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Healthcare utilization and barriers to use among ethnic minority populations: looking at Indigenous women in West Papua

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ABSTRACT

Background: Ethnic minority populations have lower rates of healthcare utilization than ethnic majority populations.
Purpose: This paper explores healthcare utilization by Indigenous West Papuan women and explains said utilization within the prominent barriers to healthcare utilization observed in ethnic minority populations globally.
Method: Secondary data analysis was conducted using Demographic and Health Surveys (DHS) data collected in Indonesia in 2017, with the use of migration status as a proxy for ethnic minority status in Western Guinea.
Results: Indigenous women in Western Guinea are less likely to use skilled health services than non-Indigenous women. There are multiple reasons for this, which can be understood within the four prominent barriers to healthcare utilization observed in ethnic minority populations globally (financial access to health services, physical access to health services, the behavior and cultural competency of health service providers, and the quality of care provided). Indigenous women were more likely than non-Indigenous women to report having problems getting money for treatment [chi2 = 38.0572; p-value = 0.00].
Conclusion: Barriers to healthcare utilization operate systemically and reproductively to force ethnic minority populations into a state of lower socioeconomic status and health outcomes. The incorporation of anti-racist foundations in health service provision is necessary to ensure the right to health for ethnic minority populations and for the successful fulfillment of the third Sustainable Development Goal (SDG).

KEY WORDS Healthcare, utilization, ethnic minorities, indigeneity

INTRODUCTION

Ethnic minority populations have been shown to have lower rates of healthcare utilization than ethnic majority populations [1]. Bridging this utilization gap will be crucial for the successful completion of health coverage, access, quality, and protection targets outlined in the third Sustainable Development Goal published by the United Nations [2]. Experts estimate that ethnic minority groups compose approximately 10% to 20% of the

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world population, making an estimated 775,300,000 to 1,550,600,000 people[1] vulnerable to the factors which prevent ethnic minority groups' full utilization of health care services [3, 4].

Upon a narrative review of seventeen sources examining healthcare utilization by ethnic minority populations, four prominent barriers to health care utilization were identified. These barriers are physical access to healthcare services, financial access to healthcare services, the behavior and cultural competency of healthcare providers, and the quality of healthcare services. Of these barriers, the most prominent was physical access to healthcare services. In general, the further away a healthcare facility is, the less likely one is to use the services offered there [11, 19-21]. Poor infrastructure, which includes rugged terrain, poorly maintained roads, and a lack of public transportation facilities, also contributes to physical barriers to health service use by ethnic minority populations [7, 8, 11, 12, 14, 17, 18, 21]. When physical access barriers, such as distance to public health facilities and poor infrastructure, pose a barrier to seeking care, patients often seek closer, privately provided care, which makes these patients vulnerable to the higher costs associated with private sector care.

TABLE I. RESULTS OF LITERATURE REVIEW

Barrier	Number of publications exploring this issue	% of sources	Sources
Financial access to health services	12	70.59%	7-18
Physical access to health services	14	82.35%	7-9, 11-15, 17-22
Cultural competency and behavior of hospital staff	9	52.94%	8, 11, 12, 13, 14, 17, 18, 22, 23
Perceived quality of public/government services	5	29.41%	8-10, 13, 17
Knowledge of health issues and/or services and benefits	5	29.41%	9, 14, 17, 18, 23
Supply issues within health services	6	35.29%	8, 10, 12, 13, 17, 22
Inadequate quality and availability of care	9	52.94%	8, 10, 12-14, 17, 18, 22, 23
Preference for traditional care and/or providers	3	17.65%	9, 12, 18
Negative feelings associated with seeking care	2	11.76%	18, 23
Language fluency	4	23.53%	9, 12, 15, 22
Religion/Ethnicity	3	17.65%	19-21
Low literacy/education level and school attendance	3	17.65%	14, 19, 20
Poor socioeconomic status	3	17.65%	15, 19, 20
Cultural factors related to the need or preference to seek care	4	23.53%	7, 18, 19, 23

