

ENHANCEMENT OF KNOWLEDGE AMONG COUPLES OF REPRODUCTIVE AGE (CRA) AND PREGNANT WOMEN IN THE PREVENTION OF HIGH-RISK PREGNANCY

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ABSTRACT

BACKGROUND

In the prevention of high-risk pregnancy among couples of reproductive age (CRA) predisposed to high-risk pregnancy, optimal education regarding high-risk pregnancy is required so that such couples do not progress into the high-risk pregnancy category. In practice, however, couples of reproductive age continue to undergo pregnancy despite being 40 years of age, having four living children, and having an interpregnancy interval of five years or more since the last child.

OBJECTIVE

The objective of this study was to investigate the level of knowledge held by couples of reproductive age (CRA) predisposed to high-risk pregnancy concerning high-risk pregnancy, in order that they may undertake appropriate preventive measures against high-risk pregnancy.

MATERIALS AND METHODS

This study was conducted in Aceh Besar through direct interviews and discussions with couples of reproductive age (CRA) predisposed to high-risk pregnancy, women with high-risk pregnancy, couples of reproductive age predisposed to high-risk pregnancy together with their husbands, women with high-risk pregnancy together with their husbands, Posyandu (integrated health post) cadres, village midwives, and heads of Puskesmas (community health centres). The respondents comprised four couples of reproductive age predisposed to high-risk pregnancy and their husbands, four women with high-risk pregnancy and their husbands, four Posyandu cadres, four village midwives, and four heads of Puskesmas. The informants for these interviews and discussions were drawn from four subdistricts in Aceh Besar Regency, namely Lembah Seulawah, Kuta Cot Glei, Darul Imarah, and Baitussalam, over the period from 17 June to 31 July 2025. The content of the interviews and discussions concerned the support system provided for the prevention of high-risk pregnancy in wives predisposed to high-risk pregnancy.

RESULTS

Interviews with couples of reproductive age (CRA) predisposed to high-risk pregnancy, women with high-risk pregnancy, village midwives, and heads of Puskesmas revealed that couples of reproductive age still desired further pregnancy despite being 40 years of age, having four living children, an interval of ten years since the last child, and a history of miscarriage as well as ectopic pregnancy. According to the village midwives, these couples continued to desire pregnancy despite the wife being 40 years of age and the last child being ten years old, because the husband still wished to have additional children.

DISCUSSION

Couples of reproductive age (CRA) predisposed to high-risk pregnancy and women with high-risk pregnancy continued to desire additional children despite being 40 years of age, having four living children, an interval of ten years since the last child, and a history of miscarriage and ectopic pregnancy. This was attributable to the couples' wish to increase family size and to the belief that lifespan and sustenance are ordained by God. They further reported that contraception did not suit them. These findings reflect the persistently limited knowledge of couples of reproductive age concerning high-risk pregnancy.

CONCLUSION

To date, couples of reproductive age (CRA) predisposed to high-risk pregnancy and women with high-risk pregnancy continue to desire further pregnancy despite having four living children, a history of miscarriage, a history of ectopic pregnancy, and an interval of ten years since the last

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child, maintaining that lifespan and sustenance are divinely ordained. In order that couples of reproductive age may undertake preventive measures against pregnancy, their knowledge of high-risk pregnancy and of its potential consequences for both mother and fetus must be strengthened.

Keywords : Couples of Reproductive Age (CRA) Predisposed to High-Risk Pregnancy, Prevention of High-Risk Pregnancy, Education, Capacity/Knowledge Enhancement.

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INTRODUCTION

The global maternal mortality figure in 2020 amounted to 287,000 per 100,000 live births, with almost 95% of these maternal deaths occurring in low- and middle-income countries. African countries and South Asia accounted for approximately 87% of maternal deaths worldwide. Nevertheless, several regions such as Eastern Europe and South Asia recorded significant reductions in the maternal mortality ratio between 2000 and 2020.

