

Health Workers' Perceptions Toward the Compliance of Antenatal Care Visit in Dumai City, Indonesia

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Health Workers' Perceptions Toward the Compliance of Antenatal Care Visit in Dumai City, Indonesia

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Abstract

Background: One of the efforts to reduce Maternal Mortality Rate (MMR) is to conduct Antenatal Care (ANC) programs routinely. Unfortunately, the problem is that the ANC compliance coverage is still the lowest (71.5%) in Dumai City, Indonesia. **Aims:** This study describes the perception of health workers toward the causes of the low coverage of ANC program visits. **Setting and Design:** This study used qualitative approach with a phenomenological design. **Methods and Material:** Data were collected by means of in-depth interviews, Focus Group Discussions (FGD), and documents collection. Key informants consisted of midwives (10 subjects), Heads of Primary Health Care units (10 subjects), Head of Maternal Program, and Secretary of the Dumai City Health Office. **Statistical analysis used:** Data were analyzed using thematic analysis by transcript texts, meaning units, coding, and themes. **Results:** This study explained that the causes of low ANC compliance based on health workers' perceptions were the difficulties in accessing transportation in suburban areas, low education and knowledge, lack of motivation of pregnant women to visit health facilities, communication, poor work discipline of health workers, local myths, and culture about pregnancy. **Conclusion:** There were six themes obtained from this study, namely: accessibility and transportation, low level of education, motivation, communication, discipline, as well as myth and culture. It is necessary to develop health education programs and transportation infrastructure, as well as to improve the quality of health human resources and regulation.

Keywords: Antenatal Care, Compliance, Health Workers' Perceptions

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Introduction

The high Maternal Mortality Rate (MMR) in Indonesia of 350/100,000 live births is a major problem. The Indonesian government has made several efforts to reduce MMR, including the Safe Motherhood Program, Mother Care Program, Making Pregnancy Safer, and the Maternal and Neonatal Survival Expanding program, even though the MMR is still not in line with the expected target of 102/100,000 live births.¹⁻³ One of the efforts to reduce MMR is the attempt to focus on Antenatal Care (ANC) and maternal education. Twenty percent of pregnancies are predicted to experience complications, and 20.3% will result in mortality if no comprehensive treatment is carried out.^{4,5}

Routine ANC services can detect risks during pregnancy early.^{6,7} Four ANC visits are useful to reduce MMR in the world.^{8,9} Indicators of assessment of health services for pregnant women in Indonesia are seen through the coverage rates of K1 (1st ANC visit) and K4 (4th ANC visit). From 2005-2015, coverage of the 1st and 4th visits approached the target of 88.6%-95.7%. Riau is the province with the lowest K4 coverage at 85.67%. Dumai City is one of the cities in Riau Province with the lowest ANC coverage (74.9% for the 1st visit and 71.57% for the 4th visit).² The behavior to conduct ANC visits is an individual perception that is influenced by three domains: knowledge, attitude, and practice.¹⁰ The low number of ANC services utilization is caused by the lack of focus on the quality of ANC services such as facilities, health workers, economic aspect, and socio-cultural aspect.¹¹⁻¹³ However, in this study, we want to discover the cause of the low number of ANC program coverage from the perception of health workers.

Subjects and Methods

The research method used was qualitative with phenomenological design. There were 22 respondents who participated in this study. They consisted of ten midwives, ten heads of Primary Health Care units in Dumai City, secretary of the Health Office, and head of maternal program. The research was conducted for four months (June-September 2019). The process of data collection was carried out using in-depth interviews, FGD, and documents collection. The in-depth interview process took an average of 30-45 minutes. The duration of FGD was approximately \pm 120 minutes. The FGD was guided by facilitator using semi-structured discussion guidelines. Data were analyzed using thematic analysis by transcript texts, meaning units, coding, and themes.

Results and Discussion

ANC is a pregnancy checkup conducted to optimize the mental and physical health of pregnant women.^{14,15} The purpose of ANC visit is to facilitate and manage pregnancy complications

promptly in order to reduce maternal mortality.¹⁶ Research related to risk factors for Maternal Mortality explain that the number of ANC visit is still low, which results in increased morbidity and mortality.^{17,18}

Several causes of ANC compliance are knowledge, attitudes, beliefs, motivations, self-concept, age, experience, and health workers' skills.^{19,20} Interactions with the closest people refer to family support, husband support, and social community support.²¹⁻²³ Health service facilities, health workers' skills, and transportation access also become other factors.^{24,25}