The cost of private sector care presents a barrier to ethnic minority populations seeking healthcare. Private sector care has been identified by some ethnic minority populations as preferable to public sector care, even though the direct costs of receiving privately provided care are higher than those incurred when seeking publicly provided care [8, 10, 13, 17]. Despite the barriers that the direct costs of private care can pose, the low cost of public care mitigates some of the impact of direct healthcare costs on ethnic minority populations. Overall, the indirect costs of healthcare pose a larger barrier to receiving care than the direct costs [7-14, 15, 18]. Indirect costs of care may be incurred through the cost of transportation to the health facility, food and accommodation for the person accompanying the patient, and the opportunity cost of missing work to visit the facility.

TABLE II. FOUR MOST PROMINENT ISSUES HIGHLIGHTED IN PUBLICATIONS

Factor	Number of publications exploring this issue	% of sources
Financial access to health services	12	70.59%
Physical access to health services	14	82.35%
Cultural competency and behavior of hospital staff	9	52.94%
Quality and availability of care	9	52.94%

The indirect costs of seeking public care, coupled with other barriers, contribute to patients' use of private care despite the higher direct costs. One additional barrier contributing to this is the behavior and cultural competency of public providers. In one case, study participants from the Kattunayakan tribe in Wayanad District, Kerala, India, actively sought out more costly private care as an alternative to public care because the private providers were more respectful toward them [17]. Overall, the manner in which public healthcare providers treat the ethnic minority populations in their care operates as an important determinant in how those populations seek care.
The perceived quality of care provided in public healthcare facilities was a prominent barrier to seeking care for ethnic minority populations. In general, public sector facilities are seen as providing a lower quality of care than private sector facilities. This can deter these populations from seeking care at public facilities and they often prefer private sector care and seek it out when they are willing and able to do so.

The state of healthcare utilization among ethnic minority populations remains suboptimal, with numerous barriers inhibiting the use of both public and private healthcare facilities. In addition to reviewing the existing literature on healthcare utilization by ethnic minority populations, this study aims to explore the healthcare utilization of a specific ethnic minority population: the Indigenous people of Western Guinea, Indonesia.
The western half of the island of New Guinea, which includes both Papua and West Papua provinces of Indonesia, is home to a large ethnic minority population. This population is the West Papuan people, and they refer to the entire western half of the island as West Papua, despite its separation into two Indonesian provinces. To respect Indigenous naming of themselves and their land, while ensuring academic clarity, this study will refer to the West Papuan people as West Papuan but the land as Western Guinea, so that the results are not confused for those from West Papua province.

While this Indigenous population accounts for a small percent of the Indonesian population, they were previously the majority population in Western Guinea – now, however, the government-sponsored relocation of Indonesian residents that followed the incorporation of Western Guinea into Indonesia has resulted in an even split of Indigenous and non-Indigenous inhabitants [5]. Indigenous Western Guineans have also been exposed to ongoing conflict during this time, resulting in the death of approximately 500,000 Indigenous West Papuans since 1963 [6]. This exposure to violence, human rights abuses, and other forms of discrimination are all social factors which could influence the uptake of health care services in ethnic minority populations.

There is currently a gap in the literature exploring the barriers to healthcare utilization of populations currently facing ethnic or other forms of endemic conflict. This paper aims to bridge this gap by examining the health care

utilization of Indigenous women in Western Guinea in comparison to non-Indigenous residents of Western Guinea. Then, this data will be analyzed to investigate the prominent barriers to healthcare utilization faced by ethnic minority populations. Finally, recommendations based on this analysis will be developed to illustrate further action to support the healthcare utilization of ethnic minority populations.