According to data from the Maternal Perinatal Death Notification (MPDN) system of the Ministry of Health, maternal deaths numbered 7,149 in 2021, declined to 4,005 in 2022, and rose again to 4,129 in 2023. These figures remain far removed from the maternal mortality reduction targets set for 2020-2024, namely 230 in 2020, 217 in 2021, 205 in 2022, 194 in 2023, and 183 per 100,000 live births in 2024. Meanwhile, according to the World Health Organization, the Sustainable Development Goals (SDGs) set a maternal mortality ratio target of 70 per 100,000 live births by 2030. From the above data it may be concluded that maternal deaths increased from 2022 to 2023 by 124 cases (12.4%), while the targeted reduction in maternal mortality for the 2020-2024 period remains far from being achieved.

The maternal mortality ratio (MMR) in Aceh Province fluctuated over the period 2017-2021. In 2017 it stood at 143 per 100,000 live births; it declined in 2018, rose again during 2019-2020, and in 2021 increased very markedly compared with the preceding year to 223 per 100,000 live births.

According to data from the Aceh Besar District Health Office, maternal deaths in 2021 numbered 17, comprising four in

Ingin Jaya Subdistrict, three in Mesjid Raya Subdistrict, two in Simpang Tiga Subdistrict, and one each in the subdistricts of Lhoknga, Jantho, Darussalam, Baiturrahman, Kuta Baro, Montasik, Suka Makmur, and Darul Imarah. In 2022, maternal deaths numbered ten, comprising two each in the subdistricts of Kuta Malaka, Darussalam, and Ingin Jaya, and one each in the subdistricts of Krueng Barona Jaya, Lhoong, Kuta Cot Glie, and Baiturrahman. In 2023, maternal deaths numbered five, comprising two in Baiturrahman Subdistrict and one each in the subdistricts of Darul Imarah, Lembah Seulawah, and Kuta Cot Glie.

A range of factors may contribute either directly or indirectly to maternal mortality. Complications during and after delivery, such as infection, haemorrhage, and hypertensive disorders (pre-eclampsia and eclampsia), obstructed or complicated labour, and unsafe abortion constitute the direct factors identified as contributing to 75% of maternal deaths. The remaining 25% of maternal deaths are attributable to indirect factors such as sociocultural conditions, poverty, family structure, and other determinants that influence maternal health status and may aggravate the mother's condition during pregnancy and childbirth.

Prevention of high-risk pregnancy may be pursued through various measures, including the provision of communication, information, and education (CIE), antenatal surveillance, and health education. A study conducted by Prasetyorini and Prihati (2023) demonstrated an increase in the knowledge of health cadres from 0% to 100% following self-education regarding high-risk pregnancy, together with an increase in the knowledge of pregnant women from 83% to 100%. Other research has likewise shown that health education concerning high-risk

pregnancy exerts a significant effect on the knowledge level of women of reproductive age. In addition, further studies have demonstrated an improvement in knowledge before and after the provision of education on high-risk pregnancy and the prevention of anaemia during pregnancy as part of efforts to prevent stunting.

MATERIAL AND METHODS

This study was conducted from 17 June to 31 July 2025 across four Puskesmas catchment areas (the subdistricts of Lembah Seulawah, Kuta Cot Glie, Darul Imarah, and Baitussalam) in Aceh Besar Regency.

This study employed a conventional analytical methodology; four couples of reproductive age (CRA) predisposed to high-risk pregnancy and four pregnant women participated with a high degree of engagement.

PARTICIPANTS

The number of participants was not predetermined prior to the conclusion of the study. Sampling continued until no new data emerged (data saturation). In this study, data collection proceeded until no further new codes were generated.

INCLUSION CRITERIA FOR PARTICIPANTS

The inclusion criteria applied in this study were as follows:

Inclusion criteria for couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women

- a. Predisposition by maternal age (under 20 years and over 35 years)
- b. Predisposition by parity (four or more living children)
- c. Predisposition by interpregnancy interval (interval of less than 2 years or more than 5 years)
- d. Predisposition by obstetric history (previous miscarriage, preterm delivery, stillbirth, ectopic pregnancy, pre-eclampsia/eclampsia, post-term pregnancy, hydatidiform mole, multiple pregnancy or polyhydramnios, and pregnancy with malpresentation)
- e. Predisposition by delivery history (vacuum extraction, forceps extraction, caesarean section, cephalopelvic disproportion, premature rupture of membranes, antepartum haemorrhage)

- f. Predisposition by maternal medical history (hypertension, cardiac disease, diabetes, anaemia, hepatic disorders, obesity, pulmonary tuberculosis)
- g. Willing to participate in and consent to being interviewed
- h. Couples of reproductive age (CRA) and pregnant women prepared to allocate time for the interview.

