine the specific barriers faced by clinics and independent practices of health professionals in providing inclusive services for persons with disabilities. In addition, trend analyses across successive cycles of the Indonesian Health Survey should be conducted to monitor changes in equitable access to health services for persons with disabilities in Indonesia over time.

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Conflicts of Interest

The authors declare no conflict of interest. Because this study received no external funding, no funding body had any role in the design of the study; in the collection, analysis, or interpretation of the data; in the writing of the manuscript; or in the decision to publish the results.

References

- Azizatunnisa', L., Probandari, A., Kuper, H., & Banks, L. M. (2025). Health insurance coverage, healthcare use, and financial protection amongst people with disabilities in Indonesia: Analysis of the 2021 National Socioeconomic Survey. *The Lancet Regional Health – Southeast Asia*, 39, 100631. <https://doi.org/10.1016/j.lansea.2025.100631>
- Badan Kebijakan Pembangunan Kesehatan, Kementerian Kesehatan Republik Indonesia. (2023). *Survei Kesehatan Indonesia (SKI) 2023*. <https://kemkes.go.id/id/survei-kesehatan-indonesia-ski-2023>
- Dassah, E., Aldersey, H., McColl, M. A., & Davison, C. (2018). Factors affecting access to primary health care services for persons with disabilities in rural areas: A “best-fit” framework synthesis. *Global Health Research and Policy*, 3(1), 36. <https://doi.org/10.1186/s41256-018-0091-x>
- Direktorat Jenderal Bina Konstruksi, Kementerian Pekerjaan Umum. (2025). *Leave no one behind at Indonesian construction*. <https://binakonstruksi.pu.go.id/publikasi/karya-tulis/leave-no-one-behind-at-indonesian-construction/>
- Dwijuliasri, K. A., & Pravitasari, P. R. (2025). Tantangan dan hambatan dalam implementasi puskesmas ramah disabilitas: Studi kualitatif eksploratif. *Jurnal Ilmu Kesehatan Bhakti Husada: Health Science Journal*, 16(2), 305–314. <https://doi.org/10.34305/jymgp698>
- Gimm, G., & Ipsen, C. (2022). Examining rural–urban disparities in perceived need for health care services among adults with disabilities. *Frontiers in Rehabilitation Sciences*, 3, 875978. <https://doi.org/10.3389/fresc.2022.875978>
- Gréaux, M., Moro, M. F., Kamenov, K., Russell, A. M., Barrett, D., & Cieza, A. (2023). Health equity for persons with disabilities: A global scoping review on barriers and interventions in healthcare services. *International Journal for Equity in Health*, 22, 236. <https://doi.org/10.1186/s12939-023-02035-w>
- Groenewegen, P. P., Kroneman, M., & Spreeuwenberg, P. (2021). Physical accessibility of primary care facilities for people with disabilities: A cross-sectional survey in 31 <https://journal.scitechgrup.com/index.php/jsi>

