



## Empowering Young Married Women Expands Access to Health-Care Utilization in Indonesia

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### ABSTRACT

Child marriage has become a major issue in Indonesia, and it is frequently associated with issues of education and employment status. Furthermore, it might serve as a barrier to these young married women seeking healthcare services. The purpose of this study is to assess health-care utilization among Indonesian young married women aged 15 to 19, by considering the role of women's empowerment. This study included 4,017 young married women aged 15 to 24 years from the Indonesia Demographic and Health Survey (IDHS) 2017 dataset. Age was not associated with healthcare utilization. Pregnant women and young married women with children under five were more likely to use health care services (AOR:5.29; AOR:3.01). Young married women from middle and upper-income families who had a bank account and daily internet access had the highest chance of receiving healthcare services. Respondents who participated in 1 to 2 decision making were 1.5 times more likely to visit a health facility. Young married women who agreed to domestic violence for three or more reasons were less likely to visit a health facility. Young married women should have 'resources' and 'agency' to be able to access healthcare services. Children played a critical role in empowering these women to seek health care.

#### Kata kunci:

Pemanfaatan layanan Kesehatan  
Perawatan kesehatan  
Pemberdayaan perempuan  
Keputusan rumah tangga  
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### ABSTRAK

Perkawinan anak masih menjadi masalah utama di Indonesia, dan sering kali dikaitkan dengan pendidikan dan status pekerjaan. Ditambah lagi, salah satu masalah yang dihadapi wanita muda yang menikah adalah mencari layanan perawatan Kesehatan. Tujuan dari kajian ini adalah untuk mengkaji pemanfaatan layanan kesehatan pada wanita muda yang menikah di Indonesia yang berusia 15–19 tahun, dengan mempertimbangkan peran pemberdayaan perempuan. Pengukuran pemberdayaan perempuan sesuai yang disarankan oleh Kabeer. Studi potong lintang menggunakan data Survei Demografi dan Kesehatan Indonesia (SDKI) 2017. Penelitian ini melibatkan 4.017 wanita muda yang menikah berusia 15–24 tahun. Umur tidak berhubungan dengan pemanfaatan layanan kesehatan. Wanita dengan anak balita tiga kali lebih menggunakan layanan Kesehatan dibandingkan mereka yang tidak memiliki anak balita. Wanita dari rumah tangga menengah ke atas yang memiliki rekening bank dan akses internet setiap hari memiliki peluang tertinggi untuk menerima layanan Kesehatan. Wanita yang terlibat dalam 1–2 pengambilan keputusan 1,5 kali lebih besar untuk mengunjungi fasilitas Kesehatan. Wanita yang setuju dengan lebih dari 3 alasan kekerasan rumah tangga cenderung tidak mengunjungi fasilitas Kesehatan. Berdasarkan hal ini, sebaiknya wanita muda yang menikah memiliki sumber daya dan mediator/agensis untuk dapat mengakses layanan Kesehatan. Anak-anak berperan penting dalam memperdayakan wanita untuk mencari perawatan Kesehatan.

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## INTRODUCTION

Indonesia has made significant progress toward its goal of achieving universal health coverage (UHC) by 2030. The national health coverage covered 82.69 percent of Indonesian population in 2019 (Kemenkes, 2020). At the same time, the country also made a progress in term of women empowerment. At the same time, the country also made a progress in term of women empowerment, with Gender Empowerment Index (IPG) standing at 75.57 in 2020 (Badan Pusat Statistik, n.d.).

Previous studies show that women with a high educational level (Ahmed, Creanga, Gillespie, & Tsui, 2010; Htun, Hnin, & Khaing, 2021) and a high socioeconomic status (Ahmed et al., 2010) were more likely to visit health-care facilities. Furthermore, women's employment (Osamor & Grady, 2018) and educational status (Acharya, Bell, Simkhada, Van Teijlingen, & Regmi, 2010; Osamor & Grady, 2018) placed them in a position to have a voice in their own health-care decisions. Women's empowerment could provide them with the freedom to choose and act in order to achieve better health outcomes.

One of the issues confronting married women in Indonesia was access to health care services. Data shows that in 2017, approximately 36 percent of Indonesian women aged 15 to 49 had difficulty accessing health-care services (BKKBN, BPS, Kemenkes, & ICF, 2018). Access to health-care services was also considered as part of the effort to achieve universal health coverage (UHC) by 2030.