1. Accessibility and Transportation

Many rivers surrounded the geographical location of this area, meaning that pregnant women's access to health care was quite far. Moreover, access to public transportation was infrequent. Some of these reasons often became the reason for pregnant women to not routinely visit ANC unit. The following are several quotes from the interviews:

"It is true that distance is a problem for the pregnant women, that is the reason why I cannot tell them about the schedule of pregnancy checkup, as the distance is just too far" (Midwife 1) Text 1
"The obstacles faced are quite possibly the distance that must be covered, as well as the fact that no one wants to escort the women to the health center" (P-1) Text 1
"One of the obstacles is transportation, and some mothers have to wait for their husbands" (P-2) Text 2
"Because of their geographical location, the two locations are difficult to access" (P-3) Text 3
"The obstacle in our place is usually the long distance, and the road is not easy to traverse. Yeah, there are no primary health facilities" (P-4) Text 4

The geographical condition of an area strongly influences pregnant women's access to health facilities.²⁶ Access to cover the distance and transportation problems have always been significant obstacles in this area.

2. Low Level of Education

The majority of pregnant women in the area only graduated from junior high and senior high school. There were even those who were elementary school graduates. Low level of education affects personal knowledge.²⁷ The following are some quotes from the interviews:

"The average education level of pregnant women here is still low, Senior High School is the highest degree here, it's rare, especially in the similar Bagan Keladi area, there are junior high school graduates, some are even elementary school graduates, but they can read" (Midwife 2, 3,4) Text 2
"How to put this... the lack of public knowledge regarding the importance of pregnancy checkup is the problem" (P-5) Text 5
"Lack of maternal knowledge, lack of important information concerning pregnancy checkup" (P-6). Text 6

Level of education can affect individual mindset as it determines the ability to obtain information; maturity of thought is accompanied by the status of the level of education. Mothers who live in rural areas with low levels of education and low socioeconomic conditions tend to not make regular ANC visits.²⁸

3. Motivation

Motivation is a condition within a person that drives an individual's desire to do certain activities. The desire of pregnant women to do ANC in this area was still low. The following are several quotes from the interviews:

"There are pregnant women who are ashamed to undergo pregnancy checkup because they already have many children (midwife 5) Text 3

"We always inform pregnant women to take pregnant women classes, but they always have a lot of excuses. No one can take them there, their children cannot look after the house, those are examples of their excuses (midwife 6) Text 4

"Our area is in the middle of the city, yet there are still many pregnant women who are too lazy to undergo pregnancy checkup at the primary health center unit" (P-7) Text 7

"Sometimes the pregnant women do not feel any medical complaints, so they think that there is no need for routine ANC visit " (P-8)Text 8

"The point is, we see that the desire of pregnant women to do pregnancy checkup is still lacking" (P-11) Text 9

One of the causes of the low motivation to undergo pregnancy checkup is ignorance regarding pregnancy. This is usually experienced by adolescent pregnant women and mothers who already have many children.^{29, 30} Grand multiparas are susceptible to the risk of hypertension, pre-eclampsia, and eclampsia. The rates of such incidence are still high in developing countries.³¹⁻³³

4. Communication

Excellent communication between health workers and patients will result in satisfaction toward the health service.^{34,35} Patients will feel comfortable and obtain sufficient information if the delivery of information is conducted communicatively. The following are interview quotes about the communication problem;

"It is difficult to communicate with areas that are far from the Primary Health Care unit due to bad signals, the electricity also often goes out, meaning that they cannot receive any information (midwife 7) Text 5

"The obstacle that we experience is usually about the character of the health workers. Their manners when communicating with patients are sometimes not good" (P-3) Text 10

"Actually, if given the information to routinely conduct pregnancy checkup as well as the checkup schedule, pregnant women would definitely want to come" (P-12). Text 11

In this study, the condition of the education level of pregnant women in this area was still low, so a communication approach that was easily understood by pregnant women was needed.

5. Discipline

Work discipline does not just suddenly appear, but it is the result of a continuous learning process. Increasing the control of health workers will create high performance. Customer satisfaction will emerge from the services provided by creating quality health services. In this study, the discipline of health workers was still a problem. The following are some quotes from the interview:

"They do not come regularly according to their pregnancy. In the first trimester of pregnancy they do not want to leave the house so they miss their first visit (Midwife 8) Text 6

"Sometimes this is just a program, and it does not run optimally due to the lack of discipline. There is no in-depth evaluation of this program" (P-9) Text 12

"There must be appropriate regulations for the performance of midwives. They will work in a disciplined manner if they have the right amount of salary" (P-11) Text 13

To improve discipline, proper guidance and regulations regarding the quality of human resources are needed. One of the controls is time discipline. Time discipline determines the quality of work in priority health services.

