Jurnal Eduhealth
Volume 15 , Number 02, 2024, DOI 10.54209/eduhealth.v15i02
ESSN 2808-4608 (Online)
https://ejournal.seaninstitute.or.id/index.php/healt

The Relationship Between The Age Of Maternity Mothers And The Incidence Of Uterine Atony At Dr. H. Bob Bazar Hospital Skm Kalianda South Lampung

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Article Info
Keywords:
Age of pregnant women,
uterine atony,
bleeding,
maternal mortality,
newborn.

ABSTRACT
Uterine atony is the most common cause of early postpartum hemorrhage (50%) and is often the main reason for having a postpartum hysterectomy. Uterine contractions are a key mechanism in controlling bleeding after childbirth. Atonia occurs when this mechanism fails. Physiologically, postpartum hemorrhage is controlled by contraction of myometrial fibers surrounding blood vessels leading to the area of placental implantation. Uterine atony occurs when these myometrial fibers do not contract. The purpose of this study was to understand the characteristics of maternity mothers who experienced uterine atony at Dr. H. Bob Bazar Hospital, SKM Kalianda South Lampung in 2024. The research method used was quantitative with a cross-sectional design involving 30 respondents. Research Results: there is a relationship between the age of postpartum mothers and the incidence of uterine atony at Dr. H. Bob Bazar Hospital SKM Kalianda South Lampung with a p-value of 0.000.

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INTRODUCTION

Every year, it is estimated that there are about 14 million cases of bleeding during pregnancy, with at least 128,000 women dying as a result. The death generally occurs within 4 hours after delivery. In Indonesia, the majority of deliveries do not occur in hospitals, leaving patients who give birth outside the hospital vulnerable to postpartum hemorrhage due to uterine atony, which is often treated late in the hospital. By the time they arrive at the hospital, their condition is often already deteriorating, increasing the risk of death. According to 2009 WHO data, 50-60% of 100,000 live births have postpartum hemorrhage due to uterine atony. There are an estimated 7-10 cases per 100,000 live births in the United States, with about 8% of these due to postpartum death from uterine atony (Mariana, 2009).

According to data from the Ministry of Health of the Republic of Indonesia in 2009, in Indonesia there are about 23.88% cases of uterine atony hemorrhage from every 4,830,609 people. In the same year, the maternal mortality rate in Indonesia reached 650 mothers per

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100,000 live births, of which 14.6% of the rate was due to postpartum hemorrhage due to uterine atony. As a referral hospital in Lampung Province, RSUDAM Bandar Lampung recorded the number of deliveries as many as 2129 in 2010, with postpartum hemorrhage cases that occurred including 35 cases of uterine atony (15.09%), 123 cases of placental residue (53.02%), 57 cases of placental retention (24.57%), and 17 cases of lacerations (7.33%) (RSAM Abdul Moeloek, 2014).

As a referral hospital in South Lampung Regency, in 2011 there was an incidence of postpartum bleeding due to uterine atony of 6.71%, with 20 cases of uterine atony recorded from 298 maternity mothers at RSUD Dr. H. Bob Bazar, SKM Kalianda, South Lampung (RSAM Abdul Moeloek, 2014). From a pre-survey conducted at RSUD dr. H. Bob Bazar, SKM South Lampung, it was found that 35 out of 273 maternity mothers experienced Atonia Uteri, accounting for 12.8% of the total cases (RSAM Abdul Moeloek, 2014).

In 2009, the WHO noted that postpartum hemorrhage due to uterine atony occurs in 50-60% of 100,000 live births. Meanwhile, the Ministry of Health of the Republic of Indonesia (2009) reported that uterine atony cases in Indonesia reached 23.88% of the total 4,830,609 people. RSUDAM Bandar Lampung, as a referral hospital in Lampung Province, recorded 35 cases of uterine atony out of a total of 2129 deliveries in 2010 (15.09%). In addition, Dr. H. Bob Bazar Hospital, SKM Kalianda, South Lampung, reported the incidence of postpartum bleeding due to uterine atony of 6.71% in 2011, with 20 cases from 298 maternity mothers. In 2012, Dr. H. Bob Bazar Hospital, SKM Kalianda, South Lampung, still recorded 35 cases of uterine atony from 273 maternity mothers (12.8%) (Riset Kesehatan Dasar (Riskesdas), 2018).