Early marriage was associated with a lack of educational attainment (Delprato, Akyeampong, & Dunne, 2017; Parsons et al., 2015), low economic status (Parsons et al., 2015), and a lack of decision-making voice (De Groot et al., 2018; Parsons et al., 2015). Child marriage has become a major issue in Indonesia. In 2018, approximately 1,220,900 Indonesian women between the ages of 20 and 24 married before the age of 18, the highest absolute number in the world (Badan Pusat Statistik, UNICEF, & PUSKAPA, 2020). This is a violation of the United Nations Convention on the Rights of the Child (UNCROC), which states that children under the age of 18 should be prohibited into marriage.

There is a lack of understanding about empowerment and health-care utilization among young married women in Indonesia. The current study aims to assess the association between early marriage and access to health care services, particularly among married women aged 15 to 19. The analysis also will examine factors related to women's empowerment. This study hypothesizes that married women aged 15 to 19 are more likely to have difficulty accessing health-care services than those aged 20 to 24. Considering Indonesia's 12-year compulsory education program, this study classifies age groups into 15 to 19 and 20 to 24.

### Conceptual Review

Our study into the empowerment of Indonesian young married women to access health-care services is based on Kabeer's measurement of women's empowerment. Women's empowerment is defined as "*the process by which those who have been denied the ability to make strategic life choices acquire such an ability*" (Kabeer, 1999). Furthermore, this 'ability' should include three interconnected dimensions: resources (access to and future claims to material, human, and social resources), agency (decision-making process), and achievement (wellbeing outcome) (Kabeer, 1999). A girl had agency if she could make decisions about her own life and act accordingly without fear of

repercussions (Klugman et al., 2014). Agency implied the ability and power to overcome the obstacles that prevent one from achieving one's goals. Therefore, access to resources was insufficient for empowerment; a woman should have control over the resources she possessed and the ability to wield power in order to achieve whatever goals she considered valuable. Recent study found that access to resources should be accompanied by control over resources in order to empower women and give them a voice in household decision making (Murshid, 2018; Narciso & Henriques, 2020).

## METHOD

### Data Source

The dataset for this study was obtained from the individual records section of the women's questions in the 2017 Indonesia Demographic and Health Survey (IDN\_2017\_DHS\_v01\_M, 2017). The survey was conducted through a household-based survey with a two-stage stratified sampling design. The first stage consisted of a systematic sampling proportional to the size (PPS) of census blocks drawn from the master sampling frame, the 2010 Population Census. Then, in the second stage, a random selection of 25 ordinary households was drawn from each of the census blocks. There were 4,017 women between the ages of 15 and 24 who were either married or living together in the households that were eligible for this study. Eligibility and exclusion criteria, including any restrictions based on demographic

### Variables

In this study, the dependent variable was a visit to a health facility within the previous 6 months. Women's age, educational attainment, working status, household wealth index, have children under 5 years, currently pregnant condition, ownership of mobile phone, ownership of bank account or other financial institutions, frequency of using internet in the last month, number of decisions in which respondent participates, number of reasons for which wife beating is justified, and place of residence were the independent variables in this study. The variables were purposely chosen because they represented women's empowerment, which was essential to health-care utilization.

The indicators, such as women's empowerment and the household wealth index, were calculated using Guide to DHS-7 (Croft, Marshall, & Allen, 2018). The number of decisions in which women participate is classified into three groups: 0, 1-2, and 3. The number of justifications for wife beating was grouped into 0, 1-2, 3-4, and 5. In this study, the wealth index is grouped into three: poor, middle, and rich.

### Data Analysis

The univariate analysis was used to present the percent distribution. Binomial logistic regression analysis was exercised to examine the independent variables related to health utilization. Based on the guidelines in the IDHS reports, descriptive statistics and regression models were presented with a complex sample weighting. STATA version 16.0 was used to analyze the data.

**Ethics Statement**

In accordance with the Access Policy, the IDHS 2017 data collection was obtained from the DHS website without providing personal identity.

