






# Determinants of Access to Health Information on the Internet by Indonesian Women (2017 IDHS Analysis)

Andi Bungawati<sup>1\*</sup>, Saharudin Saharudin<sup>1</sup>, Hasanudin Hasanudin<sup>1</sup>, Kadar Ramadhan<sup>2</sup>, Taqwin Taqwin<sup>2</sup>, Nasrul Nasrul<sup>3</sup>, Fahmi Hafid<sup>4</sup>

<sup>1</sup>Department of Sanitation, Poltekkes Kemenkes Palu, Palu, Indonesia; <sup>2</sup>Department of Midwifery, Poltekkes Kemenkes Palu, Palu, Indonesia; <sup>3</sup>Department of Nursing, Poltekkes Kemenkes Palu, Palu, Indonesia; <sup>4</sup>Department of Nutrition, Poltekkes Kemenkes Palu, Palu, Indonesia

## Abstract

**BACKGROUND:** The internet is a valuable source of health information. Women use the internet more often to access health information than men.

**AIM:** This study aims to analyze determinants on women's access to health information through the internet in Indonesia.

**METHODS:** This study uses data from the 2017 Indonesian Demographic and Health Survey (IDHS). The sample includes 24,829 women aged 15–54 years. The independent variables include age, education, working status, ownership index, type, and area of residence. The dependent variable is the use of the internet to access health information. Data analysis with the Chi-square and binary logistics using the Stata application version 15.1.

**RESULTS:** Education level, age, wealth index, working status, type, and area of residence were found to influence the behavior of Indonesian women in searching for health information through the internet. Health information is sought more frequently by women who are younger, highly educated than older people and by those who have higher levels of wealth and status as working women. In addition, the search for health information is more often carried out in urban areas than in rural areas, and more in western Indonesia than in eastern Indonesia.

**CONCLUSION:** Access to health information by Indonesian women on the internet is influenced by determinant education level, age, wealth index, working status, type, and area of residence. Considering sociodemographic characteristics and differences, all women should have equal access to reliable health information.

**Edited by:** Ana Vucurevic  
**Citation:** Bungawati A, Saharudin S, Hasanudin H, Ramadhan K, Taqwin T, Nasrul N, Hafid F. Determinants of Access to Health Information on the Internet by Indonesian Women (2017 IDHS Analysis). Open Access Maced J Med Sci. 2022 Apr 21; 10(G):417-421. https://doi.org/10.3889/oamjms.2022.9019

**Keywords:** Determinant; Health information; Women  
**\*Correspondence:** Andi Bungawati, Department of Sanitation, Poltekkes Kemenkes Palu, Indonesia.  
E-mail: andibungawati638@yahoo.co.id

**Received:** 15-Feb-2022  
**Revised:** 01-Mar-2022  
**Accepted:** 11-Apr-2022

**Copyright:** © 2022 Andi Bungawati, Saharudin Saharudin, Hasanudin Hasanudin, Kadar Ramadhan, Taqwin Taqwin, Nasrul Nasrul, Fahmi Hafid

**Funding:** This research did not receive any financial support  
**Competing Interests:** The authors have declared that no competing interests exist

**Open Access:** This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

## Introduction

The internet is a valuable source of health information [1]. The internet is a widely used medium and a source of health-related information [2]. Many studies have shown that women use the internet more often to search for health-related information than men [3], [4], [5], [6]. Health literacy scores of women who use the internet as a source of health information are higher than men. In fact, it turns out that women are more health literate than men [7], [8]. In general, social media refers to a communication tool between people, where they can create, share, and exchange information on the internet. In addition, social media is also defined as a form of computer-mediated communication, such as e-mail and online conversations that allow users to exchange content through the internet [9]. By becoming an active information seeker, people have confidence in using information from the internet to make health decisions significantly related to health-related internet use [10].

A study in Turkey shows that 87.6% of people use the internet on a daily basis. Within the previous

3 months, 68.2% of the participants had utilized the internet to find health information [4]. In Ghana, shows that every day, 78.3% of active internet users and 67.7% of them use the internet to obtain health information [11], while research in Taiwan shows that 64.4% of respondents use the internet to obtain information or health services [12].