MATERIALS AND METHODS

Secondary Data Analysis

To analyze healthcare utilization by ethnic minority populations in Western Guinea, a secondary analysis of Demographic and Health Survey (DHS) data collected in Indonesia in 2017 was conducted. This survey was conducted by Statistics Indonesia (BPS). DHS uses a two-stage cluster sampling method, in which Enumeration Areas (EA) are drawn from Census files and, for each selected EA, a sample list of households is drawn from an updated list of households. The survey is administered through questionnaires in Bahasa Indonesia and English– although four total questionnaires were administered, this study analyzed the Individual (Women's) Questionnaire. The questionnaire was administered to women ages 15-49, with a total of 49,627 respondents in this study population.

Due to limitations in data availability and collection in Western Guinea, specifically a lack of data on ethnic group and Indigeneity in Indonesian DHS surveys, this study developed proxy populations which could be used to represent the ethnic minority population in Western Guinea. Through an understanding of the historical and contemporary demographic context of Western Guinea, the selected proxy populations were migrant and non-migrant inhabitants. Given that 50% of the population is Indigenous, and the other 50% is Indonesian migrants, a migrant population was determined to be the best possible proxy population for the Indonesian migrant population, and the non-migrant population would be the best possible proxy population for the Indigenous population.

Coding

Although the DHS standard recode eliminated much of the need to recode individual variables for this analysis, it was necessary to isolate the migrant and non-migrant populations. I used two variables to do this: province of previous residence (V105A) and de jure (or, by law) region of usual residence (V139). Respondents who noted that their province of previous residence was the same as their de jure region of usual residence and those who did not indicate a province of previous residence were coded as non-migrants. Respondents who noted that they were stateless (not a de jure resident), that their province of previous residence was foreign or other, or that their province of previous residence was different than their province of previous residence were coded as migrants. There are significant limitations to using these coded populations as proxy populations for the ethnic minority and ethnic majority populations in Western Guinea. One of the most significant limitations is that transmigration programs have been happening for decades, and those being coded as non-migrants and used as a proxy for the Indigenous population in this analysis may be subsequent generations of early transmigrants. Thus, there may be respondents serving as a proxy for the Indigenous population that are not Indigenous.

In addition to creating variables for the migrant and non-migrant populations, this study created a Western Guinea variable to represent the conflict-defined region of West Papua, which includes West Papua and Papua provinces of Indonesia, based on the relevance of the ongoing conflict in Western Guinea for ethnic minority populations in the region.

Upon isolating the migrant and non-migrant populations, a chi-square test for independence was used to understand the significance of the relationship between migration status and selected health care utilization variables and demographic variables in Western Guinea (Tables 3 and 4).

TABLE III. CALCULATIONS OF THE SIGNIFICANCE OF THE RELATIONSHIP BETWEEN MIGRATION STATUS AND DEMOGRAPHIC VARIABLES

Factor	Significance	Pearson chi2	p-value
Wealth index	Yes	145.8231	0.00
Education level	Yes	41.4345	0.00
Number of children born	Yes	57.4459	0.00
Health insurance coverage	No	.7088	.400