**RESULTS AND DISCUSSION**

Table 1 showed the percentage of item responses from each empowerment variable: decision-making and attitudes toward wife-beating. Three items were used to assess decision-making: healthcare (85.96 percent), visiting friends/family (83.01 percent), and large household expenditures (72.42 percent). The majority of responses for 1 to 2 decisions in which a woman made a specific decision alone or jointly with her spouse came from decisions about 'own health-care' and 'visits to friends/family'. Approximately 82.03 percent of those who answered 'yes' to 'decision-making on own health-care' in visiting a health-care facility fell into the category of '1-2 decision-making'. Furthermore, approximately 77.64 percent of those who answered 'yes' to 'decision-making on visiting friends/family' fell into the category of '1-2 decision-making'.

Burning food (2.20 percent), arguing with the husband/partner (5.21 percent), going out without informing the husband/partner (23 percent), neglecting the children (33.29 percent), and refusing to have sexual intercourse with the husband/partner (6 percent) were all justified reasons for wife-beating. The majority of the reasons given for wife-beating that fell into the category '1 to 2 reasons' were related to 'neglecting the children' and 'going out without informing the husband/partner'. Around 95.14 percent of those who answered 'neglecting the children' fell into the category '1 to 2 reasons'. Furthermore, approximately 92.63 percent of those who answered 'going out without telling the husband/partner' fell into the category '1 to 2 reasons'.

Table 2 showed that the majority of respondents (63.3 percent) visited a health facility in the previous six months. The majority of respondents (82.6 percent) were between young married women aged 20 to 24 years old, had a primary education (60.2 percent), were unemployed (64.8 percent), had a poor household status (45.5 percent), had children under the age of five (66.5 percent), were not pregnant at the time of the interview (84.8 percent), had a mobile phone (84.7 percent), did not have an account in a bank or other financial institution (72.0 percent), never accessed the internet (42.4 percent), were involved in all decision making (62.5 percent), did not justify any reason for wife beating (62.3%), and living in the rural area (59.4 percent).

**Table 1.**  
**Indicators of women's empowerment among women married aged 15-24**

Decisions in which respondent participate				
Number of decisions making	n(weight)	Percentage of decision making in:		
		Own health care	Large household purchases	Visits to family or relatives
0	219	0.00	0.00	0.00
1	409	54.30	10.96	34.74
2	879	82.03	40.33	77.64
3	2,510	100.00	100.00	100.00
Total	4,017	85.96	72.42	83.01

  

Attitude respondent toward wife beating						
Number of Reasons for which wife beating is justified	N (weight)	Percentage of agreement based on reasons				
		Burning food	Arguing with him	Going out without telling him	Neglecting the children	Refusing to have sexual intercourse with him
0	2,503	0.00	0.00	0.00	0.00	0.00
1	653	0.19	1.77	17.53	78.28	2.24
2	557	1.01	4.96	92.63	95.14	6.26
3	211	11.58	45.02	94.91	97.22	51.27
4	65	44.93	72.86	100.00	96.62	85.59
5	28	100.00	100.00	100.00	100.00	100.00
Total	4,017	2.20	5.21	23.00	33.29	6.00

Logistic regression analysis showed that household wealth status, having children under-5, pregnancy status, ownership of bank accounts or financial institutions, internet use, involvement in decision making and acceptance toward domestic violence, were all significantly associated with health-care utilization (Table 3). Moreover, education, working status, mobile phone ownership and place of residence did not show any significant differences in accessing health-care services (Table 3).

In the best model adjusted for other independent variables (Table 3), pregnant young married women were 5.3

times more likely to access health facilities than unpregnant women. Young married women with children under-5 were 3 times more likely to visit health-care services than those without under-5 children. Married women from middle and rich households, each was about 1.3 times more likely to access health-care services than women from poor households. Young married women with a bank account were 1.2 more likely to visit a health-care facility, compared to those without a bank account. Young married women who used the internet every day had the highest odds of accessing health-care services.

**Table 2.**  
**Socio-demographic characteristics of married women aged 15-24**

Characteristics	n (weighted)	%
Age		
15-19	700	17.4
20-24	3,317	82.6
Education		
Primary	2,416	60.2
Secondary	1,315	32.7
Higher	286	7.1
Currently working		
No	2,602	64.8
Yes	1,415	35.2
Wealth index status		
Poor	1,825	45.4
Middle	1,719	42.8
Rich	473	11.8
Have children under 5		
No	1,346	33.5
Yes	2,671	66.5
Currently pregnant		
No	3,408	84.8
Yes	609	15.2
Own mobile phone		
No	615	15.3
Yes	3,402	84.7
Has an account in a bank or other financial institution		
No	2,891	72.0
Yes	1,126	28.0
Frequency of using internet last month		
Not at All	1,702	42.4
Rarely a week	778	19.4
Almost everyday	1,537	38.3
Number of decisions in which respondent participate		
0	219	5.5
1-2	1,288	32.1
3	2,510	62.5
Number of reasons for which wife beating is justified		
0	2,503	62.3
1-2	1,210	30.1
3-4	276	6.9
5	28	0.7
Place of residence		
Urban	1,629	40.6
Rural	2,388	59.4
Visited health facility last 6 month		
No	1,476	36.7
Yes	2,541	63.3
<b>Total</b>	<b>4,017</b>	<b>100.0</b>

