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Relationship of Age, Parity, and History of Abortion With the Incidence of Incomplete Abortion at RSUD Dr. HM Rabain Muara Enim 2021

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A R T I C L E I N F O

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ABSTRACT

Incomplete abortion is the expulsion of the products of conception that occurs at 20 weeks of gestation and the fetus weighs 500 grams and there are remnants left in the uterus. This study aims to determine the relationship between age, parity and history of abortion simultaneously with the incidence of incomplete abortion in RSUD Dr.HM Rabain Muara Enim 2021. The method used in this study is a quantitative study with an analytical survey method with a cross sectional approach. The population in this study were all mothers who were treated in the Midwifery Care Room without giving birth as many as 523 people, with a total sample of 84 people. The sampling technique in this study was Systematic random sampling with class intervals. The statistical test used is the chi square test. Through the analysis, the results obtained from 33 respondents of high risk age who experienced incomplete abortion as many as 25 respondents (75.8%) and 8 respondents (24.2%) who did not experience incomplete abortion, where p value 0.007 and OR 4.119 means that there is a relationship between age mothers with incomplete abortions. Of the 40 respondents with high parity, 26 respondents (65%) experienced an incomplete abortion and 14 respondents (35%) did not experience an incomplete abortion with ap value of 0.170 and an OR of 2.034, which means that there is no parity relationship with the incidence of incomplete abortion. abortion. and of the 21 respondents who had a history of abortion, there were 18 respondents (85.7%) who had incomplete abortions and 3 respondents (14.3%) did not experience an incomplete abortion with ap value of 0.004 OR 7.034, meaning that there was a relationship between the history of abortion and the incidence of abortion. . Incomplete. The results of this study are expected to be input for improving the quality of services for pregnant women so as to reduce the incidence and mortality due to incomplete abortion.

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1. Introduction

Abortion is the expulsion of the products of conception that occurs at gestational age 20 weeks and fetal weight 500 grams. As for the impact of the problem if you don't get prompt and appropriate treatment, it will increase the maternal mortality rate caused by complications from abortion, namely bleeding, perforation, infection and shock. Meanwhile, incomplete abortion is that

some of the products of conception have come out of the uterine cavity and are still present. left behind. At gestational age less than 20 weeks or fetal weight 500 grams [1].

In 2019, the maternal mortality rate (MMR) in the world was 303,000 people. The maternal mortality rate is still very high, around 810 women die from complications related to pregnancy or childbirth worldwide every day, and about 295,000 women died during and after pregnancy and childbirth in 2017. The maternal mortality rate in developing countries is 462/100,000 live births. Whereas in developed countries it is 11/100,000 live births [2], the South Sumatra Provincial Health Service abortion data in 2014 was 200 deaths per 100,000 births, from national data it reached 300 births per 100,000 births of which caused by bleeding, infection and hypertension pregnancy. The causes of maternal death include bleeding, pulmonary embolism with suspected cardiogenic shock,

The factors that can cause an incomplete abortion are maternal age, gestational age, number of parity, pregnancy distance, education level of economic status and history of previous abortion [4].

Age is the length of time life is calculated from birth until now. Determination of age is done by using a matter of years [5]. The safe age for pregnancy and childbirth is 20-30 years. Maternal mortality in pregnant women and giving birth at the age of under 20 years was 2-5 times higher, than maternal deaths that occurred at the age of 20-29 years. Maternal mortality increases again after the age of 30-35 years [6].

Parity is a woman who has given birth to a viable baby. The parity classification includes: Nullipara is a woman who has never given birth to a live baby. Primipara is a woman who gives birth to a live baby for the first time. Multipara/pleuripara is a woman who has given birth to live babies several times. Grandemultipara is a woman who has given birth to 5 or more babies, alive or dead. [7].

Abortion history is the expulsion of the products of conception at a gestational age of less than 20 weeks or a fetus weighing less than 500 grams that a person has experienced before. Abortion history is a risk factor that can increase the risk of abortion in pregnant women. is something someone has experienced before [8].

The incidence of abortion in RSUD Dr. H. Mohammad Rabain Muara Enim in 2019 as many as 397 cases, decreased during the COVID-19 pandemic in 2020 as many as 253 cases and in 2021 as many as 240 cases. (Medical records of RSUD Dr. HM Rabain Muara Enim, 2021) [9].

