ARTÍCULO ORIGINAL

# Factor analysis of the exile of women giving birth in the Forest

# Análisis factorial del exilio de las mujeres que dan a luz en la selva

Fenita Purnama Sari Indah<sup>1a\*</sup>, Riris Andriati<sup>2a</sup>, Rita Dwi Pratiwi<sup>3a</sup>, Nurwulan Adi Ismaya<sup>4a</sup>, Ika Rohmawati<sup>5a</sup>

#### SUMMARY

**Introduction**: Many areas still choose childbirth helpers with non-health workers in Indonesia, such as child shamans, who often cause adverse effects for mothers and babies. This study aimed to identify factors associated with the seclusion of women giving birth in the Merauke District.

**Methods:** This study used a cross-sectional research design, with 57 mothers with toddlers as a sample. The study was conducted for two weeks, from June 29 to July 12, 2021. Data collection used secondary data and primary data. The statistics test contingency correlation.

**Results:** Based on the results of research, knowledge (p-value = 0.026), attitude (p-value = 0.028), the role of religious figures (p-value = 0.036), and the role of the husband or family (p-value = 0.020) showed a significant relationship. While culture (p-value = 0.020)

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ORCID ID: 0000-0002-1421-3520<sup>1</sup> ORCID ID: 0000-0003-0798-4121<sup>2</sup> ORCID ID: 0000-0001-7001-1221<sup>3</sup> ORCID ID: 0000-0001-7723-7100<sup>4</sup> ORCID ID: 0000-0001-7804-4909<sup>5</sup>

<sup>a</sup>Sekolah Tinggi Ilmu Kesehatan Widya Dharma Husada, Tangerang, Indonesia

\*Corresponding Author: Fenita Purnama Sari Indah E-mail: fenita.purnama@masda.ac.id

Recibido: 11 de septiembre 2022 Aceptado: 8 de octubre 2022 0.572), accessibility to health services (p-value = 0.113), availability of health services (p-value = 0.949), the role of community leaders (p-value = 0.059), and the role of health personnel (p-value = 1,000) showed no relationship with the isolation of women.

**Conclusion:** There is a relationship between the variables of the mother's knowledge about women giving birth, the mother's attitude about women giving birth, the role of religious figures, and the role of the husband or family with the exile behaviour of women giving birth in the forest. This research suggests health service facilities in Indonesia are evenly distributed, especially in every village in Merauke District, Papua.

**Keywords:** Attitude, exile of women giving birth, knowledge, mother.

#### RESUMEN

Introducción: Muchas áreas todavía eligen ayudantes de parto con trabajadores no sanitarios en Indonesia, como niños chamanes, que a menudo causan efectos adversos para las madres y los bebés. Este estudio tuvo como objetivo identificar los factores asociados con el aislamiento de las mujeres que dan a luz en el distrito de Merauke.

**Métodos:** Este estudio utilizó un diseño de investigación transversal, con 57 madres con niños pequeños como muestra. El estudio se realizó durante dos semanas, del 29 de junio al 12 de julio de 2021. La recopilación de datos utilizó datos secundarios y datos primarios. Las estadísticas prueban la correlación de contingencia.

**Resultados:** Con base en los resultados de la investigación, el conocimiento (p-valor = 0,026), la actitud (p-valor = 0,028), el papel de las figuras

religiosas (p-valor = 0,036) y el papel del esposo o la familia (p-valor = 0,020) mostró una relación significativa. Mientras que la cultura (valor de p =0,572), la accesibilidad a los servicios de salud (valor de p = 0,113), la disponibilidad de servicios de salud (valor de p = 0,949), el papel de los líderes comunitarios (valor de p = 0,059) y el papel del personal de salud (p-valor = 1.000) no mostró relación con el aislamiento de las mujeres.

**Conclusión:** Existe relación entre las variables conocimiento de la madre sobre la mujer que da a luz, la actitud de la madre sobre la mujer que da a luz, el papel de las figuras religiosas y el papel del esposo o familia con el comportamiento de exilio de la mujer que da a luz en el bosque. Esta investigación sugiere que las instalaciones de servicios de salud en Indonesia están distribuidas de manera uniforme, especialmente en cada aldea del distrito de Merauke, Papúa.