TABLE IV. CALCULATIONS OF THE SIGNFICANCE OF THE RELATIONSHIP BETWEEN MIGRATION AND HEALTHCARE UTILIZATION VARIABLES

Factor	Significance	Pearson chi2	p-value
Last source visited to obtain modern contraception	Yes	28.4386	0.00
Reason for not using contraceptives			
Lack of access/too far	No	.1082	.742
Cost	No	1.8584	.173
Reason for discontinuing contraceptives	No	3.4766	.176
Prenatal care provider			
General practitioner	No	.0150	.903
Obstetrician	Yes	17.3704	0.00
Nurse	Yes	8.9872	.003
Midwife	Yes	14.3026	0.00
Village midwife	No	1.9294	.165
Other person/TBA	Yes	9.5813	.002
No one	Yes	13.8464	0.00
Place of delivery	Yes	51.6632	0.00
Delivery provider			
General practitioner	No	.1661	.684
Obstetrician	Yes	6.6116	.010
Nurse	Yes	4.6255	.032
Midwife	Yes	22.0287	0.00
Village midwife	No	.0065	.936
Other person/TBA	No	.4845	.486
Friend/relative	Yes	27.4891	0.00
Other	No	.6307	.427
No one	No	2.816	.093
Problems with getting help for self			
Getting money for treatment	Yes	38.0572	0.00
Distance to health facility	Yes	28.5705	0.00
Place where antenatal care was received			
Respondent's home	No	.8420	.359
Other's home	No	.4417	.506
UKBM: village health post	No	2.0590	.151
UKBM: health post	No	.0095	.922
Government hospital	No	.6785	.410
Public clinic	No	1.9198	.166
Public health center	No	.2691	.604
Public mobile clinic	Yes	7.9014	.005
Public village midwife	No	1.0703	.301
Private hospital/maternity home	Yes	4.3608	.037
Private clinic/maternity home	No	.8930	.345
Private obstetrician	Yes	5.1541	.023
Private general practitioner	No	.0013	.972
Private midwife	Yes	7.4210	.006

RESULTS

Demographics

There were 1,229 women in the study population for this analysis. The mean age of respondents was 30.53 years and the mean number of children born to each respondent was 2.11. Upon analyzing the associations between selected demographic variables and migration status, the non-migrant population was significantly more likely to have a lower wealth index than the migrant population [chi2 = 145.8231; p-value = 0.00]. The non-migrant population was also significantly more likely to have a lower highest level of education [chi2 = 41.4345; p-value = 0.00] and birth more children than the migrant population [chi2 = 57.4459; p-value = 0.00].

Health Service Utilization Variables

There was a significant association between migration status and the last source visited to obtain modern contraception [chi2 = 28.4386; p-value = 0.00]. Non-migrants were more likely than migrants to have visited a government clinic or pharmacy, while there was a greater proportion of the migrant population which sought private sector care. There were no significant associations between migrant status and the reasons for discontinuing contraceptives [chi2 = 3.4766; p-value = .176] – additionally, cost [chi2 = 1.8584; p-value = .173] and lack of access [chi2 = .1082; p-value = .742] were not significant barriers to accessing contraception.

The non-migrant population was significantly less likely to receive antenatal care from a private obstetrician [chi2 = 5.1541; p-value = 0.023], a private midwife [chi2 = 7.4210; p-value = .006], or a private maternity home [chi2 = 4.3608; p-value = .037], and was significantly more likely to receive antenatal care from a public mobile clinic [chi2 = 7.9014; p-value = .005] than the migrant population. The migrant population was significantly more likely than the non-migrant population to receive prenatal care from an obstetrician [chi2 = 17.3704; p-value = 0.00], midwife [chi2 = 14.3026; p-value = 0..00], or nurse [chi2 = 8.9872; p-value = .003], while the non-migrant population was significantly more likely to receive prenatal care from a traditional birth attendant [chi2 = 9.5813; p-value = .002] or no one [chi2 = 13.8464; p-value = 0.00].

There was a significant association between migration status and place of delivery [chi2 = 51.6632; p-value = 0.00]. A greater proportion of the non-migrant population delivered children in their own homes (52.36% vs. 25.55%). A lower proportion of the non-migrant population delivered in private sector facilities or with a private sector provider than the migrant population (4.38% vs. 17.52%). The non-migrant population was significantly less likely to receive delivery care from an obstetrician [chi2 = 6.6116; p-value = .010], a nurse [chi2 = 4.6255; p-value = .032], or a midwife [chi2 = 22.0287; p-value = 0.00], and was significantly more likely to receive delivery care from a friend or relative [chi2 = 27.4891; p-value = 0.00].