Studies in Turkey show that access to health information on the internet is influenced by age, gender, education level, place of residence, and frequency of internet use. Female gender, younger age, and higher education level access health information more often than males, younger than older people, and those with higher levels of education. It was found that those who used the internet more often had a higher tendency to seek health information [4]. Studies in Taiwan show that women aged between 20 and 44.9 years, with higher education level, married status, live in cities or urban districts and have high incomes, and access health information more on the internet than other women in Taiwan [12]. The absence of information related to the use of the internet by women in Indonesia with a large and representative sample is the background of this research.

This study aims to analyze the sociodemographic influence on women's access to health information through the internet in Indonesia.

## Methods

This study uses data from the Indonesian Demographic and Health Survey (IDHS) in 2017. The sample is 24,829 women aged 15–54 years. The independent variables in this study were age, education, working status, wealth index, type of area, and area of residence. The dependent variable is the use of the internet to access health information. This variable is a composite variable of the variables sm302f (listening to family planning on the internet), sm701ak (a source of knowledge about AIDS through the internet), and sm727bk (a source of knowledge about sexually transmitted infections [STIs] through the internet). If the respondent uses the internet to access one of them, then the category is “yes” for the variable using the internet to access health information.

Presentation of data with a frequency distribution of both univariable and bivariable. Data analysis uses statistical tests with the Chi-square analysis and binary logistics for multivariable analysis with complex sampling analysis. Data analysis uses the Stata application version 15.1.

## Results

The results showed that in general, women who became respondents in this study had sociodemographic

**Table 1: Distribution of respondents' sociodemographic characteristics**

Characteristics	n = 24,829	%
Age Group		
15–25	12,772	51.07
26–45	11,116	45.10
46–54	941	3.83
Education		
Primary	1,283	6.01
Secondary	15,163	64.58
Higher	8,383	29.41
Working Status		
Not working	10,495	42.64
Working	14,334	57.36
Wealth		
Poorest	2,336	6.85
Poorer	3,660	13.37
Middle	4,668	18.70
Richer	5,998	25.20
Richest	8,167	35.88
Residence		
Urban	16,849	65.20
Rural	7,980	34.80
Region of residence		
West of Indonesia	15,992	83.02
Middle of Indonesia	7,141	15.08
East of Indonesia	1,696	1.90

characteristics, namely, aged 15–25 years (51.07%) with a secondary education level (64.58%). Working status is 57.36%, with the richest wealth index at 35.58%. About 65.2% of respondents live in urban areas and 83.02% live in western Indonesia (Table 1). Respondents used the internet to access health information as much as 59.61%, mainly related to family planning (43.72%), access to information related to AIDS (40.84%), and related to STIs (15.68%) (Table 2).

**Table 2. Distribution of internet use for health information among Women in Indonesia**

Characteristics	n = 24829	%
Use of the internet to access health information		
No	10,139	40.39
Yes	14,690	59.61
Access information about family planning		
No	13,971	56.28
Yes	10,858	43.72
Access information about AIDS		
No	14,963	59.16
Yes	9,866	40.84
Access information about IMS		
No	21,115	84.32
Yes	3,714	15.68

The results of the bivariate analysis show that the factors related to internet use among women in accessing health information are age, education, working status, ownership index, type of area of residence, and area of residence. Women aged 15–25 years, highly educated, working status, richest, living in urban areas, and residing in western Indonesia are more likely to access health information (Table 3).

**Table 3: Sociodemographic distribution by use of the internet for health information among Women in Indonesia**

Variable	Internet use among Women in Health Information Access				p-value
	Not		Yes		
	N	%	n	%	
Age group					
15–25	5,320	40.01	7,452	59.99	<0,001
26–45	4,341	39.96	6,775	60.04	
46–54	478	50.40	463	49.60	
Education					
Primary	916	70.83	367	29.17	<0,001
Secondary	7,225	46.39	7,938	53.61	
Higher	1,998	20.98	6,385	79.02	
Occupation					
Not working	4,954	46.29	5,541	53.71	
Working	5,185	36.00	9,149	64.00	<0,001
Wealth					
Poorest	1,449	59.81	887	40.19	<0,001
Poorer	1,898	52.35	1,762	47.65	
Middle	2,114	45.45	2,554	54.55	
Richer	2,255	39.22	3,743	60.78	
Richest	2,423	30.40	5,744	69.60	
Residence					
Urban	6,202	36.72	10,647	63.28	<0,001
Rural	3,937	47.25	4,043	52.75	
Region of residence					
West of Indonesia	6,278	39.75	9,714	60.25	<0,001
Middle of Indonesia	3,012	42.32	4,129	57.68	
East of Indonesia	849	52.69	847	47.31	