**Palabras clave:** Actitud, exilio de la parturienta, saber, madre

### INTRODUCTION

The World Health Organization (WHO) estimated that around 830 women die every day only due to pregnancy complications and during the birth process (1). According to WHO, almost deaths case occurred because of things that could have been prevented in 2016 (2). One case is childbirth, carried out at home without health workers (2-5). The 2013 Basic Health Research results showed that giving birth in health facilities 70.4 %, and 29.6 % of births were carried out at home or other locations (6).

Giving birth assistants by competent health personnel (specialist doctors, general practitioners, and midwives) reached a number of 87.1 %. However, the remaining 12.9 % of birth assistants were performed by other than health workers (delivering themselves at home and/or with the help of traditional birth attendants) (7,8). In addition, some stillbirths are carried out by the mother herself or assisted by traditional birth attendants because of the vital role of customs and community culture in several regions in Indonesia. This causes the Maternal Mortality Rate (MMR) in Indonesia, based on the 2015 Inter-Census Population Survey (SUPAS), to be 305 deaths per 100 000 live births (7). Apart from partly the problem of access to unaffordable healthcare facilities, various other reasons such

as economic, social, and cultural factors behind the mother's choice to give birth alone or assisted by traditional birth attendants (9-12).

In one of the districts in Papua, namely Merauke District, the maternal mortality rate in 2016 reached 17 cases. It went 13 cases in 2017. While in 2018, it went 6 cases. Besides that, it got 9 cases in 2019 and 7 cases in 2020. Data for 2020 showed that giving birth in Merauke District, which the health workers assist, has not been fully helped, seeing the target numbering 5 377 but only 4 163 being achieved, then giving birth carried out in health care facilities amounting to 4 098 of the target of 5 377 (13).

Based on a preliminary study, several ethnic groups in the Eastern Indonesia region (IBT) still have a "house of exile" culture for women giving birth. In the Jagebob sub-district, Merauke District, Papua, the house of exile (Tana Barambon Ambip) for women giving birth is called Be'vak. This tradition applies to the Yei tribe. Living in seclusion for women giving birth is a problematic condition when compared to the current development of the modern medical world. The tradition of the postpartum period for Eastern women after giving birth for 40 days in a Be'vak continues today. Newly born mothers, as are their babies, are ostracized from society and families. They are only allowed to be visited by their closest relatives and undergo some very unusual rituals for the world of health. Women who have given birth are compressed with hot water using an Eastern cloth every day with the excuse of improving blood circulation. Seeing the above factors that affect a mother in labor, the researcher is interested in conducting a study entitled factors related to the alienation of women giving birth in Merauke District.

#### **METHODS**

This type of research was quantitative research. This research was conducted in Merauke Regency. The study began in June-July 2021 and was carried out for two weeks. The research duration implemented in two weeks is divided into two days to conduct permits and approaches to village heads, religious leaders, and community leaders accompanied by community leaders. Then one day was for introductions and asking for data on the number of mothers who have toddlers from health workers. Then eight days were conducted for research using the interview method, and the last day was to say goodbye to health workers, village heads, community leaders, and religious leaders.

The population and sample in this research were all mothers who had toddlers with a total of 57 populations and 57 samples by using the total sampling technique. The data collected in this study were primary and secondary. Primary data were obtained from an interview with respondents, and secondary data was obtained from the Merauke District Healthcare Office. The data analysis used univariate and bivariate analysis with a phi-correlation test. In addition, this study used a questionnaire that has been tested for validity and reliability testing. The validity and Reliability Test was conducted on 30 mothers with toddlers in the Jagebob 7 on the variables of knowledge (5 questions), attitude (5 questions), culture (3 questions), access to health services (3 questions), availability of health services (3 questions), the role of the family or husband (9 questions but 1 question was invalid, so it was deleted), the role of health workers (9 questions). The questions asked were regarding the knowledge possessed by the mother about childbirth, the postpartum period, and health services with the interpretation of less if the score is median and good if median. Likewise, other variables are divided into two categories with a cut of points using the median in its interpretation. This study was approved by the Health Research Ethics Commission, Faculty of Public Health, Universitas Jember under decree No. 176/KEPK/ FKM-UNEJ/III/2021.