Based on the initial survey conducted by researchers at RSUD Dr. HM Rabain Muara Enim it is known that the data obtained in 2019 recorded the number of cases of incomplete abortion as many as 163 cases (3.9%), abortion imminens 234 cases from 2175 mothers who were treated in the obstetric care room, in 2020 the number of cases of incomplete abortion as many as 117 cases (6.7%) of abortion imminens 136 cases of 1569 mothers who were treated in the obstetric care room and in 2021 there were 130 cases (9.2%) of incomplete abortion and abortion imminens 110 cases of 1412 mothers who were treated in obstetric care room at RSUD Dr HM Rabain Muara Enim (Medical Record at RSUD Dr H Mohammad Rabain Muara Enim) [10].

Based on the data above, the researcher is interested in conducting a study entitled "The Relationship of Age, Parity and Abortion History with the Incidence of Incomplete Abortion at DR H Mohammad Rabain Muara Enim Hospital in 2021."

2. Methods

This study uses quantitative research with an analytic survey method with a cross sectional approach, the study was conducted in January 2022, the sample of this study was partly from mothers who were treated in the Midwifery Care Room of Dr HM Rabain Muara Enim Hospital in 2021, the number of samples in this study was 84 people.

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3. Results

3.1 Research result

a. Univariate Analysis

TABLE 1.
FREQUENCY DISTRIBUTION BY INCOMPLETE ABORTION AT DR. HOSPITAL. HM. RABAIN MUARA ENIM YEAR 2021

Incomplete Abortion	Amount (N)	Percentage (%)
Yes	47	56
No	37	44
Total	84	100

Source: IBM SPSS version 26

Based on table 1 shows that the number of respondents in this study were 84 respondents, where mothers who experienced incomplete abortions were 47 respondents (56%) and mothers who did not experience incomplete abortions were 37 respondents (44%).

TABLE 2.
FREQUENCY DISTRIBUTION BY AGE AT DR. HOSPITAL. HM. RABAIN M. ENIM YEAR 2021

Mother's Age	Amount (N)	Percentage (%)
High risk	33	39.3
Low Risk	51	60.7
Total	84	100

Source: IBM SPSS version 26

Based on table 2, it was found that from 84 respondents there were 33 respondents (39.1%) of high risk age and 51 respondents (60.7 %).

TABLE 3.
FREQUENCY DISTRIBUTION BY PARITY AT DR. HOSPITAL. HM. RABAIN MUARA ENIM YEAR 2021

Parity	Total (N)	Percentage (%)
High Risk	40	47.6
Low Risk	44	52.4
Total	84	100

Source: IBM SPSS version 26

Based on table 3, it was found that from 84 respondents there was high parity, namely 40 respondents (47.6%) and low parity, namely 44 respondents (52.4%).

TABLE 4.
FREQUENCY DISTRIBUTION ACCORDING TO ABORTION HISTORY AT DR. HOSPITAL. HM. RABAIN MUARA ENIM 2021

Abortion History	Total (N)	Percentage (%)
Yes	21	25
No	63	75
Total	84	100

Source: IBM SPSS version 26

Based on Table 4 shows that of the 84 respondents there are mothers who have a history of abortion as many as 21 respondents (25%) and mothers who do not have a history of abortion as many as 63 respondents (75%).

b. Bivariate Analysis

TABLE 5.
RELATIONSHIP OF AGE WITH INCIDENCE OF INCOMPLETE ABORTION AT DR. HOSPITAL. HM. RABAIN MUARA ENIM YEAR 2021

No	Age	Incomplete Abortion				Amount		value	OR
		Yes		No		n	%		
		n	%	n	%				

No	Age	Incomplete Abortion				Amount		□value	OR
		Yes		No		n	%		
		n	%	n	%				
1	High risk	25	75.8	8	24.2	33	100		
2	Low Risk	22	43.1	29	56.9	51	100	0.007	4.119
Amount		47		37		84			

Based on table 5 above, it is found that from 33 respondents with high risk age who experienced incomplete abortion as many as 25 respondents (75.8%) and 8 respondents (24.2%) did not experience incomplete abortion. 22 respondents (43.1%) of low risk age experienced incomplete abortion and 29 respondents (56.9%) did not experience incomplete abortion.Based on the results of the chi square statistical test at the limit of = 0.05 and df = 1, p value = 0.007 = 0.05, this indicates that there is a relationship between maternal age and incomplete abortion so that the hypothesis that states there is a significant relationship means statistically proven. The results of the Odds Ratio obtained a value of 4.119 which means that respondents who are of high risk age have a 4,119 times greater chance of experiencing incomplete abortion compared to mothers of low risk age.