PROCEDURE

Interviews were conducted individually and face-to-face after the objectives of the study had been explained. Interviews took place at Posyandu facilities and in the homes of the couples of reproductive age (CRA) and pregnant women.

Demographic information comprised age, education, occupation, number of children, interval since the last child, obstetric history, delivery history, and medical history. The venue and timing of the interviews were determined by the couples of reproductive age (CRA) and the pregnant women. Interviews were conducted in accordance with the interview guide, together with follow-up questions arising from the responses of the couples of reproductive age (CRA) and the pregnant women.

Questions for couples of reproductive age (CRA)

1. What do you know about high-risk pregnancy?
2. Do you understand that a further pregnancy would be classified as a high-risk pregnancy?
3. What support does your family or husband provide in preventing high-risk pregnancy?
4. What programmes or education have you received in efforts to prevent high-risk pregnancy?
5. What obstacles have you encountered in efforts to prevent high-risk pregnancy?

Questions for pregnant women

1. What is your understanding of high-risk pregnancy?
2. Do you consider yourself to be in the high-risk pregnancy category?
3. Does your husband support you in becoming pregnant again?
4. What obstacles have you encountered in preventing high-risk pregnancy?

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ETHICAL CONSIDERATIONS

This study was conducted following approval from the Ethics Committee of the Faculty of Medicine, Universitas Syiah Kuala; the approval letter was subsequently submitted to the Head of the Aceh Besar District Health Office in order to obtain research permission within Aceh Besar Regency. After the objectives of the study had been explained to the couples of reproductive age (CRA) and the pregnant women, consent was sought from them; once consent to be interviewed and consent to record the interviews had been granted, the interviews commenced.

The couples of reproductive age (CRA) and pregnant women were informed that participation in the interview was voluntary and that they had the right to decline.

ANALYSIS

1. Conducting analysis immediately after each interview;
2. Reading the transcript to obtain a general understanding of its content;
3. Determining meaning units and primary codes;
4. Classifying primary codes into subcategories and categories;
5. Identifying latent content within the data.

RESULTS

A total of eight couples of reproductive age (CRA) and pregnant women participated. The demographic characteristics of the participants are presented in Table 1.

Table 1. Demographic Characteristics of Participants: Couples of Reproductive Age (CRA)

Co de/ Na me	A ge	E d u c a - t i o n	O c c u p a t i o n	N u m b e r o f c h i l d r e n	I n t e r p r e g n a n c y i n t e r v a l	M e d i c a l h i s t o r y	O b s t e t r i c h i s t o r y	D e l i v e r y h i s t o r y
P1(Su ma rin	4 3	Ju ni or hi	H ou se wi	3	13 yea rs	O v a ria	Pr e v i o us	N o r m al

gsih)		g h s c h o l	fe			n c y st	mi s c a r i a g e	
P2 (Put ri)	4 1	B a c h e l o r's de gr ee	Ea rly ch ild ho od ed uc ati on te a c h e r	4	5 yea rs	-	-	N o r m al
P3 (Ha bsa h)	4 1		H ou se wi fe	5		-	-	N o r m al
P4 (Nu r Asi ah)	3 8	Pr i m a r y s c h o l	H ou se wi fe	4	21 day s	-	-	N o r m al

Table 2. Demographic Characteristics of Participants: Pregnant Women

C o d e / N a m e	A g e	E d u c a - t i o n	O c c u p a t i o n	N u m b e r o f c h i l d r e n	I n t e r p r e g n a n c y i n t e r v a l	M e d i c a l h i s t o r y	O b s t e t r i c h i s t o r y	D e l i v e r y h i s t o r y	N o t e s
P 1(E	4 3		H ou se	3	ye ars	-		N o r	-

