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# Utilisation and associated factors in public health centres in urban areas, Banten-Indonesia

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**Abstract**

**Background:** Public Health Centers (PHCs) in urban areas face various challenges, including competition from numerous other health facilities.
**Purpose:** To analyze the internal factors influencing the utilization of a PHC in Serang City, Banten.
**Method:** The study is analytical observational research with a cross-sectional design. The population includes individuals aged 14 and older residing within the PHC service area. Data on age, education level, employment, insurance ownership, availability of health workers, accessibility, and perception of illness were collected. The outcome measured was the utilization of PHC services, and data were analyzed descriptively.
**Results:** A total of 96 respondents participated in the study. Most respondents were male (49/51.0%), aged 14-44 (59/61.5%), had a senior high school education and higher (37/38.5%), worked in the formal sector (56/58.3%), had national insurance (78/81.3%), and held a positive perception of illness (86/89.6%). Additionally, the majority found PHC access easy (78/81.3%) and believed that the necessary health workers were available (78/81.3%). Statistical analysis revealed that education (p-value 0.00), employment (p-value 0.00), insurance ownership (p-value 0.00), availability of health workers (p-value 0.00), accessibility (p-value 0.00), and perception of illness (p-value 0.00) were all significantly related to PHC utilization.
**Conclusion:** To improve the development of more effective health policies, further studies are needed regarding the mechanisms behind the influence of these factors.

**Keywords: Public Health Centers; Urban Areas; Utilization.**

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## INTRODUCTION

Public Health Centers (PHCs) are one of the important elements in the primary health service system in many countries, including Indonesia. PHC must be able to provide services that are comprehensive, sustainable, affordable, and easily accessible to the community, to improve the overall health status of the population (Hogben, 2015; Roemer, 2012). In Indonesia, the Ministry of Health places PHC as the spearhead of health services at the basic level. PHC functions include promotive, preventive, curative, and rehabilitative health efforts. Therefore, the role of PHC is crucial in ensuring equitable health standards for all levels of society (Ministry of Health of the Republic of Indonesia, 2014).

In recent decades, rapid urbanization has changed urban communities' social and economic structure (Liu, Meng, Dobbs, Conner, Hyer, Li, & Gao, 2017). This requires PHC to adapt to an increasingly dynamic urban environment, where high population density, demographic diversity, and the challenges of infectious and non-communicable diseases are the main issues (Liu et al., 2017). PHCs in urban areas must be able to deal with this complexity by providing relevant services for urban communities, such as managing chronic diseases, reproductive health, and more intensive prevention and control of infectious diseases. Limited infrastructure, population density, and access that may be more difficult for some urban communities are also challenges that must be faced by PHC (Hailemariam, Genetu, & Sahile, 2020).

Several previous studies have revealed various factors that affect the use of PHC by the community. Research shows that physical accessibility, such as distance and ease of transportation to the health center, is one of the main determining factors for the use of this service (Abel, 2016). Meanwhile, other studies found that the education level and economic status of the community also played a role in influencing the use of PHC, where individuals with higher education levels tended to be more aware of the importance of primary health services (Basith, 2019).

High income in urban areas does not increase PHC utilization. Based on an initial survey conducted in the research field, it was found that some people do not use PHC because of the many choices of other health facilities available in the city. In addition, the limited facilities provided by PHC are also another reason why they choose other primary health facilities. As happened to a PHC in Serang City. There are 2 hospitals, 10 private practice midwives, 23 private practice doctors, 10 clinic units, and 1 maternity home in the work area of the PHC. Generally, people come to PHC if they need a referral letter for treatment at a higher health service facility. A similar pattern was also reported in another setting, such as Ethiopia. They reported that low public satisfaction with health services at PHC is due to ineffective services, incomplete facilities, and lack of health workers (Bobo, Woldie, Wordofa, Tsega, Agago, Wolde, & Yesuf, 2018). According to Andersen's behavioral model, the utilization of health facilities is influenced by predisposing, enabling, and need characteristics (Andersen, 2015). Knowing these characteristics is very important to improve the effectiveness and efficiency of health services in PHC. Understanding these factors not only helps formulate better health policies but can also increase public satisfaction with PHC services utilization. In the context of cities with high mobility and dynamism, understanding these factors is very important to ensure that PHCs can optimally function as primary health service providers (Cai, Mao, Xu, & Wu, 2015).