TABLE 6.
RELATIONSHIP OF AGE WITH INCIDENCE OF INCOMPLETE ABORTION AT DR. HOSPITAL. HM. RABAIN MUARA ENIM YEAR 2021

No	Parity	Incomplete Abortion				Amount		□Value	OR
		Yes		No		N	%		
		N	%	N	%				
1	High Parity	26	65	14	35	40	100		
2	Low Parity	21	47.7	23	52.3	44	100	0.170	2.034
Amount		47		37		84			

Based on table 6 above, it was found that from 40 respondents there were 26 respondents (65%) of high parity who had incomplete abortions and 14 respondents (35%) did not experience incomplete abortions. Meanwhile, from 44 low parity respondents, 21 respondents (47.7%) had low parity who had incomplete abortion and 23 respondents (52.3%) did not experience incomplete abortion.Based on the results of the chi square statistical test at the limit of = 0.05 and df = 1, p value = 0.170 > = 0.05, this indicates that there is no relationship between parity and incomplete abortion, thus the hypothesis that there is a significant relationship not statistically proven.The results of the Odds Ratio obtained a value of 2.034 which means that respondents with high parity have 2.034 times greater chance of experiencing incomplete abortion compared to respondents with low parity.

TABLE 7.
RELATIONSHIP OF ABORTION HISTORY WITH INCOMPLETE ABORTION INCIDENCE AT DR. HOSPITAL. HM. RABAIN MUARA ENIM YEAR 2021

No	Abortion History	Incomplete Abortion				Amount		□value	OR
		Yes		No		N	%		
		n	%	n	%				
1	Yes	18	85.7	3	14.3	21	100		
2	No	29	46.0	34	54.0	63	100	0.004	7,034
Amount		47		37		84			

Based on table 7 above shows the results obtained from 21 respondents who have a history of abortion there are 18 respondents (85.7%) experienced an incomplete abortion and 3 respondents (14.3%) did not experience an incomplete abortion. Meanwhile, of the 63 respondents who did not have a history of abortion, 29 respondents (46%) had an incomplete abortion and 34 respondents (54%) did not experience an incomplete abortion.. Based on the results of the chi square statistical test at the limit of = 0.05 and df = 1, p value = 0.004 < = 0.05, this indicates that there is a relationship between history of abortion and incomplete abortion so that the hypothesis states that there is a significant relationship. statistically proven means. The results of the Odds Ratio obtained a value of 7.034 which means that respondents who have a history of abortion have a 7.034 times greater chance of experiencing an incomplete

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abortion compared to respondents who do not have a history.

3.2 Discussion

a. Age Relationship with Incomplete Abortion

From the results of research on univariate analysis, it was found that from 84 respondents, maternal age at high risk was 33 respondents (39.3%) and 51 respondents (60.7%). From the results of research on bivariate analysis, it was found that of the 33 respondents with high risk age who experienced incomplete abortion, as many as 25 respondents (75.8%) and 8 respondents (24.2%) who did not experience incomplete abortion. Meanwhile, of the 51 respondents of low risk age, there were 22 respondents (43.1%) who had an incomplete abortion and 29 respondents (56.9%) did not experience an incomplete abortion.

Based on the results of the chi square statistical test at the limit of = 0.05 and df = 1, p value = 0.007 = 0.05, this indicates that there is a relationship between age and incomplete abortion so that the hypothesis that states there is a significant relationship statistically proven. The results of the Odds Ratio obtained a value of 4.119 which means that respondents with high risk age have a 4.119 times greater chance of experiencing incomplete abortion compared to respondents with low risk age.

The results of this study are in line with the research conducted by Heriyanti (2018), entitled Relationship between Age and Parity of pregnant women with the incidence of incomplete abortion at Muhammadiyah Hospital in Palembang in 2017, which stated that respondents with high risk age were 100 people (66.7%) and those who were not experienced an incomplete abortion as many as 50 people (33.3%) and fewer than those from the low risk age as many as 23 people (11.6%) who experienced an incomplete abortion and 175 people (88.4%) who did not experience an incomplete abortion. the results of p value = 0.000 = 0.05 so that there is a significant relationship between age and the incidence of incomplete abortion at Muhammadiyah Hospital Palembang in 2017 statistically tested.