Non-migrants were also significantly more likely to experience some barriers to getting medical help for themselves than the migrant population. They were significantly more likely than the migrant population to say that treatment cost [chi2 = 38.0572; p-value = 0.00] and the distance to the health facility [chi2 = 28.5705; p-value = 0.00] were barriers to getting medical help.

DISCUSSION

Interpretation

Currently, there is a paucity of literature on health care utilization by ethnic minorities, especially those currently experiencing ethnic or other forms of endemic conflict. This absence of literature, however, does not indicate an absence of need – this analysis demonstrates that ethnic minority populations around the world face significant barriers to accessing health services. Through an analysis of the healthcare utilization of Indigenous women in West Papua, this analysis contributes important information on the overarching barriers experienced by a population facing ongoing ethnic conflict and how they reflect the common experiences of ethnic minority populations worldwide.

The existing literature demonstrates that the largest barriers to healthcare among ethnic minority populations are physical and financial access to health services, followed by the behavior and cultural competency of health service staff. The quality and availability of care are also a prominent barrier to accessing care. These, however, are not the only barriers that these populations face, only the most prominent. It will be important for future research to discern additional barriers to health care utilization to inform targeted interventions for health.
In Western Guinea, the non-migrant population was significantly more likely to be at a socioeconomic disadvantage than the migrant population, as indicated by their significantly lower wealth indices and education levels. These lower values likely contribute to the barriers that the non-migrant population experiences in utilizing quality health care. Cost was a barrier for non-migrants utilizing health services in Western Guinea, similar to the trends seen in other ethnic minority populations analyzed in the literature review. Non-migrant people were also more likely overall to use public health services rather than private health services and they were also more likely to visit less-skilled care providers.

Implications

As shown, ethnic minority populations face significant socioeconomic disparities which limit their utilization of the health system in situations where using health services is indicated. They also face geographic disparities, including limited access to public transportation and well-maintained roads and large distances to health centers

which further exacerbate inequity in the utilization of health services. These results are supported by data collected from Indigenous populations in North American, Australian, and New Zealand. Indigenous people in these regions were significantly less likely to utilize health care services because of rural location, communication, and socio-economic barriers [1].

The non-migrant population in Western Guinea, which serves as a proxy for the Indigenous population, represents an ethnic minority population that experiences cost-related barriers to utilizing health care services. This, however, is a barrier which operates within the historical context of the population – it is important to address these conditions which may further contribute to lower rates of healthcare utilization among the non-migrant population in Western Guinea. Decades-long ethnic conflict supplemented with government-sponsored transmigration programs has not only resulted in the further minorization of the Indigenous population but has also introduced inequity by providing transmigrants with benefits and preferential treatment not made available to non-migrants (minorityrights.org, 2018).

The sizable proportion of studies which discuss the cultural incompetency or undesirable behavior of health service providers as a barrier to utilizing health services demonstrates that ethnic minority populations face barriers to care for simply being part of an ethnic minority population – this is an example the racial bias within the health workforce and the impacts it has on racial and ethnic minorities globally. This result is supported by data collected in the United States which demonstrates that ethnic minority populations were significantly more likely to report being looked down upon or being treated with disrespect by their health care providers than non-minority populations [24].

Barriers to health care utilization operate systemically and reproductively, with the existence of one barrier perpetuating the existence of others, forcing ethnic minority populations into a persistent state of lower socioeconomic status and poor health outcomes. It is apparent that physical access barriers to health care utilization exacerbate financial barriers – for example, physical barriers increase the cost of travel to prohibitive levels and costly private care is often sought due to the inaccessibility of less-costly public care. Additionally, the behavior and cultural competency of health service providers, as well as the quality of that care, has been shown to motivate patients to seek more costly, but more trusted, privately provided care.

The situation in Western Guinea further reflects this reality. The continuing conflict itself operates as a barrier to healthcare utilization, which perpetuates financial and social inequities which, in turn, impact health care utilization. Although the use of quantitative data limits the depth at which conclusions may be drawn, use of less skilled health professionals and the lower socioeconomic status of Indigenous women when compared to non-Indigenous women in Western Guinea demonstrates the subtle impact of ethnicity and minorization on the Indigenous population's ability to use healthcare services.