## RESEARCH METHOD

The research was carried out in the working area of a PHC in Serang City, Banten Province, Indonesia in July 2023. This research is an observational analysis with a cross-sectional approach. The population in this study is people who are domiciled in the PHC work area and are over 14 years old. Based

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on existing secondary data, the number of community members over 14 years old was 20.299 people. The sample was calculated based on the Lameshow formula and a sample of 96 people was obtained. Samples were taken by cluster random sampling technique in 3 villages located in the PHC work area. Respondents who were less than 14 years old and were not willing to be respondents were excluded from the study.

In addition to demographic data, the data taken represent the characteristics of predisposing, enabling, and need. The variables that represent the characteristics of predisposing are education and occupation. The variables that represent the enabling characteristics are insurance ownership, availability of health workers, and accessibility. The variable that represents the need characteristics is the disease susceptibility perception. The dependent variable that was explored was the use of health services at the PHC. The collected data was then analyzed in univariate and bivariate statistics. Univariate analysis uses frequency distribution, while bivariate analysis is performed using the Fisher Exact Test. Respondents' jobs are considered formal if they work at a Serang City health center, and informal if they work outside the Serang City health center. Respondents who have insurance are categorized as "yes" and those who do not have insurance are categorized as "no". Respondents who have health services are given the information "yes" and those who do not have are given the information "no". Accessibility is easily seen from flexible operating hours, clear service information, availability of drugs and equipment. While accessibility is difficult to see from limited service hours, unclear service information and inadequate supporting facilities. Negative Perception of Illness indicators are seen from lack of knowledge about disease symptoms, fear of stigma against certain diseases, expensive medical costs, complicated processes and flows and inadequate service quality. While positive Perception of Illness is seen from awareness of the importance of disease prevention, trust in the quality of services at health centers, good service quality, and affordable medical costs.

The research was carried out after obtaining the institution's permission and approval from the local ethics board on June 16, 2023 (No. Spem/5FH-AK/VI/2023). All respondents were informed about the purpose of the study and signed an informed consent before the data was taken.

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## RESEARCH RESULTS

**Table 1. Characteristics of Respondents (N=96)**

| Variable | Results |
|---|---|
| **Age (n/%)** | |
| **(Mean±SD)(Range)(Year)** | (41.5±16.0)(15-75) |
| 15-44 | 59/61.5 |
| 45-63 | 27/28.1 |
| 64-75 | 10/10.4 |
| **Gender (n/%)** | |
| Male | 49/51.0 |
| Female | 47/49.0 |
| **Education (n/%)** | |
| Low | 59/61.5 |
| High | 37/38.5 |
| **Occupation (n/%)** | |
| Formal sectors | 56/58.3 |
| Non-formal sectors | 40/41.7 |
| **Insurance ownership (n/%)** | |
| Yes | 78/81.3 |
| No | 18/18.7 |
| **Health service availability (n/%)** | |
| Yes | 78/81.3 |
| No | 18/18.7 |
| **Accessibility (n/%)** | |
| Easy | 78/81.3 |
| Difficult | 18/18.7 |
| **Perception of illness (n/%)** | |
| Positive | 86/89.6 |
| Negative | 10/10.4 |

Based on table 1, it is known that in the age group of 15-44 years (59/61.5%), the average age is 41.5 years, with a standard deviation value of 16.0, the youngest age is 15 years, and the oldest age is 75 years. Most of the respondents were men (49/51.0%), had a low education level (59/61.5%), had insurance (78/81.3%), and had a positive perception of illness (86/89.6%). Most of the respondents perceived that access to the PHC was easy (78/81.3%) and also considered that the expected health workers were available at the PHC (78/81.3%).