Based on the explanation above, the researcher assumes that mothers who are at risk for incomplete abortion are aged < 20 years and > 35 years. Because at the age of <20 years, the reproductive function of women has not developed perfectly, while at the age of> 35 years, the reproductive function of women has decreased. However, in the results of the study, there were 22 (43.1%) age data who had low risk but experienced incomplete abortion. This can be caused by other factors such as a history of abortion, parity, nutritional intake, anemia and other comorbidities. To avoid abortion or miscarriage in mothers, who want to plan their pregnancy, it is better to get pregnant at the age of 20-35 years. And for mothers who are already pregnant at the age of < 20 years and > 35 years, to be able to check their pregnancy regularly.

b. The relationship of parity with incomplete abortion

P From the results of research on univariate analysis, it was found that from 84 respondents, there were high parity, namely 40 people (47.6%) and low parity, namely 44 people (52.4%). From the results of research on bivariate analysis, it was found that from 40 respondents there were 26 respondents (65%) of high parity who had incomplete abortions and 14 respondents (35%) did not experience incomplete abortions. Meanwhile, from 44 low parity respondents, 21 respondents (47.7%) had low parity who had incomplete abortion and 23 respondents (52.3%) did not experience incomplete abortion.

Based on the results of the chi square statistical test at the limit of = 0.05 and df = 1, p value = 0.170 > = 0.05, this indicates that there is no relationship between parity and incomplete abortion, thus the hypothesis that there is a significant relationship not statistically proven. The results of the Odds Ratio obtained a value of 2.034 which means that respondents with high parity have 2.034 times greater chance of experiencing incomplete abortion compared to respondents with low parity.

Based on the explanation above, the researcher assumes that mothers with high parity and mothers with low parity basically every pregnant woman has a risk of incomplete abortion, if not treated and prevented with better midwifery care. pregnancy will last until term. While pregnant women with high parity primipara can be caused by a lack of better obstetric care during pregnancy. Meanwhile, a high parity of more than 3 can be caused by a decrease in the function of the reproductive organs in receiving the fruit of pregnancy and can be reduced or

prevented by participating in a planned program.

c. Relationship history of abortion with incomplete abortion

Of the 84 respondents, there were 21 women with a history of abortion (25%) and 63 women (75%). The number of mothers who have a history of abortion is less than the number of mothers who do not have a history of abortion at RSUD Dr. HM. Rabain Muara Enim in 2021. From the results of research on bivariate analysis, it was found that from 21 respondents who had a history of abortion, 18 respondents (85.7%) had incomplete abortions and 3 respondents (14.3%) did not experience incomplete abortions. while from 63 respondents who did not have a history of abortion, 29 respondents (46%) had incomplete abortions and 34 respondents (54%) did not experience incomplete abortions.

Based on the results of the chi square statistical test at the limit of = 0.05 and df = 1, the p value = 0.004 < = 0.05, this indicates that there is a relationship between history of abortion and incomplete abortion so that the hypothesis that states there is a relationship which is statistically proven.

The results of the Odds Ratio obtained a value of 7.034 which means that respondents who have a history of abortion have a 7.034 times greater chance of experiencing an incomplete abortion compared to respondents who do not have a history.

4. Discussion

There is a relationship between Age and History of Abortion simultaneously with the incidence of incomplete abortion, there is a relationship between age partially and the incidence of incomplete abortion, there is no relationship between parity partially and the incidence of incomplete abortion and there is a relationship between history of partial abortion and the incidence of incomplete abortion at Dr. Hospital. HM. Rabain Muara Enim 2021.

References

[1] Akbar, A. (2019). Factors Causing Abortion in Indonesia in 2010-2019: a meta-analysis study, 182-191

[2] Amalia & Suyono,. Risk factors for abortion (Study at Sultan Agung Islamic Hospital, Semarang. ISSN: 1693-3443. 10(1). 2015. (04/12/2021)

[3] Andesia Maliana. (2016). Factors related to the incidence of incomplete abortion in the obstetrics ward of the Mayjend General Hospital. HM. Ryacudu Earth City. Journal of Health volume VII. (06/01/2022)

[4] Cunningham, FG., Hauth, JC, Leveno, KJ, Bloom, SL, Rouse, DJ, Spong, CY (2014). Obstetrics Williams 23rd Edition. Jakarta, Indonesian Medical Book Publisher EGC.