The purpose of this study was to understand the characteristics of maternity mothers who experienced uterine atony at Dr. H. Bob Bazar Hospital, SKM Kalianda South Lampung in 2024. As for the question in this study , what are the characteristics of maternity mothers who experience uterine atony at Dr. H. Bob Bazar Hospital, SKM Kalianda South Lampung?. Uterine atony is a condition in which myometrium cannot contract, causing blood coming out of the former place where the placenta attaches out of control (Rohani, 2011). According to (Mochtar, 2021), the predisposing factors for the occurrence of uterine atony are:

1. Age: Too young or old.
2. Parity: Often found in multiparous and multiparous grades.
3. Operative obstetrics and narcosa.
4. The uterus is too stretched and large, in twin pregnancies, excess amniotic fluid (hydramnios), or large fetuses.
5. Abnormalities in the uterus such as uterine myoma.
6. Socioeconomic factors, such as malnutrition.

Symptoms and signs are always present in uterine atony, uterus does not contract and is tender and bleeding soon after the placenta and fetus are born (P3). Symptoms and signs that sometimes there is shock (low blood pressure, fast and small pulse, cold extremities, anxiety, nausea, etc.) (Unpad, 2009).

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Table 1 Detailed steps for postpartum uterine atony management

No.	Management Steps	Reason
1	Masase fundus uteri immediately after birth of the placenta (maximum 15 seconds)	Masase stimulates uterine contractions. When masase can be done assessment of uterine contractions
2	Clean blood clots and amniotic membranes from the vagina and cervical opening	Blood clots and amniotic membranes in the vagina and cervical canal will be able to prevent uterine contractions properly.
3	Make sure that the bladder is empty, if full can be palpated, perform catheterization using Aseptic technique	A full bladder will be able to prevent the uterus from contracting properly.
4	Perform Internal Bimanual (KBI) for 5 minutes	Internal bimanual compression exerts direct pressure on the blood vessels of the uterine wall and also stimulates the myometrium to Contracting.
5	Encourage families to start helping with external bimanual compression	The family can continue external bimanual compression as long as the helper performs the steps Next
6	Take your hands out slowly	Avoidance of pain
7	Give ergomethrin 0.2 mg IM (contraindications hypertension) or misopostrol 600-1000 mcg	Ergometrin and misopostrol will works within 5-7 minutes and causes uterine contractions
8	Install the infusion using a 16 or 18 needle and give 500cc ringer lactate + 20 units of oxytocin. Spend the first 500 cc as quickly as possible	Large needles allow rapid administration of IV solutions or blood transfusions. RL will help restore the volume of fluid lost during bleeding.IV oxytocin will be fast stimulates uterine contractions.
9	Repeat internal bimanual compression	KBIs done together with ergomethrin and oxytocin or misopostrol will create the uterus Contracting
10	Refer immediately	If the uterus is not in contact for 1 to 2 minutes, it is not a simple atony. The mother needs emergency care in a facility capable of performing surgery and blood transfusion
11	Accompany the mother to the place of referral. Forward doing KBI	This uterine compression exerts direct pressure on the blood vessels of the uterine wall and stimulates the uterus Contracting
12	Continue the infusion of RL +20 IU oxytocin in 500 cc solution at the rate of 500 cc / hour so as to spend 1.5 I infusion. Then give 125 cc/hour. If there is not enough fluid, give a second 500 cc	RL can help restore fluid volume lost due to bleeding. Oxytocin can stimulate the uterus to contract.

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No.	Management Steps	Reason
	at medium speed and give a drink for rehydration	

METHODS

This study used a quantitative approach with a Cross-Sectional design. The survey method is used to collect data from certain natural sources using questionnaires, tests, structured interviews, and similar methods (Sugiyono., 2019). The cross-sectional design of this study investigated risk factors and effects simultaneously through observation or data collection (Notoadmojo, 2018). Population is the entirety of objects or subjects that have certain quantities and characteristics set by the researcher to study and draw conclusions. In this study, the population was all maternity mothers who experienced uterine atony at RSUD dr. H. Bob Bazar, SKM Kalianda, South Lampung.