6. Myth and Culture

During pregnancy, mothers are advised to understand which information are correct and which ones are only myths. In this study, the myth and culture of the people in this city were that in the first-trimester of pregnancy women could not leave their home. There were pregnant women who still visited Shaman to get her pregnancy examined. The following are the interview quotes:

"They still go to the shaman to be examined, even if it's just for massage. Their reason is that they are comfortable with the shaman and they have known them from their family for a long time" (midwife 9, 10) Text 7

"Pregnant women still want to be examined by a shaman because they still feel comfortable and the practice has become a custom" (P-6) Text 14

"Sometimes, there is a myth from the family. If you are still in the first trimester of pregnancy, you should not leave the house, and thus the pregnant women will miss the K1 coverage" (P-10) Text 15

Trust in shamans depends on individual character.³⁶ So it needs a personal approach in providing the right understanding of these characters. Personal approaches and the provision of health information about the importance of handling health services by health workers. The stages of the process of qualitative analysis are transcript texts, meaning units, coding, and themes.

Table 1. Summary of Qualitative Analysis Steps from Key Informants

Respondent	Transcript Text	Meaning Unit	Coding	Theme
M-1	Text 1	o Long distance	o Distance	Access
M-2,3,4	Text 2	o Low education	o Education	Education
M-5	Text 3	o Ashamed to be examined	o Low knowledge level	Motivation
M-6	Text 4	o No one can escort to health center	o Transportation	Transportation
M-7	Text 5	o Difficult communication	o Signal error	Communication
M-8	Text 6	o Unwillingness to come routinely	o No regular checkups	Discipline
M-9	Text 7	o Go to the shaman to be examined	o Comfortable	Myth
M-10	Text 7	o Family advice	o Family support	Family Culture

Abbreviation = M: Midwife

Table 2. Summary of Qualitative Analysis Steps from Supporting Informants

Respondent	Transcript Text	Meaning Unit	Coding	Theme
P-1	Text 1	<ul style="list-style-type: none"> o Long distance o No one can escort to health center 	<ul style="list-style-type: none"> o Distance o Escort 	Access Transportation
P-2	Text 2	<ul style="list-style-type: none"> o Transportation issue o Wait for husband to escort 	<ul style="list-style-type: none"> o Transportation o Wait for husband 	Transportation
P-3	Text 3	<ul style="list-style-type: none"> o Geographical location o Difficult to access 	<ul style="list-style-type: none"> o Location o Access 	Access
P-4	Text 4	<ul style="list-style-type: none"> o Long distance o The road is not easy to traverse 	<ul style="list-style-type: none"> o Distance o Access 	Access
P-5	Text 5	<ul style="list-style-type: none"> o Lack of knowledge o Information check 	<ul style="list-style-type: none"> o Knowledge o Information 	Education
P-6	Text 6	<ul style="list-style-type: none"> o Maternal knowledge o Pregnancy risk 	<ul style="list-style-type: none"> o Knowledge o Information 	Low Education Level
P-7	Text 7	<ul style="list-style-type: none"> o Too lazy to undergo checkup o Go to the doctors' clinic 	<ul style="list-style-type: none"> o Lazy o Clinic 	Motivation
P-8	Text 8	<ul style="list-style-type: none"> o Does not have any medical complaints 	<ul style="list-style-type: none"> o No complaints 	Motivation
P-11	Text 9	<ul style="list-style-type: none"> o The pregnant women's lack of desire 	<ul style="list-style-type: none"> o Lack of desire 	Motivation
P-3	Text 10	<ul style="list-style-type: none"> o The characters of health workers o Communication with patients 	<ul style="list-style-type: none"> o Character o Communication 	Communication
P-12	Text 11	<ul style="list-style-type: none"> o Informed to check routinely 	<ul style="list-style-type: none"> o Information 	Communication
P-9	Text 12	<ul style="list-style-type: none"> o Lack of discipline program 	<ul style="list-style-type: none"> o Discipline program 	Discipline
P-11	Text 13	<ul style="list-style-type: none"> o Work discipline 	<ul style="list-style-type: none"> o Discipline 	Discipline
P-6	Text 14	<ul style="list-style-type: none"> o Examined by a shaman 	<ul style="list-style-type: none"> o Shaman 	Culture
P-10	Text 15	<ul style="list-style-type: none"> o Myth from the family 	<ul style="list-style-type: none"> o Myth 	Myth

Abbreviation = P: Person

Tables 1 and 2 show that based on health worker's perception, the factors that caused the low coverage of the ANC program were transportation, education, motivation, communication, discipline, myth, and culture. The limitation of this study was the fact that it only determined the perception of health workers. Further research is needed for other perspectives (pregnant women, social support, and other communities).