Respondents who were involved in 1 to 2 decision making were 1.5 times more likely to visit health facilities than those who were not involved. Young married women who agreed with 1-2 types of domestic violence were 1.24 times more likely to visit a health-care facility than those who disagreed. Nevertheless, the likelihood of young married women visiting a health facility showing a decreasing pattern, in which young married women who had acceptance attitudes towards domestic violence for three or more reasons were being the least likely to visit a health-care facility.

The current study showed the association between empowerment and health-care utilization among Indonesian young married women. Following Kabeer's measurement of women's empowerment, the model showed the role of

resources and agency in pursuing important goals and increasing well-being.

Referring to the 'resources' mentioned by Kabeer, this study found that after adjustment, ownership of financial account, household wealth status (Boateng et al., 2014; Voronca, Walker, & Egede, 2018) and frequency of internet access, all of which served as material and social resources, were positively associated with health-care service utilization among Indonesian young married women. In terms of social resource, internet access could create a network of women's communication. Previous study showed the role of the internet in voicing undeserved women for their concerns on justice and other issues concerning women's rights (Shirazi, 2012). Other studies found that, in addition to providing access to health-care services and information (Ginossar & Nelson, 2010; Van De Belt et al., 2013), the internet could be used to create peer online group support from greater social connectedness in terms of health-care (Naslund, Aschbrenner, Marsch, & Bartels, 2016).

Access to resources was insufficient to achieve one's own individual well-being. Kabeer mentioned 'agency,' which is when a woman uses her power to exert control over her resources while remaining free of coercion in order to achieve the desired goals. The findings of this study showed that the more young married women participated in household decision-making, the more likely she was to be able to access health-care services (Sado, Spaho, & Hotchkiss, 2014).

In order to have 'agency,' a woman must also be free of fear of violence in order to make decisions and act accordingly. This study highlighted that Indonesian young married women who were more opposed to any form of intimate partner violence (IPV) were more likely to be positively associated with health-care utilization (Sado et al., 2014), other than reasons for 'neglecting children' and 'leaving the house without informing husband/partner'. These two reasons were in compliance with the cultural values ingrained in Indonesian society and religion values. The Indonesian family placed a higher value on children, believing that a child's accomplishment was a family's accomplishment (Albert, Trommsdorff, Mayer, & Schwarz, 2005; Puspitasari, Rahmadhony, Prasetyo, & Fadila, 2020). Furthermore, Islamic society forbade a wife from leaving the house without her husband's permission.

The most important factors associated with a higher likelihood of young married women accessing health care were pregnancy and having children. The model found that young married women who were pregnant or who had children under the age of five were more likely to have access to health-care services. Prior studies showed that decisions concerning children in Indonesian households were typically within the domain of women (Fernandez, Della Giusta, & Kambhampati, 2015; Rammohan & Johar, 2009), including improving child health status. Recent study found that mothers who received quality health care had a positive impact on the health of their children (Badiane et al., 2021). Therefore, it was assumed that when young married women were pregnant or had children, they were more likely to use health-care services to improve their children's health. This finding highlighted the value of children for young mothers in accessing health-care services, especially in a society where child-related decisions fell under the domain of the wife.

In contrast to the study's hypotheses, the mother's age was not associated with health-care utilization. In particular, the model showed no difference in access to health-care

services between young married women aged 15 to 19 and 20 to 24. According to Kabeer's definition of women's empowerment, access to health-care services would be more likely if these young women had resources and could control

them without coercion. Therefore, age itself was insufficient to justify whether a young married woman had access to health-care services.