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**Table 2. Data Analysis (N=96)**

| Variable | PHC Utilization | | p-value |
|---|---|---|---|
| | Yes (N=50) | No (N=46) | |
| **Education level (n/%)** | | | |
| Low | 50/100.0 | 9/19.6 | 0.00* |
| High | 0/0.0 | 37/80.4 | |
| **Occupation (n/%)** | | | |
| Formal sectors | 10/20.0 | 46/100.0 | 0.00* |
| Non-formal sectors | 40/80.0 | 0/0.0 | |
| **Insurance ownership (n/%)** | | | |
| Yes | 50/100.0 | 28/60.9 | 0.00* |
| No | 0/0.0 | 18/39.1 | |
| **Health service availability (n/%)** | | | |
| Yes | 50/100.0 | 28/60.9 | 0.00* |
| No | 0/0.0 | 18/39.1 | |
| **Accessibility (n/%)** | | | |
| Easy | 50/100.0 | 28/60.8 | 0.00* |
| Difficult | 0/0.0 | 18/39.1 | |
| **Perception of illness (n/%)** | | | |
| Positive | 50/100.0 | 36/78.3 | 0.00* |
| Negative | 0/0.0 | 10/21.7 | |

Note: *) significant (p < α 0.05)

Based on table 2, respondents who choose to use PHC are 50 respondents with low education data (50/100.0%), work in the non-formal sector (40/80.0%), have insurance (50/100.0%), and perceive that the health service they seek is available (50/100.0%). This group also perceives that PHC accessibility is easy (50/100.0%), and has a positive perception of illness (50/100.0%). While respondents who did not use PHC were 46 respondents with high education data (37/80.4%), work in formal sector (46/100.0%), have insurance (28/60.9%) and perceive that the health service they seek is available (28/60.9%). This group also perceives that PHC accessibility is easy (28/60.9%), and has a positive perception of illness (36/78.3%).

Based on the results of the statistical test, it was found that the variables of education (p-value 0.00), employment (p-value 0.00), insurance ownership (p-

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value 0.00), perception of the availability of health workers (p-value 0.00), accessibility (p-value 0.00), and perception of the illness they suffer from (p-value 0.00) have a p-value smaller than α 0.05. Therefore, it can be concluded that education, employment, insurance ownership, availability of health workers, accessibility, and perception of illness have a significant impact on the utilization of health services in PHC.

## DISCUSSION

The percentage of utilization of PHC was obtained at 52.1%. This value is similar to the percentage of utilization of other PHCs in Indonesia (52%) (Souhaly, Arifin, Razak, Mallongi, Wadi, & Abadi, 2020). However, the percentage of utilization of this PHC is relatively lower when compared to the utilization rate of other PHCs in Indonesia which reaches 93.3 (Sandra, 2018). This is influenced by several factors, both internal and external. One of the models that can explain the utilization of health facilities is the Andersen model. Andersen's model explains that the use of health services is influenced by the components of predisposing, enabling, and a person's need for health services (Andersen, 2015).

Based on the results of data analysis, the predisposing factors that affect the use of PHC found in this study are education and employment. This follows previous research which stated that knowledge and education have a significant effect on the use of PHC (Banjarnahor, Andayani, & Aulia, 2023). The type of work turns out to affect people's behavior to take advantage of PHC. Formal jobs tend to prefer to use other primary health service facilities rather than PHC. Meanwhile, people who work in the non-formal sector are more likely to take advantage of PHC facilities. This finding is in line with another study in Central Java, Indonesia which reported that the non-working group tended to use PHC compared to the working group. Furthermore, this study also explains that socioeconomic status also affects the use of PHC. Low-socioeconomic-status people tend to utilize PHC compared to people with high socioeconomic status (Korachais, Macouillard, & Meessen, 2019).