Conclusion

This study concluded that the six causes of low ANC compliance in Dumai City were accessibility and transportation, education, motivation, communication, discipline, as well as myth and culture. It is necessary to develop an ANC program to increase the coverage of ANC visits, especially by creating and promoting health education programs, completing the infrastructure of

transportation, improving the quality of health human resources, and issuing appropriate government regulation.

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Ethical Clearance

The Ethics Committee for Health Research, Diponegoro University (No.240/EA/KEPK-FKM/2018).

References

1. Sustainable Development Goals (SDGs). Indicator and Monitoring Framework for The Global Strategy for Women's, Children's And Adolescents' Health (2016-2030). Every Woman Every Child, pp.19–20. 2016
2. Kementerian Kesehatan Republik Indonesia. ProfilKesehatan Indonesia. Publisher: *Kementerian Kesehatan Republik Indonesia*. pp.102 - 106. 2016
3. Osborn, D, Cutter A., Ullah, F, Universal Sustainable Understanding the Transformational Challenge for Developed Countries Report of A Study by Stakeholder Forum. pp.6-13. 2015
4. Campbell OMR, Graham WJ, Lancet Maternal SurvivalSteering Group. Strategies for Reducing Maternal Mortality:getting on with what works. *Lancet* 2006;368:1284–1299
5. Abouchadi, S., Zhang, W., & De Brouwere, V.UnderReporting of Deaths in The Maternal Deaths SurveillanceSystem in One Region of Morocco. *Plos ONE*, 2008:13(1), 115.DOI:10.1371/journal.pone.0188070
6. Tinker A, Koblinsky M. Making Motherhood Safe. WorldBank Discussion Papers. Washington, DC: World Bank.1993
7. Carroli G, Rooney C, Villar J. Antenatal Care and MaternalMortality and Serious Morbidity: How Effective Is It? *PaediatrPerinat Epidemiol* 2001:15 pp. 1–42
8. Shafqat T, Fayaz S, Rahim R, Saima S, Knowledge andAwareness Regarding Antenatal Care and Delivery amongPregnant Women. *J. Med. Sci.*, 2015. 23: 88-91.

9. Javali R, Wantamutte A, Mallapur M, Socio-demographic Factors Influencing Utilization of Antenatal Health Care Services in a Rural Area - A cross-sectional study. *Int J MedSci Public Health*, 2014;3: pp.308-312.
10. Green, L.W. Kreuter, M.W, Health Program Planning an Educational and Ecological Approach 4th Ed, Mc. Graw Hill, Boston, 2005
11. Naariyong S, Poudel C K, Rahman M, Yasuoka J, Otsuka K, Jimba M, Quality of Antenatal Care Services in the Birim North District of Ghana: Contribution of the Community Based Health Planning and Services Program. *Matern Child Health J* (2012) 16:1709–1717; DOI: 10.1007/s10995-0110880-z.
12. Adamu, Y. M. and H. M. Salih), "Barriers to The Use of Antenatal and Obstetric Care Services in Rural Kano, Nigeria." *Journal of Obstetrics & Gynecology* 2002. 22(6): pp.600-603.
13. Chukuezi, C, Socio-cultural Factors Associated with Maternal Mortality in Nigeria. *Research Journal of Social Sciences*, 2010,1 (5), pp. 22-26.
14. Tesfaye, G., Loxton, D., Chojenta, C., Semahegn, A., &Smith, R. Delayed Initiation of Antenatal Care and Associated Factors in Ethiopia: A Systematic Review and Meta-Analysis. *Reproductive Health*, 2017:141-17.DOI:10.1186/s12978-017-0412-4
15. Solnes Miltenburg, A., Van Der Eem, L., Nyanza, E. C., VanPelt, S., Ndaki, P., Basinda, N., & Sundby, J. Antenatal Care and Opportunities for Quality Improvement of Service Provision in Resource-Limited Settings: A Mixed Methods Study. *Plos ONE*, 2017:12(12), 1-15. Doi:10.1371/Journal.Pone.0188279
16. Gidey, G., Hailu, B., Nigus, K., Hailu, T., G/her, W., &Gerense, H. Timing of First Focused Antenatal Care Booking and Associated Factors Among Pregnant Mothers Who Attend Antenatal Care in Central Zone, Tigray, Ethiopia. *BMC Research Notes*, 2017:101-6. DOI:10.1186/s13104-0172938-5
17. AbouZahr C, Wardlaw TM. Maternal Mortality at the End Decade: What Sign of Progress? *Bull World Health Org*. 2001;79:561–573.
18. World Health Organization. Pregnancy, Childbirth, Postpartum, and Newborn care: A Guide for Essential Practice. Geneva: WHO; 2006