The sample must be representative for the population studied. Total sampling was chosen because the population is less than 100, which allows generalization with minimal error. If the entire population is used, it is called a census. In this study, using Total Sampling with a total of 30 respondents.

RESULTS AND DISCUSSION

Validity and Rehabilitation Test

Validity testing refers to the assessment of how accurately and precisely a measuring instrument (such as a test) performs its intended function. A test is considered to have high validity if it accurately measures what it is supposed to measure, yielding results that align with the purpose of the measurement. This indicates that the results of the measurement reflect the actual facts or conditions of the subject being measured (Notoadmojo, 2018).

Reliability of an instrument can be assessed through various tests, including test-retest, equivalent forms, and internal consistency. Internal consistency, in turn, encompasses several techniques such as split-half, KR 20, KR 21, and Cronbach's alpha. In this case, Cronbach's alpha is used for the reliability test. Cronbach's alpha is a measure of reliability that ranges from zero to one. A Cronbach's alpha value between 0.40 and 0.60 indicates moderate reliability, while a value exceeding 0.60 suggests high reliability or consistency in measurement (Sugiyono., 2019). The validity and reliability of a test involving 15 questions, completed by a minimum of 30 respondents.

Table 1. Reabillity Statistics

Very strong	N of items
0,903	15

Descriptive Test

Table 2. Descriptive (n=30)

		Frequency	Percent
Valid	Mean	40,07	
	Median	40	

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Descriptive Test

Table 2. Descriptive (n=30)

		Frequency	Percent
	Modus	40	
	Std. Deviation	2.164	
	Variance	4.685	
	Range	10	
	Minimum	35	
	Maximum	45	
Education	SMA	23	76.7
	D3	1	3.3
	S1	6	20.0
Work	IRT	18	60.0
	PNS	2	6.7
	Private	10	33.3
Occurrence of Atonia Uteri	Ya	2	6,7
	No	28	93,3
Mother's knowledge of atony uteri	Good	1	3.3
	Enough	18	60.0
	Less	11	36.7

In the table above, from 30 respondents the results showed a mean of 40.07 median 40, mode 40 Std. Deviation 2,164 variance 4,685 range 10 minimum 35 and maximum 45, the most high school education 76.6%, and the most jobs are IRT 60.0%.

Table 3. Bivariate (n=30)

Age	Occurrence of Atonia Uteri						PR	CI 95%		
		Atonia Uteri		No Atonia Uteri		Total		Lower	Upper	P-Value
		N	%	N	%	N	%	39,1	17	89,7	0,000
Risk	<20 years	4	13,3	26	86,7	30	100				
	>35 years	18	60	12	40	30	100				
No Risk	20-35 years	8	26,7	22	73,3	30	100				

Based on available data, the incidence of uterine atony has a relative prevalence value (PR) of 39.1 with a p value of 0.000, indicating statistical significance. In the age group at risk, namely <20 years, there were 4 cases (13.3%) of 30 mothers who had uterine atony, while 26 others (86.7%) did not experience the condition. Meanwhile, in the >35 age group, 18 mothers (60%) experienced uterine atony out of a total of 30 respondents, and 12 other respondents (40%) did not experience this condition. On the other hand, in the age group that is not at risk, namely 20-35 years, there were 8 cases (26.7%) of 30 respondents who experienced uterine atony, while 22 respondents (73.3%) did not experience it.

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One of the factors contributing to the incidence of uterine atony is the increasing age of pregnant women, especially at the age of over 35 years. The tendency to get pregnant after age 35 is more common in developed countries. This increased age is associated with an increased risk of maternal morbidity due to accompanying medical conditions (Sugiyono., 2019). Older age can cause weakness in myometrium and muscle tone, so the blood vessels at the site of placental implantation are not properly compressed, which can result in postpartum bleeding. At the age of under 20 years, reproductive function is not fully developed, while at the age of over 35 years, reproductive function begins to decline. Both of these age groups are at risk of postpartum bleeding complications due to uterine atony (M. Zulfi Pratama, 2011).