The data demonstrates that increasing physical and financial access to health services for ethnic minority populations should be a top priority for increasing their uptake of health care services. However, simply reducing these barriers will likely do little for health care utilization without also focusing on other barriers to health care utilization. It will be necessary to focus on these other barriers, which include the cultural competency of health service providers, increasing language accessibility for ethnic minority populations, and increasing the quality of care and supplies, and the interactions between and within them, to truly increase health equity for ethnic minority populations.

Limitations

Ethnic groups are, in principle, self-defined. Thus, assigning labels to ethnic groups in this study is a limitation that must be addressed. In this analysis, migrant and non-migrant populations in Western Guinea were used as proxy populations for the Indigenous and non-Indigenous populations. Although this was necessary given the limitations in available data, this study makes major assumptions about ethnicity that may not be entirely correct. This is true for all studies which do not ask each respondent to self-identify with an ethnic group and presents an ongoing concern in academic research on ethnic minority populations. Additionally, these results cannot be generalized to the Indigenous population in Western Guinea, although they can be used to hypothesize and inform future research.

Recommendations

First and foremost, the collection of data on ethnicity should occur in all DHS surveys, with the understanding

that providing such information is voluntary and dependent on the informed consent of all respondents. One of the major limitations of this study was that data on ethnicity was not collected in the DHS survey for Indonesia and it was necessary to create proxy populations. This lack of information limits the interpretability of the data, and thus, what said data can inform. Additionally, further research should be done in Western Guinea to understand the factors which contribute to healthcare utilization in the region. This research should focus on understanding healthcare utilization by the Indigenous population and how the unique context of ongoing conflict and colonialism contributes to it. This being said, the amount of research that can be done in West Papua is restricted, especially to non-Indonesian people [25]. Additional research should also be done on healthcare utilization by ethnic minority populations in conflict-affected regions. The lack of research on this topic necessitated the broadening of my literature review, but also brought to light a gap in the research that should be addressed. Lastly, to truly increase the utilization of health services by ethnic minority populations, it will be necessary to base those services in anti-racist ideology – in the United States, Schatzkin et al. found that antiracism was key for increasing the healthcare utilization of ethnic minority populations [26]. The results of this study show that ethnic minority populations face barriers to healthcare utilization for being members of an ethnic minority population – although changing the foundation of any health system is nearly impossible, taking steps toward providing anti-racist health services will be important for increasing health service utilization and equity for ethnic minority populations.