The enabling factors of PHC utilization found in this study are insurance ownership, availability of health workers, and accessibility (Shen, He, Li, & Wu, 2020). This is following previous research that reported that access to PHC, the role of cadres, and health workers significantly affect the utilization of health centers in urban areas (Prihatiningsih, Sriatmi, & Fatmasari, 2020). Other similar research also found that insurance ownership has a significant effect on the use of PHC. However, this finding is different from other studies that state that insurance classes do not affect the utilization of the PHC program (Rahmawati, Suharsoyo, Munir, & Sudrajad, 2022). Slightly different from other countries, Indonesia's national insurance ownership is divided into three groups, the group whose premium payments are borne by the state (out-of-pocket, OOP), the group of independent premium payers, and the group of premium payers through companies or working institution. The difference in sources and methods of premium payment seems to affect people's behavior in utilizing PHC (Buor, 2014). There is a tendency for OOP groups and premium payers through institutions to take advantage of PHC and primary health facilities (Nam, Park, Chung, & Kim, 2020). Further studies are needed to examine the patterns of healthy-sick behavior of the community related to the differences in the sources and methods of payment of national insurance (Syamsuriah, 2019).

The need factors found in this study are the respondents' perception of disease. Most of the respondents have a positive perception of the disease. This means that they perceive that their illness can be cured, so they tend to seek treatment, one of which is to utilize PHC. This follows previous research that health conditions and disease susceptibility perception affect the utilization of PHC (Wanaka, Hussen, Alagaw, Tolosie, & Boti, 2020). This means that when a person suffers from a

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disease, he/she will perceive that the disease will have a bad effect if not immediately treated. The need to recover will lead someone to seek treatment. However, this does not necessarily make people take advantage of PHC. A study in rural Cambodia reported a phenomenon. The provision of subsidies for medical expenses at PHCs for the local poor is not accompanied by an increase in the use of PHCs. Local people still tend to use self-treatment or other alternative treatments even though they have to pay more (Wulandari, Laksono, Rohmah, & Ashar, 2023).

## CONCLUSION

Predisposing, enabling, and need characteristics are found in PHC utilization in an urban PHC. Education, employment, insurance ownership, availability of health workers, accessibility, and perception of illness are key factors influencing PHC utilization. Understanding these community characteristics can help optimize PHC development strategies to enhance service use in local populations. However, to improve the development of more effective health policies, further studies are needed regarding the mechanisms behind the influence of these factors.

## REFERENCES

Abel, A. (2016). Accessibility to Public Health Centres: The Case of the Urban and Rural Poor in Delta State, Nigeria. *Archives of Current Research International*, *3*(1), 1-9.

Andersen, R. M. (2015). Revisiting the behavioral model and access to medical care: does it matter?. *Journal of health and social behavior*, 1-10.

Banjarnahor, R., Andayani, L. S., & Aulia, D. (2023). Factors Influencing the Health Service Center Application for Hypertension Patients in Humbang Hasundutan Regency. *Randwick International of Social Science Journal*, *4*(2), 395-404.

Basith, Z. A. (2019). Faktor-Faktor yang Berhubungan Dengan Pemanfaatan Pelayanan Kesehatan Di Puskesmas Gayamsari Kota Semarang. *Universitas Negeri Semarang*.

Bobo, F. T., Woldie, M., Wordofa, M. A., Tsega, G., Agago, T. A., Wolde M. K., & Yesuf, E. A. (2018). Technical efficiency of public health centers in three districts in Ethiopia: two-stage data envelopment analysis. *BMC research notes*, *11*, 1-5.

Buor, D. (2014). Determinants of utilisation of health services by women in rural and urban areas in Ghana. *GeoJournal*, *61*(1), 89-102.

Cai, Y., Mao, Z., Xu, B., & Wu, B. (2015). Factors associated with traditional Chinese medicine utilization among urban community health centers in Hubei Province of China. *Asia Pacific Journal of Public Health*, *27*(2), NP2489-NP2497.