#### RESULTS

Based on Table 1 most of mothers has good knowledge with total number 31 respondents (54.4 %), mothers' attitudes towards safe delivery most of the respondents had a poor attitude those were as many as 42 respondents (73.7 %), the influence of culture shows that almost all respondents choose that culture affected as many as 53 respondents (93.0 %), access to health services shows that almost all respondents are difficult

to access to services as many as 53 respondents (93.0%), the availability of health services shows that more than half of the respondents feel the availability of health services, namely as many as 41 respondents (71.9 %). The community supports that as many as 55 respondents (96.5 %) the role of religious leaders shows that more than half of the respondents felt that the role of religious leaders was supportive, and as many as 32 respondents (56.1 %), the role of husband or family showed that more than half of the respondents felt that the role of husband or family was less supportive, as many as 32 respondents (56.1 %), health shows that more than half of the respondents feel the role of health workers, as many as 38 respondents (66.7 %).

Table 1

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Variable	n	%	
Knowledge			
Poor	26	45.6	
Good	31	54.4	
Attitude			
Poor	42	73.7	
Good	15	26.3	
Culture			
Affected	53	93.0	
Not affected	4	7.0	
Access to the Heat	alth Serv	rices	
Unreachable	53	93.0	
Reachable	4	7.0	
Availability of the	e Health	Services	
Not Available	16	28.1	
Available	41	71.9	
Role of Commun	ity Figu	res	
Not supportive	2	3.5	
Supportive	55	96.5	
Role of Religious	Figures		
Not Supportive	25	43.9	
Supportive	32	56.1	
Role of Husband	or Fami	ly	
Not Supportive	32	56.1	
Supportive	25	43.9	
Role of Health W	orkers		
Not Helpful	19	33.3	
Helpful	38	66.7	
Exclusion			
Do	21	36.8	
Not Do	36	63.2	
Total	570	100	

Based on Table 2 the results of the bivariate test on 9 variables, 4 variables correlate with the alienation of women giving birth in the forest: mother's knowledge about safe delivery (p-value = 0.026), mother's attitude about safe delivery (p-value = 0.028), the role of religious leaders (p-value = 0.036), and the role of husband or family (p-value = 0.020). Meanwhile, cultural variables (p-value = 0.572), the availability of health services (p-value = 0.949), access to health services (p-value = 0.113), the role of community leaders (p-value = 0.059), and health workers (p-value = 1.000) have no relationship with the exclusion of women giving birth in the forest.

Variable	Exclusion					p-value	Contingency Coefficient	
		Do		Not Do		Total		
	n	%	n	%	n	%		
Mothers'Knowledge							0.026	0.283
Poor	14	51.9	13	48.1	27	100		
Good	7	23.3	23	76.7	30	100		
Mothers' Behavior							0.028	0.280
Poor	19	45.2	23	54.8	42	100		
Good	2	13.3	13	86.7	15	100		
Culture							0.572	0.075
Affected	19	35.8	34	64.2	53	100		
Not Affected	2	50.0	2	50.0	4	100		
Access to the Health Services							0.113	0.205
Unreachable	21	39.6	32	60.4	53	100		
Reachable	0	0.0	4	100.0	4	100		
Availability of the Health Ser	vices						0.949	0.009
Not Available	6	37.5	10	62.5	16	100		
Available	15	36.6	26	63.4	41	100		
Role of Community Figures							0.059	0.242
Not Supportive	2	100	0	0.0	2	100		
Supportive	19	30.8	36	65.5	55	100		
Role of Religious Figures							0.036	0.268
Not Supportive	13	52.0	12	48.0	25	100		
Supportive	8	25.0	24	75.0	32	100		
Role of Husband or Family							0.020	0.295
Not Supportive	16	50.0	16	50.0	32	100		
Supportive	5	20.0	20	80.0	25	100		
Role of Health Workers							1.000	0.0001
Not Helpful	7	36.8	12	63.2	19	100		
Helpful	14	36.8	24	63.2	38	100		