**Table 3**  
**Logistic Regression for the predictors of women visited health facility last 6 months**

Variable	Unadjusted		Adjusted	
	Odd Ratio	95% CI	Odd Ratio	95% CI
Age				
15-19	1			
20-24	1.06	0.87-1.27		
Education				
Primary	1			
Secondary	1.10	0.94-1.29		
Higher	1.17	0.88-1.54		
Currently working				
No				
Yes	0.88	0.76-1.02		
Wealth index status				
Poor	1			
Middle	1.28*	1.09-1.50	1.28**	1.09-1.49
Rich	1.30	1.00-1.69	1.29*	1.00-1.67
Have children under 5				
No	2.92**	2.48-3.46		
Yes			3.01**	2.55-3.55
Currently pregnant				
No	1			
Yes	5.16**	4.04-6.59	5.29**	4.15-6.74
Own mobile phone				
No	1			
Yes	0.94	0.78-1.15		
Has an account in a bank or other financial institution				
No	1			
Yes	1.22*	1.02-1.46	1.25*	1.05-1.48
Frequency of using internet last month				
Not at All	1			
Rarely a week	1.28*	1.06-1.56	1.31**	1.09-1.58
Almost everyday	1.45**	1.19-1.77	1.51**	1.26-1.80
Number of decisions in which respondent participate				
0	1			
1-2	1.54**	1.12-2.12	1.54**	1.12-2.11
3	1.31	0.96-1.77	1.30	0.96-1.76
Number of reasons for which wife beating is justified				
0	1			
1-2	1.24**	1.06-1.45	1.23**	1.06-1.44
3-4	0.96	0.75-1.23	0.95	0.74-1.22
5	0.66	0.33-1.31	0.65	0.33-1.30
Place of residence				
Urban	1			
Rural	0.94	0.81-1.10		

Note. \*( $p < 0.05$ ); \*\*( $p < 0.01$ ).

Furthermore, the model showed that education and employment status were not associated with health-care utilization among Indonesian young married women. Education in Indonesia might be insufficient to change deeply cultural values that granted husbands the right to make household decisions on their own, affecting women's decision-making on only a subset of issues (Samarakoon & Parinduri, 2015). Another study found that when economic status and empowerment were controlled for, the effect of women's education on health-care utilization vanished (Yadav, Sahni, & Jena, 2021). The role of culture was predicted to play a role in Malaysia, a neighboring country with a culture similar to Indonesia's. A recent study found that women's employment status in microcredit finance was

not associated with the ability to control their spending within the household (Al-Shami, Majid, Mohamad, & Rashid, 2017).

The study's strength was the use of large amounts of nationally representative data. However, due to the study's design, the causality relationships could not be determined. An in-depth analysis was required to explain the causal relationship.

#### LIMITATION OF THE STUDY

Future research should look into the role of cultural values, particularly the role of children, in explaining how empowered young married women access health-care

services. Furthermore, in-depth research should be encouraged in order to determine the causal relationship.

## CONCLUSIONS AND SUGGESTIONS

Although age was not associated with access to health facilities, Indonesian young married women, including those aged 15 to 19, should have 'resources' and 'agency' to be empowered in order to achieve health and wellbeing outcomes. Ownership of a financial account, living in a wealthier household, and daily internet access were all considered 'resources.' Furthermore, 'agency' included participation in household decision-making and a negative attitude toward domestic violence. One significant finding was that pregnancy and having children were very important for these young married women to be able to visit health-care facilities.

## ETHICAL CONSIDERATIONS

### Conflict of Interest Statement

The authors have no conflicts of interest to declare.

### Informed consent

In accordance with the Access Policy, the IDHS 2017 dataset was downloaded from the DHS website (<https://microdata.worldbank.org/index.php/catalog/3477>) on November 25, 2018. The IDHS 2017 involved human participants. The procedures and questionnaires for the 2017 IDHS are in accordance with the Standard DHS survey protocol, which has been approved by the ICF Institutional Review Board (IRB) and are in accordance with the regulations for the Protection of Human Subjects of the United States Department of Health and Human Services (45 CFR 46) (<https://dhsprogram.com/methodology/Protecting-the-Privacy-of-DHS-Survey-Respondents.cfm>).