The results of multivariate analysis showed that women aged 15–25 years accessed health information 2.9 times compared to women aged 46–54 years. Women with higher education have 7.3 times access to health information than women with basic education. Working women access health information 1.4 times than women who do not work. The richest women access health information 2.3 times than the poorest women. Women living in urban areas access health information

**Table 4: Multivariable analysis of internet use for health information by women in Indonesia**

Variables	p-value	AOR	(95% CI)	
			Lower	Upper
Age group				
15–25	<0.001	2.9	2.5	3.4
26–45	<0.001	2.1	1.8	2.5
46–54	Ref	1.0		
Education				
Primary	Ref	1.0		
Secondary	<0.001	2.5	2.1	2.9
Higher	<0.001	7.3	6.2	8.7
Occupation				
Not working	Ref	1.0		
Working	<0.001	1.4	1.3	1.5
Wealth				
Poorest	Ref	1.0		
Poorer	0.002	1.3	1.1	1.5
Middle	<0.001	1.6	1.4	1.8
Richer	<0.001	1.9	1.6	2.2
Richest	<0.001	2.3	2.0	2.6
Residence				
Urban	<0.001	1.2	1.1	1.3
Rural	ref	1.0		
Region of residence				
West of Indonesia	<0.001	1.8	1.4	2.2
Middle of Indonesia	<0.001	1.6	1.2	1.9
East of Indonesia	Ref	1.0		

1.2 times than women living in rural areas. Women living in Western Indonesia access health information 1.8 times than women living in Eastern Indonesia (Table 4).

## Discussion

The internet is part of the mass media, where the facts show that the mass media has a big role in people's lives [13]. Along with the advancement of communication and technology in recent years, the internet has become a source of health information [7]. The fact is that there is a lot of content on the internet that has a positive impact on one's life. Not only as a place to share and find information but the internet can also be a show for those who don't know where to go, the internet can also be a broad business platform, besides that the internet can also be a source of information and share health content. So indirectly, the internet can help someone to improve their health status [14]. In this study, we found that respondents used the internet to access health information quite high (59.61%), especially related to family planning (43.72%), access to information related to AIDS (40.84%), and related to STIs (15.68%).

Women in the world have used the internet to access health information to improve their health [15], [16], [17], [18], [19], [20], good for reproductive health [21], antenatal class [15], health of pregnant women [22], postpartum health [23], gynecological oncology [24], family planning [25], information on HIV/AIDS [17], sexual transmitted infection [26], [27], and information of nutrition and health [28]. Due to the many benefits of using the internet to provide women's health information, increasing access to health information in Indonesia needs to be expanded, especially in the fields of reproductive health, pregnant women's health, family planning, HIV/AIDS, and STIs.

As an example of using the internet to access health information for pregnant women, the Javanmardi study shows that the use of the internet by pregnant women is driven by the need for information, convenience, and speed of access and finding people with similar situations. Fetal development, symptoms, pregnancy complications, prenatal testing and nutrition, activities during pregnancy, and stages of labor are the most frequently mentioned topics. The benefits of using the internet include reducing anxiety, personal support, creating emotional connection, and increasing self-confidence [22].

In general, the results of this study indicate that young Indonesian women aged between 15 and 25 years, highly educated, working status, wealthiest, living in urban areas, and residing in western Indonesia are more likely to access health information. Women with higher education have access to health information 7.3 times than women with basic education.

In line with the Yildirim study that the age variable is one of the factors for someone to use the internet in accessing health information, younger internet users are more likely to seek medical knowledge online, but this group is also more critical in receiving information [7]. Spaderna's study also shows that young people have an interest and are very active in using the internet to obtain health-related information [29]. The Yigzaw study found that the use of web search engines to find health information decreased with age [3]. For those aged 20–34 years or young people, prioritizing the need for communication in accessing health information [20].

In this study, women with higher education had access to health information 7.3 times compared to women with basic education. This is in line with the Esmaelzadeh study which found that women with higher education levels access the internet more often [1]. Demirci's study also shows that access to health information on the internet is influenced by education level. Women with higher levels of education access health information more often than women with lower education [4]. Another study conducted by Hafeez found that education level has a major influence on knowledge about sexually transmitted diseases in women in Pakistan and in fact 40.6% of that knowledge was obtained from the internet [30].