Hailemariam, S., Genetu, A., & Sahile, E. (2020). Mother's Satisfaction towards Childbirth Care at Public Health Centers in Bench-Maji Zone, Ethiopia: A Facility-Based Cross-Sectional Study. *International Journal of Reproductive Medicine*, *2020*(1), 6746459.

Hogben, G. H. (2015). Community Health Centres And Their Function. *The Journal of the Royal Institute of Public Health and Hygiene*, *8*(8), 198-204.

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DOI: https://doi.org/10.33024/minh.v7i10.504

Korachais, C., Macouillard, E., & Meessen, B. (2019). The impact of reimbursed user fee exemption of health centre outpatient consultations for the poor in pluralistic health systems: lessons from a quasi-experiment in two rural health districts in Cambodia. *Health policy and planning*, *34*(10), 740-751.

Liu, D., Meng, H., Dobbs, D., Conner, K. O., Hyer, K., Li, N., & Gao, B. (2017). Cross-sectional study of factors associated with community health centre use in a recently urbanised community in Chengdu, China. *BMJ open*, *7*(6), e014510.

Ministry of Health of the Republic of Indonesia. (2014). Peraturan Menteri Kesehatan Republik Indonesia Nomor 75 Tahun 2014 Tentang Pusat kesehatan Massyarakat. Accessed from: https://bappeda.pidiekab.go.id/media/2019.12/PERMENKES_NO_75_TAHUN_2014.pdf

Nam, K., Park, E., Chung, Y., & Kim, C. Y. (2020). Effects of the Out-of-pocket Payment Exemption in the Public Health Center on Medical Utilization of the Korean Elderly. *Journal of Preventive Medicine and Public Health*, *53*(6), 455.

Prihatiningsih, A., Sriatmi, A., & Fatmasari, E. Y. (2020). Determinant of Elderly Posyandu Utilization in Working Areas of Six Public Health Centers (Puskesmas) of Semarang City. *Jurnal Riset Kesehatan*, *9*(2), 88-93.

Rahmawati, E. S., Suharsoyo, D., Munir, M., & Sudrajad, M. (2022). The Effect of Prolanis Service Information and Timeliness on the Utilization of Prolanis at Jatirogo Public Health Center Tuban District. *Lux Mensana: Journal of Scientific Health*, 172-183.

Roemer, M. I. (2012). *Evaluation of community health centres*. World Health Organization. Retrived from: https://iris.who.int/bitstream/handle/10665/39771/WHO_PHP_48.pdf?sequence=1

Sandra, C. (2018). Penyebab Kejadian Kekurangan Energi Kronis Pada Ibu Hamil Risiko Tinggi Dan Pemanfaatan Antenatal Care di Wilayah Kerja Puskesmas Jelbuk Jember. *Jurnal Administrasi Kesehatan Indonesia*, *6*(2), 136-142.

Shen, M., He, W., Li, L., & Wu, Y. (2020). Comparison of health care utilization among users of public and private community health centres in urban China. *Family practice*, *37*(6), 738-743.

Souhaly, E. I., Arifin, M. A., Razak, A., Mallongi, A., Wadi, S., & Abadi, M. (2020). Factors Corresponded to Health Service Utilization of Chronic Disease Management Program (Prolanis) Patient in Health Center Lateri Ambon City Post-Earthquake. *Medico-Legal Update*, *20*(3).

Syamsuriah, S. (2019). Traditional Medical Systems in Handling Children Diseases Among Tolotang Community in Sidrap Regency South Sulawesi. *SEHATI ABDI*, *1*(01).

Wanaka, S., Hussen, S., Alagaw, A., Tolosie, K., & Boti, N. (2020). Maternal delays for institutional delivery and associated factors among postnatal mothers at public health facilities of Gamo zone, Southern Ethiopia. *International Journal of Women's Health*, 127-138.

Wulandari, R. D., Laksono, A. D., Rohmah, N., & Ashar, H. (2023). Regional differences in primary healthcare utilization in Java Region—Indonesia. *PLoS One*, *18*(3), e0283709.

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