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REFERENCES

1. Marrone, S. (2007). Understanding barriers to health care: a review of disparities in health care services among indigenous populations. Int J Circumpolar Health, 66(3), 188-98. doi: 10.3402/ijch.v66i3.18254.
2. United Nations. (2020). *Sustainable Development Goals Report 2020*. https://sdgs.un.org/sites/default/files/2020-09/The-Sustainable-Development-Goals-Report-2020.pdf
3. United Nations. (n.d.). *United Nations Guide for Minorities*. United Nations Human Rights Office of the High Commissioner. https://www.ohchr.org/en/issues/minorities/pages/minoritiesguide.aspx
4. World Bank – Databank, World Development Indicators. (2020) *Total Population – World*. Data originally from: (1) United Nations Population Division. World Population Prospects: 2019 Revision. (2) Census reports and other statistical publications from national statistical offices, (3) Eurostat: Demographic Statistics, (4) United Nations Statistical Division. Population and Vital Statistics Report (various years), (5) U.S. Census Bureau: International Database, and (6) Secretariat of the Pacific Community: Statistics and Demography Programme. Sourced from: https://data.worldbank.org/indicator/SP.POP.TOTL
5. International Work Group for Indigenous Affairs [IWGIA]. (2021). *The Indigenous World 2021*. https://iwgia.org/doclink/iwgia-book-the-indigenous-world-2021-eng/eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJpd2dpYS1ib29rLXRoZS1pbmRpZ2Vub3VzLXdvcmxkLTIwMjEtZW5nIiwiaWF0IjoxNjI4ODM5NjM2LCJleHAiOjE2Mjg5MjYwMzZ9.z1CuM7PcT5CPkV0evx8ve88y6v0vmwDu_51JQ_lwAkM
6. Antonopoulos, P. & Cottle, D. (2019). Forgotten Genocide in Indonesia: Mass Violence, Resource Exploitation, and Struggle for Independence in West Papua. In F. Jacob (Ed.), *Genocide and Mass Violence in Asia: An Introductory Reader* (160-188). De Gruyter.
7. Uddin, J., Hossin, M. Z., Mahbub, F., Hossain, M. Z. (2012). Healthcare-seeking behavior among the Chakma ethnic group in Bangladesh: can accessibility and cultural beliefs shape healthcare utilization? International Quarterly of Community Health Education, 33, 375-89. https://dx.doi.org/10.2190/IQ.33.4.e
8. Boro, B., Saikia, N. (2020). A qualitative study of the barriers to utilizing healthcare services among the tribal population in Assam. PLoS ONE [Electronic Resource], 15, e0240096. https://dx.doi.org/10.1371/journal.pone.0240096
9. McKinn, S., Linh, D.T., Foster, K., McCaffery, K. (2019) A qualitative analysis of factors that influence Vietnamese ethnic minority women to seek maternal health care. BMC Pregnancy Childbirth 19, 243. https://doi.org/10.1186/s12884-019-2375-7
10. Mohindra, K.S., Narayana, D., Haddad, S. (2010). "My story is like a goat tied to a hook." Views from a marginalized tribal group in Kerala (India) on the consequences of falling ill: a participatory poverty and health assessment. J Epidemiol Community Health. 64(6), 488-94. doi: 10.1136/jech.2008.086249
11. Steele, V., Patterson, K., Berrang-Ford, L., King, N., Kulkarni, M., Namanya, D., Kesande, C.; Batwa Communities, Twesigomwe, S., Asaasira, G., Harper, S.L. (2021). Factors influencing antenatal care attendance for Bakiga and Indigenous Batwa women in Kanungu District, Southwestern Uganda. Rural Remote Health, 21(3). doi: 10.22605/RRH6510.
12. Bussalleu, A., Pizango, P., King, N., Ford, J., Team, I. H. A. C. C. R., & Harper, S. L. (2021). Kaniuwatewara (when we get sick): understanding health-seeking behaviours among the Shawi of the Peruvian Amazon. BMC Public Health, 21(1), 1–13.