Caralon's research on the use of the internet in web-based education programs can be useful as a web-based educational intervention for women in Australia with gestational diabetes mellitus. The Caralon study found that a standardized approach to education plus a web-based program resulted in excellent knowledge scores [31]. Chae JM's study shows that internet-based educational interventions affect maternal health status in terms of psychological, emotional, and physical health. Therefore, maternal health care professionals can benefit from distance education using internet or mobile-based interventions during the postpartum period [32].

The linkage of higher education, internet utilization, and barriers to housing type in rural areas can

be explained through the Sandhu study which shows that the quality and access of higher education can be improved using Internet facilities [33]. It is recommended that higher education policy makers provide higher education institutions with improved internet facilities and are accessible free of charge. Free access to universities can motivate female students to use the internet as an online learning practice. Policymakers can provide special internet facilities for students who wish to complete higher education. The internet can enable women to complete their education from home without worrying and still carry out other responsibilities at home.

In addition, education policy makers can increase the level of education among the rural population. For this, internet resources can be used. Governments and higher education policy makers are advised to provide internet facilities in rural areas that can solve the problems of traveling for rural residents, in which they face to attend colleges located in urban areas. In addition, the provision of good Internet facilities in rural areas can help rural students to access the latest learning materials from online sources. In this way, online learning facilities can open new learning gateways for rural female students.

Based on data from WeAre Social in collaboration with Hootsuite in 2018, the number of internet users reached 132 million people. This figure shows that half or more than 50% of the population can access the internet. Youth and the internet are two things that are very closely related. Jayaminagun's research found that young people's internet use in rural areas is rare with an average duration of 3.4 h per week, the media used are cellphones and school computers [34]. This information proves that attention in providing internet connection services for rural areas can be in the form of increasing connections and cheap internet [34]. To fulfill the need for internet access to enter rural areas and Eastern Indonesia, the government has launched an internet access program to enter villages. The internet program for villages is managed by the Ministry of Communication and Information (Kominfo) [35]. The development of internet access to all villages throughout Indonesia as an effort to support digital transformation in Indonesia [36].

Limitation of this study, analysis relies on secondary data from 2017 (about 5 years ago), which may vary in 2022 depending on current situations. The internet usage indicator is limited to three variables due to the use of secondary data: listening to family planning on the internet, a source of knowledge about AIDS through the internet, and a source of knowledge about sexually transmitted illnesses (STIs) through the internet.

## Conclusion

Education level, age, wealth index, employment status, type, and region of residence were found to affect

access to health information on the internet by Indonesian women. Health information searches are more common in urban areas than in rural areas, and more frequently in western Indonesia than in eastern Indonesia. Several factors influence their health information-seeking behavior on the internet. All women should have equal access to credible health information, considering their sociodemographic traits and differences.

## Acknowledgment

The authors thank Director of Health Polytechnic of Health Ministry Palu, Director General of Health Workers Ministry of Health, Director of Human Resources Ministry of Education and culture. Authors would like to express deepest gratitude to those who helped carry out the research and publication of this article.

## References

1. Esmaelzadeh S, Jahdi F, Haghani H, Esmaelzadeh Saeieh S. Access to internet and using for health information in women's that referred to health centers of universities in Tehran City. *Aust J Basic Appl Sci.* 2011;5(6):1204-8.
2. Kardas G, Daszyńska A, Koziarska-Rościszewska M. The internet as a source of health-related information among internet users in the Lodz region, Poland. *Fam Med Prim Care Rev.* 2017;3(3):221-4.
3. Yigzaw KY, Wynn R, Marco-Ruiz L, Budrionis A, Oyeyemi SO, Fagerlund AJ, *et al.* The Association between Health Information Seeking on the Internet and Physician Visits (The Seventh Tromsø Study - Part 4): Population-Based Questionnaire Study. *J Med Internet Res.* 2020;22(3):e13120. <https://doi.org/10.2196/13120> PMID:32134387
4. Demirci Ş, Uğurluoğlu Ö, Konca M, Çakmak C. Socio-demographic characteristics affect health information seeking on the Internet in Turkey. *Health Inf Libr J.* 2021;38(4):304-12. <https://doi.org/10.1111/hir.12358> PMID:33524222
5. Seçkin G. Expansion of Parson's sick role into cyberspace: Patient information consumerism and subjective health in a representative sample of U.S. internet users. *Soc Sci Med.* 2020;247:112733. <https://doi.org/10.1016/j.socscimed.2019.112733> PMID:31981818
6. Bidmon S, Terlutter R. Gender Differences in Searching for Health Information on the Internet and the Virtual Patient-Physician Relationship in Germany: Exploratory Results on How Men and Women Differ and Why. *J Med Internet Res.* 2015;17(6):e156. <https://doi.org/10.2196/jmir.4127> PMID:26099325
7. Yildirim F, Çakir M. Are adult women or men who use the internet as a health information resource more health literate? In: *Handbook of Research on Advancing Health Education through Technology.* Turkey: Ankara University; 2016. p. 114-38.
8. Kristina SA, Ekasari MP, Wati MR. Internet use for searching information on health and medicine: An exploratory study among