[5] District Health Office. Muara Enim, Health Profile of Muara Enim Regency. 2020.

[6] South Sumatra Health Office, South Sumatra Health Profile. 2020

[7] Guttmacher, Institute. 2014. Abortion in Indonesia in conclusion. https://www. Guttmacher. Org/ pubs/ 2008/10/15

[8] Handayani, EK (2015). Relationship of Age and Parity with Abortion Incidence in Rokan Hulu District Hospital. Journal of Maternity and Neonatal, Volume 1, Number 6, Page 249. (06/01/2022)

[9] Heryanti. (2018). The Relationship between Age and Parity of Pregnant Women with the Incidence of Incomplete Abortion at Muhammadiyah Hospital Palembang in 2017. Palembang Health Journal, Volume 13, Number 1. (06/01/2022)

[10] Hindu. Obstetrics and Gynecology International Volume 2018. http://doi.org/10.1155/2018/39558681

[11] Indonesian Ministry of Health, Indonesian Health Profile. 2020.

[12] Indonesian Ministry of Health, Indonesian Health Profile. Causes of Maternal Death in Indonesia.2015

[13] Manuaba, Ida. Obstetrics, Gynecology and Family Planning. Jakarta : EGC, 2010

[14] Marisa Hartika Sari. (2019). Relationship between age and parity with the incidence of incomplete abortion: ISSN 2580-3123

[15] Marmi, ARM S, et al. 2011. Pathology Midwifery Care. Yogyakarta: Student Library

[16] Mochtar, R. Synopsis of Obstetrics Volume 2 Edition 3. Jakarta: ECG, 2012

[17] Mooren L et al, (2016). Factors that influence the incidence of incomplete abortion in Gambiran Hospital, Kediri City in 2016. (06/01/2022)

[18] Noer RI, Ermawati, Afdal. Research article on the characteristics of mothers in patients with

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abortion and non-abortion. Andalas Health Journal. 2016. 5(3):575-583
[19] Notoadmodjo. (2018). Health Research Methodology. Jakarta, PT. Rineka Cipta
[20] Nugroho, T. (2012). Obstetric Pathology. Yogyakarta, Nuha Medika.
[21] Prawirohardjo, S. (2012). Midwifery Science. Jakarta, PT. Library Building.
[22] Purwaningrum, E,. D., & Fibriyana, AII (2017). Risk factors for spontaneous abortion. Higeia Journal OF public Health research and development ,1(3)84-94 (06/01/2022)
[23] Rimanto. 2014. Relationship between incomplete abortion and risk factors for pregnant women in the hospital. Pindad Bandung Period 2013-2014 Journal. (06/01/2022)
[24] Ruqiyah. (2018). Factors related to the incidence of incomplete abortion at RSIA Siti Khadijah i Makassar in 2018. (06/01/2022)
[25] Saifuddin, AB (2012). National Reference Book for Maternal and Neonatal Health Services, Edition 1. Jakarta, YBP-SP.
[26] Sari, AIYM (2013) Effect of Age, Gravida, Hemoglobin Level and Upper Arm Circumference (LILA) of pregnant women on the incidence of abortion. Airlangga University.
[27] Sarwono, P. Gynecology. Third Edition. Jakarta: Bina Pustaka, 2018
[28] IDHS. (2012). Maternal Mortality Rate. Jakarta.
[29] Septiwiyarsi. (2019). The relationship between age, parity and occupation with the incidence of incomplete abortion in pregnant women at H Abdul Manaf Hospital, Jambi City in 2019. (04/12/2021)
[30] Shofaria, NM (2016) Factors related to the incidence of abortion in Kelet Hospital, Jepara Regency, Central Java Province in 2016. KTI: S1 Nursing study program Stikes Widya Husada Semarang 2016. (06/01/2022)
[31] Tiara Puspita, et al. (2020) Relationship between Age, Parity and Abortion History with the incidence of incomplete abortion at the AL-Ihsan Hospital in Bandung for the period January 2017 – August 2019. (04/12/2021)
[32] WHO. 2016 Unsafe Abortion and Associated Mortality. http://www.who.int
[33] Wulandari, FC and Nasikhah, N. (2014). Relationship between maternal age and the incidence of incomplete abortion at the Kutuarjo Blue Cross Hospital. Essay. (06/01/2022)