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## REFERENCES

- Acharya, D. R., Bell, J. S., Simkhada, P., Van Teijlingen, E. R., & Regmi, P. R. (2010). Women's autonomy in household decision-making: A demographic study in Nepal. *Reproductive Health*, 7(1), 1–12. <https://doi.org/10.1186/1742-4755-7-15>
- Ahmed, S., Creanga, A. A., Gillespie, D. G., & Tsui, A. O. (2010). Economic status, education and empowerment: Implications for maternal health service utilization in developing countries. *PLoS ONE*, 5(6). <https://doi.org/10.1371/journal.pone.0011190>
- Al-Shami, S. S. A., Majid, I., Mohamad, M. R., & Rashid, N. (2017). Household welfare and women empowerment through microcredit financing: Evidence from Malaysia microcredit. *Journal of Human Behavior in the Social Environment*, 27(8), 894–910. <https://doi.org/10.1080/10911359.2017.1345341>
- Albert, I., Trommsdorff, G., Mayer, B., & Schwarz, B. (2005). Value of Children in Urban and Rural Indonesia: Socio-Demographic Indicators, Cultural Aspects, and Empirical Findings. In G. Trommsdorff & B. Nauck (Eds.), *The Value of Children in Cross-cultural Perspective. Case Studies from Eight Societies*. Lengerich: Pabst Science.
- Badan Pusat Statistik. (n.d.). Indeks Pemberdayaan Gender (IDG) 2019-2020. Retrieved March 21, 2022, from <https://www.bps.go.id/indikator/40/468/1/indeks-pemberdayaan-gender-idg.html>
- Badan Pusat Statistik, UNICEF, & PUSKAPA. (2020). *Pencegahan Perkawinan Anak: Percepatan yang Tidak Bisa Ditunda*. Retrieved from <https://www.unicef.org/indonesia/media/2851/file/Child-Marriage-Report-2020.pdf>
- Badiane, A., Diouf, A., Sylla, P. M. D. D., Cissé, N. S., Idohou-Dossou, N., Dramaix, M., ... Donnen, P. (2021). Body composition and determinant factors among mother-child pairs (6–8 months) in rural areas of Senegal. *Maternal and Child Nutrition*, 17(3), 1–12. <https://doi.org/10.1111/mcn.13174>
- National Population and Family Planning Board (BKKBN) [Government of Indonesia], Statistics Indonesia (BPS) [Government of Indonesia], & Ministry of Health (Kemenkes) [Government of Indonesia]. (2017). *IDN\_2017\_DHS\_v01\_M*. Retrieved from <http://www.dhsprogram.com/>
- National Population and Family Planning Board (BKKBN), Statistics Indonesia (BPS), Ministry of Health (Kemenkes), & ICF. (2018). *Indonesia Demographic and Health Survey 2017*. Jakarta, Indonesia: BKKBN, BPS, Kemenkes, and ICF.
- Boateng, G. O., Kuuire, V. Z., Ung, M., Amoyaw, J. A., Armah, F. A., & Luginaah, I. (2014). Women's Empowerment in the Context of Millennium Development Goal 3: A Case Study of Married Women in Ghana. *Social Indicators Research*, 115(1), 137–158.
- Croft, T. N., Marshall, A. M. J., & Allen, C. K. (2018). *Guide to DHS Statistics*. Rockville, Maryland, USA: ICF. Retrieved from [https://dhsprogram.com/data/Guide-to-DHS-Statistics/Guide\\_to\\_DHS\\_Statistics\\_DHS-7.htm](https://dhsprogram.com/data/Guide-to-DHS-Statistics/Guide_to_DHS_Statistics_DHS-7.htm)
- De Groot, R., Kuunyem, M. Y., Palermo, T., Osei-Akoto, I., Adamba, C., Darko, J. K., ... Caparello, A. (2018). Child marriage and associated outcomes in northern Ghana: A cross-sectional study. *BMC Public Health*, 18(1). <https://doi.org/10.1186/s12889-018-5166-6>
- Delprato, M., Akyeampong, K., & Dunne, M. (2017). Intergenerational Education Effects of Early Marriage in Sub-Saharan Africa. *World Development*, 91, 173–192. <https://doi.org/10.1016/j.worlddev.2016.11.010>
- Fernandez, A., Della Giusta, M., & Kambhampati, U. S. (2015). The Intrinsic Value of Agency: The Case of Indonesia. *World Development*, 70, 92–107. <https://doi.org/10.1016/j.worlddev.2014.12.020>
- Ginossar, T., & Nelson, S. (2010). La Comunidad Habla: Using Internet Community-Based Information Interventions to Increase Empowerment and Access to Health Care of Low Income Latino/a Immigrants. *Communication Education*, 59(3), 328–343. <https://doi.org/10.1080/03634521003628297>
- Htun, N. M. M., Hnin, Z. L., & Khaing, W. (2021). Empowerment and health care access barriers among currently married women in Myanmar. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-10181-5>

- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change, 30*(3), 435–464. <https://doi.org/10.1111/1467-7660.00125>
- Kemkes. (2020). Profil Kesehatan Indonesia Tahun 2019. Retrieved March 21, 2022, from <https://pusdatin.kemkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/Profil-Kesehatan-indonesia-2019.pdf>
- Klugman, J., Hanmer, L., Twigg, S., Hasan, T., McCleary-Sills, J., & Santamaria, J. (2014). *Voice and Agency: Empowering Women and Girls for Shared Prosperity. World Bank Groups*. Washington, DC: World Bank Group. Retrieved from <https://openknowledge.worldbank.org/handle/10986/19036>
- Murshid, N. S. (2018). Microfinance Participation and Women's Decision-Making Power in the Household in Bangladesh. *Journal of Social Service Research, 44*(3), 308–318. <https://doi.org/10.1080/01488376.2018.1472170>
- Narciso, V. J. S., & Henriques, P. D. S. (2020). Does the matrilineality make a difference? Land, kinship and women's empowerment in Bobonaro district, Timor-Leste. *Journal of the Asia Pacific Economy, 25*(2), 348–370. <https://doi.org/10.1080/13547860.2019.1665295>
- Naslund, J. A., Aschbrenner, K. A., Marsch, L. A., & Bartels, S. J. (2016). The future of mental health care: Peer-To-peer support and social media. *Epidemiology and Psychiatric Sciences, 25*(2), 113–122. <https://doi.org/10.1017/S2045796015001067>
- Osamor, P., & Grady, C. (2018). Factors associated with women's health care decision making autonomy: Empirical evidence from Nigeria. *J Biosoc Sci, 50*(1), 70–85. <https://doi.org/10.1017/S0021932017000037>
- Parsons, J., Edmeades, J., Kes, A., Petroni, S., Sexton, M., & Wodon, Q. (2015). Economic Impacts of Child Marriage: A Review of the Literature. *Review of Faith and International Affairs, 13*(3), 12–22. <https://doi.org/10.1080/15570274.2015.1075757>
- Puspitasari, M. D., Rahmadhony, A., Prasetyo, S., & Fadila, W. (2020). Early Childhood Parenting Practices in Indonesia. *Population Review, 59*(2). <https://doi.org/10.1353/prv.2020.0006>
- Rammohan, A., & Johar, M. (2009). The determinants of married women's autonomy in Indonesia. *Feminist Economics, 15*(4), 31–55. <https://doi.org/10.1080/13545700903153989>
- Sado, L., Spaho, A., & Hotchkiss, D. R. (2014). The influence of women's empowerment on maternal health care utilization: Evidence from Albania. *Social Science & Medicine, 114*, 169–177. <https://doi.org/10.1016/j.socscimed.2014.05.047>
- Samarakoon, S., & Parinduri, R. A. (2015). Does Education Empower Women? Evidence from Indonesia. *World Development, 66*, 428–442. <https://doi.org/10.1016/j.worlddev.2014.09.002>
- Shirazi, F. (2012). Information and communication technology and women empowerment in Iran. *Telematics and Informatics, 29*(1), 45–55. <https://doi.org/10.1016/j.tele.2011.02.001>
- Van De Belt, T. H., Engelen, L. J. L. P. G., Berben, S. A. A., Teerenstra, S., Samsom, M., & Schoonhoven, L. (2013). Internet and social media for health-related information and communication in health care: Preferences of the Dutch general population. *Journal of Medical Internet Research, 15*(10), 1–11. <https://doi.org/10.2196/jmir.2607>
- Voronca, D., Walker, R. J., & Egede, L. E. (2018). Relationship between Empowerment and Wealth: Trends and Predictors in Kenya between 2003 and 2008–09. *International Journal of Public Health, 63*(5), 641–649. <https://doi.org/10.1007/s00038-017-1059-1>
- Yadav, A. K., Sahni, B., & Jena, P. K. (2021). Education, employment, economic status and empowerment: Implications for maternal health care services utilization in India. *Journal of Public Affairs, 21*(3). <https://doi.org/10.1002/pa.2259>