https://doi-org.proxy.library.georgetown.edu/10.1186/s12889-021-11574-2
13. Babu, B. V., Swain, B. K., Mishra, S., & Kar, S. K. (2010). Primary Healthcare Services Among a Migrant Indigenous Population Living in an Eastern Indian City. Journal of Immigrant & Minority Health, 12(1), 53–59. https://doi-org.proxy.library.georgetown.edu/10.1007/s10903-008-9181-z
14. Jose, J. A., Sarkar, S., Kumar, S. G., & Kar, S. S. (2014). Utilization of maternal health-care services by tribal women in Kerala. Journal of Natural Science, Biology & Medicine, 5(1), 144–147. https://doi-org.proxy.library.georgetown.edu/10.4103/0976-9668.127314
15. Chomat, A. M., Solomons, N. W., Montenegro, G., Crowley, C., & Bermudez, O. I. (2014). Maternal health and health-seeking behaviors among indigenous Mam mothers from Quetzaltenango, Guatemala. Pan American Journal of Public Health, 35(2), 113–120.
16. Leyva-Flores, R., Servan-Mori, E., Infante-Xibille, C., Pelcastre-Villafuerte, B. E., & Gonzalez, T. (2014). Primary Health Care Utilization by the Mexican Indigenous Population: The Role of the Seguro Popular in Socially Inequitable Contexts. PLoS ONE, 9(8), 1–6. https://doi-org.proxy.library.georgetown.edu/10.1371/journal.pone.0102781
17. Moosan, H., Stanley, A., Vijayakumar, K., Jayasree, A. K., Lawrence, T., & Veena, A. (2019). Impediments to Optimal Health-care Utilization of a Particularly Vulnerable Tribal Group in Wayanad: A Qualitative Study. Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine, 44(Suppl 1), S62–S65. https://doi.org/10.4103/ijcm.IJCM_48_19
18. Harris A., Zhou, Y., Liao, H., Barclay, L., Zeng, W., Gao, Y. (2010).Challenges to maternal health care utilization among ethnic minority women in a resource-poor region of Sichuan Province, China, Health Policy and Planning, 25(4), 311–318. https://doi-org.proxy.library.georgetown.edu/10.1093/heapol/czp062
19. Islam, R. (2016). Utilization of Maternal Health Care Services among Indigenous Women in Bangladesh: A Study on the Mru Tribe. Women & Health. 57. 10.1080/03630242.2016.1153020.
20. Duong, D.T.T., Van Minh, H., Long, K.Q. et al. The Utilization of Maternal Healthcare Services Among Ethnic Minority Populations in Vietnam. J. Racial and Ethnic Health Disparities 8, 723–731 (2021). https://doi-org.proxy.library.georgetown.edu/10.1007/s40615-020-00832-5
21. Kosariya, S. S., Chakravarty, M., & Sen, N. (2018). Factors Affecting the Utilization of Maternal Health Care Services among Bhunjia tribe of Chhattisgarh (India). Oriental Anthropologists, 18(2), 245–253. https://doi-org.proxy.library.georgetown.edu/10.1177/0976343020180205
22. Ippolito, M., Chary, A., Daniel, M., Barnoya, J., Monroe, A., Eakin, M. (2017). Expectations of health care quality among rural Maya villagers in Sololá Department, Guatemala: A qualitative analysis. International Journal for Equity in Health, 16. 10.1186/s12939-017-0547-5.
23. Canuto, K., Brown, A., Harfield, S., & Wittert, G. (2018). "I feel more comfortable speaking to a male": Aboriginal and Torres Strait Islander men's discourse on utilizing primary health care services. International Journal for Equity in Health, 17(1), N.PAG. https://doi-org.proxy.library.georgetown.edu/10.1186/s12939-018-0902-1
24. Blanchard, J., Lurie, N. (2004). R-E-S-P-E-C-T: patient reports of disrespect in the health care setting and its impact on care. J Fam Pract. 53(9), 721-30. PMID: 15353162. https://pubmed.ncbi.nlm.nih.gov/15353162/
25. Underrepresented Peoples and Nations Organization. (2015). *The human rights situation in West Papua – UNPO submission to the Human Rights Council's Expert Mechanism on the Rights of Indigenous Peoples. https://unpo.org/downloads/1282.pdf*
26. Schatzkin, A., Cooper, R., Green, L. (1984) Antiracism and the level of health services: a sociomedical hypothesis. J Natl Med Assoc, 76(4), 381-6. PMID: 6737494; PMCID: PMC2561669.https://pubmed.ncbi.nlm.nih.gov/15353162/

Dataset: National Population and Family Planning Board (BKKBN), Statistics Indonesia (BPS), Ministry of Health (Kemenkes), and ICF [Producers]. 2018. ICF [Distributor], 2018. Indonesia Demographic and Health Survey 2017 [Dataset]. IDIR71FL. Jakarta, Indonesia: BKKBN, BPS, Kemenkes, and ICF.