- Indonesian customers. *Res J Pharm Technol.* 2019;12(12):5927.
9. Collins FM. *The Relationship between Social Media and Empathy.* Statesboro: Georgia Southern University; 2014.
  10. Bender JL, Feldman-Stewart D, Tong C, Lee K, Brundage M, Pai H, et al. Health-related internet use among men with prostate cancer in Canada: Cancer registry survey study. *J Med Internet Res.* 2019;21(11):e14241.
  11. Osei Asibey B, Agyemang S, Boakye Dankwah A. The internet use for health information seeking among Ghanaian University students: A cross-sectional study. *Int J Telemed Appl.* 2017;2017:1-9. <https://doi.org/10.1155/2017/1756473>
  12. Koo M, Lu MC, Lin SC. Predictors of internet use for health information among male and female internet users: Findings from the 2009 Taiwan National Health Interview Survey. *Int J Med Inform.* 2016;94:155-63. <https://doi.org/10.1016/j.ijmedinf.2016.07.011> PMID:27573323
  13. Setianti Y, Hafiar H, Damayanti T. Media informasi kesehatan reproduksi bagi remaja disabilitas tunagrahita di Jawa Barat. *J Kaji.* 2019;7(2):170-83.
  14. Nur L. Gambaran Penggunaan Internet dalam Mencari Informasi Kesehatan Pada Siswa Sekolah Menengah Pertama (SMP) X. *J Promkes Indones J Health.* 2018;6(2):188-200. <https://doi.org/10.20473/jpk.V6.I2.2018.188-200>
  15. Lima-Pereira P, Bermúdez-Tamayo C, Jasienska G. Use of the internet as a source of health information amongst participants of antenatal classes. *J Clin Nurs.* 2012;21(3-4):322-30. <https://doi.org/10.1111/j.1365-2702.2011.03910.x> PMID:22093043
  16. Licciardone JC, Smith-Barbaro P, Coleridge ST. Use of the internet as a resource for consumer health information: Results of the second osteopathic survey of health care in America (OSTEOSURV-II). *J Med Internet Res.* 2001;3(4):e31. <https://doi.org/10.2196/jmir.3.4.e31> PMID:11772546
  17. Kalichman SC, Cherry C, Cain D, Weinhardt LS, Benotsch E, Pope H, et al. Health information on the internet and people living with HIV/AIDS: Information evaluation and coping styles. *Health Psychol.* 2006;25(2):205-10. <https://doi.org/10.1037/0278-6133.25.2.205> PMID:16569112
  18. Delić D, Polašek O, Kern J. Internet health-information seekers in Croatia—who, what, and why? *Med Inform Internet Med.* 2006;31(4):267-73. <https://doi.org/10.1080/14639230600991726> PMID:17135059
  19. Jo HS, Hwang MS, Lee H. Market segmentation of health information use on the internet in Korea. *Int J Med Inform.* 2010;79(10):707-15. <https://doi.org/10.1016/j.ijmedinf.2010.07.006> PMID:20810307
  20. Magnezi R, Grosberg D, Novikov I, Ziv A, Shani M, Freedman LS. Characteristics of patients seeking health information online via social health networks versus general Internet sites: A comparative study. *Inform Health Soc Care.* 2015;40(2):125-38. <https://doi.org/10.3109/17538157.2013.879147> PMID:24475937
  21. Ibegbulam IJ. Use of the internet as a source for reproductive health information seeking among adolescent girls in secondary schools in Enugu, Nigeria. *Health Info Libr J.* 2018;35(4):298-308. <https://doi.org/10.1111/hir.12242> PMID:30426642
  22. Javanmardi M. Internet usage among pregnant women for seeking health information: A review article. *Iran J Nurs Midwifery Res.* 2018;23(2):79-86. [https://doi.org/10.4103/ijnmr.IJNMR\\_82\\_17](https://doi.org/10.4103/ijnmr.IJNMR_82_17) PMID:29628953
  23. Cumming GP. The future of post-reproductive health – The role of the internet, the Web, information provision and access. *Post Reprod Health.* 2016;22(3):123-30.