- countries. *BMC Health Services Research*, 21, 107. <https://doi.org/10.1186/s12913-021-06120-0>
- Harrison, J. A. K., Thomson, R., Banda, H. T., Mbera, G. B., Gregorius, S., Stenberg, B., & Marshall, T. (2020). Access to health care for people with disabilities in rural Malawi: What are the barriers? *BMC Public Health*, 20, 833. <https://doi.org/10.1186/s12889-020-08691-9>
- Hashemi, G., Wickenden, M., Bright, T., & Kuper, H. (2022). Barriers to accessing primary healthcare services for people with disabilities in low- and middle-income countries: A meta-synthesis of qualitative studies. *Disability and Rehabilitation*, 44(8), 1207–1220. <https://doi.org/10.1080/09638288.2020.1817984>
- Hasibuan, S. U., & Ayuningtyas, D. (2021). A literature review: Gambaran perwujudan Puskesmas ramah disabilitas pada beberapa wilayah di Indonesia. *Jurnal Medika Hutama*, 3(1), 1390–1399.
- Iezzoni, L. I., Rao, S. R., Ressler, J., Bolcic-Jankovic, D., Agaronnik, N. D., Donelan, K., Lagu, T., & Campbell, E. G. (2021). Physicians' perceptions of people with disability and their health care. *Health Affairs*, 40(2), 297–306. <https://doi.org/10.1377/hlthaff.2020.01452>
- Kuper, H., Aziztunnisa', L., Rodríguez Gatta, D., Rotenberg, S., Banks, L. M., Smythe, T., & Heydt, P. (2024). Building disability-inclusive health systems. *The Lancet Public Health*, 9(5), e316–e325. [https://doi.org/10.1016/S2468-2667\(24\)00042-2](https://doi.org/10.1016/S2468-2667(24)00042-2)
- Mactaggart, I., Ssemata, A. S., Menya, A., Smythe, T., Rotenberg, S., Marks, S., Bannink Mbazzi, F., & Kuper, H. (2024). Adapting and pilot testing a tool to assess the accessibility of primary health facilities for people with disabilities in Luuka District, Uganda. *International Journal for Equity in Health*, 23, 237. <https://doi.org/10.1186/s12939-024-02314-0>
- Mesmar, A., Limungi, G. M., Elmadani, M., Simon, K., Hamad, O., Tóth, L., Horvath, E., & Máté, O. (2025). Bridging healthcare disparities: A systematic review of healthcare access for disabled individuals in rural and urban areas. *Frontiers in Health Services*, 5, 1695320. <https://doi.org/10.3389/frhs.2025.1695320>
- Nopiah, R., & Wahyuni, H. (2022). Pengaruh asuransi kesehatan dan ekonomi terhadap aksesibilitas layanan kesehatan penyandang disabilitas di Indonesia. *Convergence: The Journal of Economic Development*, 3(2), 127–146. <https://doi.org/10.33369/convergence-jep.v3i2.22768>
- Ombudsman Republik Indonesia. (2022). *Hak pelayanan publik untuk penyandang disabilitas*. <https://ombudsman.go.id/artikel/r/pwkinternal--hak-pelayanan-publik-untuk-penyandang-disabilitas>
- Peraturan Menteri Kesehatan Republik Indonesia Nomor 43 Tahun 2019 tentang Pusat Kesehatan Masyarakat. (2019).
- Peraturan Menteri Pekerjaan Umum dan Perumahan Rakyat Nomor 14/PRT/M/2017 tentang Persyaratan Kemudahan Bangunan Gedung. (2017).
- Peraturan Pemerintah Republik Indonesia Nomor 42 Tahun 2020 tentang Aksesibilitas terhadap Permukiman, Pelayanan Publik, dan Perlindungan dari Bencana bagi Penyandang Disabilitas. (2020).
- Pinto, A., Köptcke, L. S., David, R., & Kuper, H. (2021). A national accessibility audit of primary health care facilities in Brazil – Are people with disabilities being denied their

-
- right to health? *International Journal of Environmental Research and Public Health*, 18(6), 2953. <https://doi.org/10.3390/ijerph18062953>
- Rotenberg, S., Rodríguez Gatta, D., Wahedi, A., Loo, R., McFadden, E., & Ryan, S. (2022). Disability training for health workers: A global evidence synthesis. *Disability and Health Journal*, 15(2), 101260. <https://doi.org/10.1016/j.dhjo.2021.101260>
- Smythe, T., & Kuper, H. (2024). The association between disability and all-cause mortality in low-income and middle-income countries: A systematic review and meta-analysis. *The Lancet Global Health*, 12(5), e756–e770. [https://doi.org/10.1016/S2214-109X\(24\)00042-1](https://doi.org/10.1016/S2214-109X(24)00042-1)
- Undang-Undang Republik Indonesia Nomor 8 Tahun 2016 tentang Penyandang Disabilitas. (2016).
- World Health Organization. (2022). *Global report on health equity for persons with disabilities*. <https://iris.who.int/handle/10665/364834>
- Yousef, L., Almatroodi, N., AlAngari, D., AlShehri, R., & Alshammari, S. (2023). Disability inclusion assessment in primary healthcare centers in Eastern Saudi Arabia: A way forward. *Journal of Medicine and Life*, 16(12), 1813–1817. <https://doi.org/10.25122/jml-2023-0385>

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