19. Anjum F. N.N, Bano S, To Assess the Knowledge of Women in Regards to Antenatal Care. *Med Forum*, 2015;26: 23-26.
20. Overbosch GB, Nsowah Nuamah NNN, van den Boom GJM Damnyag L. Determinants of Antenatal Care Use in Ghana. *J Afr Econ*. 2004;13(2):277–301.
21. Chortatos A, Haugen M, Iversen PO, Vikanes A, Magnus P. Nausea and Vomiting in Pregnancy: Associations with Maternal Gestational Diet and Lifestyle Factors in The Norwegian Mother and Child Cohort Study. *BJOG* 2013;120: 1642-1653
22. Kowlessar O, Fox J, Wittkowski A. First Time Fathers' Experiences of Parenting During TheFirst Year. *Journal of Reproductive and Infant Psychology [serial online]*. February 2015;33 (1):4-14.
23. Chin, R., Hall, P., & Daiches, A. Fathers' Experiences of Their Transition to Father- Hood: A Meta Synthesis. *Journal of Reproductive and Infant Psychology*, 2011:29,4 –18. DOI:10.1080/02646838.2010.513044
24. Brown. S, Glover K, Weetra. D. Improving Access to Antenatal Care for Aboriginal Women in South Australia: Evidence from a Population-Based Study. *Birth*.2016;43(2):134-143. DOI:10.1111/birt.12214
25. Rahmani Z, Brekke M. Antenatal and obstetric Care in Afghanistan--a qualitative study among health care receivers and health care providers. *BMC Health Serv Res*. 2013;13:166. Published 2013 May 6. DOI:10.1186/1472-6963-13-166
26. Ali H, Ali A, Mahmood QK, Jalal A, Ali SR. Antenatal Care: Accessibility Issue among Pakhtun Women in Malakand, Pakistan. *Isra Medical Journal*. 2018;10(6):362-366
27. Shafqat T, Fayaz S, Rahim R, Saima S, Knowledge and Awareness Regarding Antenatal Care and Delivery among Pregnant Women. *J. Med. Sci.*, 2015. 23: 88-91.
28. Noh J-W, Kim Y, Lee LJ, et al. Factors associated with the use of Antenatal Care in Sindh Province, Pakistan: A population-based study. *PLoS ONE*. 2019;14(4):1-11. DOI:10.1371/journal.pone.0213987.
29. Chikalipo MC, Nyondo-Mipando L, Ngalande RC, Muheriwa SR, Kafulafula UK. Perceptions of pregnant adolescents on the antenatal Care received at Ndirande Health Centre in Blantyre, Malawi. *Malawi Med J*. 2018;30(1):25-30.

30. Bai J, Wong FW, Bauman A, Mohsin M. Parity, and Pregnancy Outcomes. *Am J Obstet Gynecol.* 2002; 186:274-8
31. Khatun, J. Obstetrical Outcome of Grand Multipara. *Journal of Bangladesh College of Physicians & Surgeons*, 2016;34(4), pp.184-187.
32. Begum S. Age and Parity Related Problems Affecting Outcome of Labor in Grand Multipara. *Pak J Med* 2003; 42:179-184.
33. Rayamajhi. R, Thapa M, Pande. S. The Challenge of Grand Multiparity in Obstetric Practice. *Kathmandu Univ Med J (KUMJ)* 2006; 4:70-4.
34. Onyeajam DJ, Xirasagar S, Khan MM, Hardin JW, Odutolu O. Antenatal care satisfaction in a developing country: a cross-sectional study from Nigeria. *BMC Public Health.* 2018;18(1):368. Published 2018 Mar 20. DOI:10.1186/s12889-018-5285-0
35. Lori JR, Munro ML, Chuey MR. Use of a Facilitated Discussion Model for Antenatal Care to Improve Communication. *Int J Nurs Stud.* 2016;54:84-94. DOI:10.1016/j.ijnurstu.2015.03.018
36. Walter, Mariko Namba, and Eva Jane Neumann Fridman, Shamanism: an Encyclopedia of World Beliefs, Practices, and Culture. Volume I. Santa Barbara, California: *ABC-CLIO, Inc.* p:162. 2004

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