  24. Lawrentschuk N. Health information quality on the internet in gynecological oncology: A multilingual evaluation. *Eur J Gynaecol Oncol.* 2016;37(4):478-83. PMID:29894070
  25. Fehring RJ, Schneider M, Raviele K, Rodriguez D, Pruszynski J. Randomized comparison of two Internet-supported fertility-awareness-based methods of family planning. *Contraception.* 2013;88(1):24-30. <https://doi.org/10.1016/j.contraception.2012.10.010> PMID:23153900
  26. Brown MJ, Pugsley R, Cohen SA. Meeting sex partners through the internet, risky sexual behavior, and HIV testing among sexually transmitted infections clinic patients. *Arch Sex Behav.* 2015;44(2):509-19. <https://doi.org/10.1007/s10508-014-0463-3> PMID:25567074
  27. Logie CH, Navia D, Loutfy MR. Correlates of a lifetime history of sexually transmitted infections among women who have sex with women in Toronto, Canada: Results from a cross-sectional internet-based survey. *Sex Transm Infect.* 2015;91(4):278-83. <https://doi.org/10.1136/sextrans-2014-051745> PMID:25477474
  28. Fassier P. Seeking health- and nutrition-related information on the internet in a large population of French adults: Results of the NutriNet-Santé study. *Br J Nutr.* 2016;115(11):2039-46. <https://doi.org/10.1017/S0007114516001355> PMID:27081008
  29. Spaderna H, Sieverding M. Who makes use of Internet-delivered health information? The role of gender role self-concept in young men and women. *Psychol Health Med.* 2015;20(2):247-53. <https://doi.org/10.1080/13548506.2014.915330> PMID:24810670
  30. Hafeez T, Ahmed Y, Ahmad M. Awareness about sexually transmitted diseases in women related to their age, education and income. *J Pak Med Assoc.* 2022;71(12):2842-6. <https://doi.org/10.47391/JPMA.2036> PMID:35150559
  31. Carolan-Olah M, Sayakhot P. A randomized controlled trial of a web-based education intervention for women with gestational diabetes mellitus. *Midwifery.* 2019;68:39-47. <https://doi.org/10.1016/j.midw.2018.08.019> PMID:30343264
  32. Chae JM, Kim HK. Maternal health effects of internet-based education interventions during the postpartum period: A systematic review. *J Korean Acad Community Health Nurs.* 2021;32(1):116.
  33. Sandhu SK. Women and Rural People's Participation in Tertiary Education through Internet Resources in India: A Narrative Inquiry. *ASCILITE 2017 - Conference Proceedings - 34<sup>th</sup> International Conference of Innovation, Practice and Research in the Use of Educational Technologies in Tertiary Education*; 2019. p. 393-9.
  34. Jayawinangun R, Nugraha YA. *Penggunaan Internet Dan Media Sosial Orang Muda di Pedesaan.* Wahana; 2018. Available from: <https://repository.unpak.ac.id/tukangna/repo/file/files-20190206184218.pdf> [Last accessed on 2022 Jan 11].
  35. Rahmayani I. *Internet Masuk Desa: Dukung Usaha Nelayan.* Kementerian Komunikasi Dan Informatika Republik Indonesia. 2015. p. 1. Available from: [https://kominfo.go.id/index.php/content/detail/6306/INTERNET+MASUK+DESA%3A+Dukung+Usaha+Nelayan/0/sorotan\\_media](https://kominfo.go.id/index.php/content/detail/6306/INTERNET+MASUK+DESA%3A+Dukung+Usaha+Nelayan/0/sorotan_media). [Last accessed on 2022 Feb 10].
  36. Surry K, Santoso B. *Kominfo Percepat Bangun Akses Internet Di Seluruh Desa.* Antara News; 2021. p. 1. Available from: <https://www.antaranews.com/berita/2006169/kominfo-percepat-bangun-akses-internet-di-seluruh-desa>. [Last accessed on 2022 Feb 10].