 Table 2

 Factors Associated With Exclusion of Women Giving Birth in the Forest

# DISCUSSION

The correlation between mothers' knowledge about safe delivery and the seclusion behavior of women giving birth in the forest with weak relationship strength. The direction of the relationship is unidirectional, which means that the higher the mother's knowledge, the higher the mother's awareness of not doing seclusion in the forest when giving birth. Respondents in this study had less knowledge about safe delivery. This also caused mothers to go into seclusion in the forest when giving birth. This study is in line with research conducted that there is a relationship between knowledge, where the higher the knowledge, the higher the impact on the utilization of delivery facilities (14-17).

The correlation between mothers' attitudes about safe delivery and the exile behavior of women giving birth in the forest with weak relationship strength. The direction of the relationship is unidirectional, which means that the higher the mother's attitude about safe delivery, the higher the mother's awareness of not doing seclusion in the forest when giving birth. Some of the respondents in this study lack attitudes about safe childbirth, accompanied by high behavior in seclusion in the forest. This shows that the attitude has less impact on the behavior of the respondents to conduct seclusion in the forest during childbirth. The relationship between the role of religious leaders and the exile behavior of women giving birth in the forest with weak relationship strength. The direction of the relationship is unidirectional, which means that the higher the role of religious leaders, the higher the mothers' awareness not to do seclusion in the forest when giving birth. The study respondents felt that the role of religious leaders was very supportive and did not carry out high isolation behavior either. The research showed that this is the impact of the role of community leaders who play an active and real role in the choice of place of delivery for mothers (18).

The relationship between the role of the husband or family with the exile behaviour of women giving birth in the forest with weak relationship strength. The direction of the relationship is unidirectional, which means that the higher the role of the husband or family, the higher the mother's awareness not to seclusion in the forest when giving birth. Respondents in this study felt that the role of their husband or family was less supportive, accompanied by high exile behaviour. This is the impact of the role of the husband or family being less supportive in providing information, motivational, instrumental, and emotional support (19). This study is in line with research conducted, which shows a significant relationship between family support, where the higher the family support, the higher the impact on the utilization of delivery facilities (20-23).

This research shows that there is no correlation between culture, access to health services, availability of health services, or the role of community leaders and health workers with the exile behaviour of women giving birth in the forest. In this study, most respondents have difficult access to health services. This is caused by long distances and difficult road conditions, especially in the rainy season so it requires special transportation, namely a jeep, and it requires a fairly large cost to reach health services which has an impact on respondents to go into exile in the forest when giving birth.

In addition, most respondents in this study felt that health services were unavailable. Due to long distances and the difficulty of transportation to health services make respondents feel that health services are unavailable. Hence, it impacts respondents to practice seclusion in the forest when giving birth. The role of health workers is very important and does not carry out high isolation behaviour either (24-26). This is the impact of the role of health workers who play an active and real role in the selection of maternal delivery places, such as health workers who can approach pregnant women well through existing activities such as making counselling for pregnant women, holding classes for pregnant women, conducting surveys to every home to find out what is happening. Registering pregnant women and conducting community participation in maternal and child health. On the role of community leaders, respondents in this study felt that the part of community leaders was very supportive and did not carry out high isolation behaviour. This is the impact of the role of community leaders who play an active and real role in the choice of place of delivery for mothers (27-29).

## CONCLUSION

This study found a correlation between variables of mothers' knowledge about safe delivery, their attitude about the safe delivery, the role of religious leaders, and the role of husband or family with the exile behaviour of women giving birth in the forest. The exile behaviour of women giving birth in the forest can be changed by increasing the knowledge and attitudes of the husband or family mother and religious leaders. And no correlation between cultural variables, the availability of health services, access to health services, the role of community leaders, and the role of workers with the exclusion of women giving birth in the forest. This research suggests that healthcare facilities in Indonesia are evenly distributed, especially in every village in Merauke Regency, Papua.

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