This study found a significant relationship between maternal age and the incidence of uterine atony, as revealed in a study conducted by (Nuraeni, 2017) which resulted in a p-value = 0.000. Similar findings were also obtained in research by (Ratmawati & Setiyaningrum, 2018) with a p-value = 0.016. The results of this study are consistent with previous research which states that increasing maternal age, especially over 35 years, can increase the risk of intrapartum complications due to physical decline and elasticity of reproductive organs (Liana et al., 2011). Although the age of 20-35 years is considered a healthy reproductive age with optimal reproductive function, uterine atony can still occur due to other factors (Siti Irene, 2011)

Pregnancy at the age of under 20 years and over 35 years can cause anemia. At the age of under 20 years, the body is not biologically optimal, emotions tend to be unstable, and mentally immature, so emotional shock can result in lack of attention to meeting nutritional needs during pregnancy. On the other hand, at the age of over 35 years, it is associated with decreased endurance and chronic diseases, which can lead to anemia. Anemia can have an impact on weak contractions of the uterus during and after delivery, as well as a more attached placenta due to compensated anemia, which can cause difficulty detaching the placenta and potentially cause uterine atony. In mothers over 35 years of age, the risk of pregnancy and childbirth is higher due to the aging process and reproductive degeneration. This can lead to disturbances in pregnancy and childbirth as the organs begin to regress or regress. However, research shows that there is no association between maternal age and the incidence of uterine atony in maternity mothers, which suggests that other factors may also play a role in the occurrence of this condition.

CONCLUSION

Based on the research conducted, it can be concluded that there is a correlation between the age of postpartum mothers and the incidence of uterine atony at Dr. H. Bob Bazar Hospital, SKM Kalianda South Lampung, with a p-value of 0.000.

REFERENCE

Liana, D., Lestari, F., Sutoto, S., Modjo, R., & Bachtiar, A. (2011). A Self-Assessment Model for Hospital Safety Culture Maturity. *Journal of Public Health Research*, *11*(2), jphr.2022.2530. https://doi.org/10.4081/jphr.2022.2530

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https://ejournal.seaninstitute.or.id/index.php/healt

M. Zulfi Pratama. (2011). *Penerapan Terapi Range Of Motion (Rom) Terhadap Peningkatan Kekuatan Otot Pada Pasien Dengan Stroke', pp. 692–698.*

Mariana, N. (2009). *Hubungan Sikap Konsumen Pada Discount Dengan Minat Membeli Produk Fashion Pada Remaja Akhir. Skripsi (Tidak Diterbitkan). Malang : Fakultas Psikologi Universitas Islam Negeri Maulana Malik Ibrahim*.

Mochtar, R. (2021). *Buku Sinopsis Obstetri. Edisi 2. Jakarta : EGC. Hal 77*.

Notoadmojo, S. (2018). *Metodologi Penelitian Kesehatan. Jakarta : Rineka Cipta.*

Nuraeni, R. (2017). *Keperawatan Maternitas. Cirebon: LovRinz Publishing*.

Ratmawati, L. A., & Setiyaningrum, D. (2018). Hubungan Antara Pengetahuan Tentang Atonia Uteri Pada Mahasiswa Kebidanan Dengan Praktikum Kompresi Bimanual Interna Di Politeknik Banjarnegara. *Jurnal Keperawatan Dan Kesehatan Masyarakat Cendekia Utama*, *7*(1), 71. https://doi.org/10.31596/jcu.v0i0.215

Riset Kesehatan Dasar (Riskesdas). (2018). *Badan Penelitian dan Pengembangan Kesehatan Kementerian RI tahun 2018. http://www.depkes.go.id/resources/download/infoterkini/materi_rakorpop_2018/Hasil%20Riskesdas%202018.pdf – Diakses Agustus 2018.*

Rohani, dkk. (2011). *Asuhan kebidanan pada masa persalinan. Jakarta : Salemba Medika*.

RSAM Abdul Moeloek. (2014). *Profil RSUD dr. H. Abdul Moeloek Provinsi Lampung. Bandar Lampung.*

Siti Irene. (2011). *Desentralisasi dan Partisipasi Masyarakat dalam Pendidikan, (Yogyakarta: Pustaka Belajar).*

Sugiyono. (2019). *Metodelogi Penelitian Kuantitatif dan Kualitatif Dan R&D. Bandung: ALFABETA.*