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ka P ur w ati)			wi fe					m al		Predisposed to High-Risk Pregnancy and Pregnant Women			
										Code	Subcategory	Category	Theme
P 2 (M u k r a w a t i)	3 2	S e n i o r h i g h s c h o o l	H o u s e w i f e	2	4 y e a r s	-	P r e v i o u s m i s c a r r i a g e ; p r e v i o u s e c t o p i c p r e g n a n c y	N o r m a l	-	Woman with high-risk pregnancy (aged 43 years, two living children, interval of 20 years since the last child) who had not used contraception prior to conception and had indeed hoped to conceive, having no children from her present marriage to her second husband	Need for education from health personnel for pregnant women concerning efforts to prevent high-risk pregnancy	Education involving couples of reproductive age (CRA) with predisposition and pregnant women in efforts to prevent high-risk pregnancy	Need for education and training for couples of reproductive age (CRA) with predisposition and pregnant women in efforts to prevent high-risk pregnancy
										Woman with high-risk pregnancy (aged 32 years, two living children, history of abortion/miscarriage, history of ectopic pregnancy) determined to conceive again, having planned and agreed with her husband to have four children			
P 3 (Z a h r a t i)	2 2	J u n i o r h i g h s c h o o l	H o u s e w i f e	-	-	-	-	-	C h r o n i c e n e r g y d e f i c i e n c y				
P 4 ()			H o u s e w i f e			-	-	N o r m a l	-				

Table 3. Data Analysis of Couples of Reproductive Age (CRA)									
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Table 3. Data Analysis of Couples of Reproductive Age (CRA)

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Code	Subcategory	Category	Theme	Code	Subcategory	Category	Theme
before the age of 40 years; she regards this high-risk pregnancy as a struggle				last child, history of abortion) not using contraception and still hoping to conceive again, having no children from the present marriage to her second husband	osed to high-risk pregnancy in efforts to prevent high-risk pregnancy		
Primigravida with chronic energy deficiency who did not inform health personnel of her marriage plans in advance (three months beforehand) but reported them one week before the wedding; mid-upper arm circumference measured less than 23 cm and haemoglobin less than 11 g/dL				Couple of reproductive age (CRA) predisposed to high-risk pregnancy (aged 41 years, five living children, interval of 5.5 years since the last child) who had previously used injectable contraception after her first child but found it unsuitable; currently using no contraception and hoping to conceive again in order to have a daughter, all five children being sons			
Couple of reproductive age (CRA) predisposed to high-risk pregnancy (aged 43 years, three living children, interval of 13 years since the	Need for education from health personnel for couples of reproductive age (CRA) predisposed						

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Code	Subcategory	Category	Theme	Code	Subcategory	Category	Theme
Couple of reproductive age (CRA) predisposed to high-risk pregnancy (aged 41 years, four living children, interval of 5 years) reporting that her husband hopes she will conceive again in order to have another daughter, the family having one daughter and three sons boarding at an Islamic boarding school	Need for a support system from the husbands of couples of reproductive age (CRA) with predisposition in efforts to prevent high-risk pregnancy	Importance of the support system of the husbands of couples of reproductive age (CRA) predisposed to high-risk pregnancy and of the husbands of pregnant women in efforts to prevent high-risk pregnancy	Support system of the husbands of couples of reproductive age (CRA) predisposed to high-risk pregnancy and of the husbands of pregnant women in efforts to prevent high-risk pregnancy	will conceive again because he desires a daughter, all five of their children being sons			
Couple of reproductive age (CRA) predisposed to high-risk pregnancy (aged 41 years, five living children, interval of 5.5 years since the last child) reporting that her husband hopes she				Woman with high-risk pregnancy (aged 43 years, two living children, interval of 20 years since the last child) reporting that her husband hopes she will conceive again; the husband maintains that lifespan and sustenance are ordained by God	Need for a support system from the husbands of pregnant women in efforts to prevent high-risk pregnancy	Importance of the support system of the husbands of pregnant women in efforts to prevent high-risk pregnancy	
				Woman with high-risk pregnancy (aged 32 years, two living children, history of abortion/miscarriage, history of ectopic pregnancy) reporting that if she is			

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Code	Subcategory	Category	Theme
able to carry a pregnancy she is free to conceive again			
The extensive area and dense population render it difficult for couples of reproductive age (CRA) predisposed to high-risk pregnancy and for pregnant women to attend Posyandu and Puskesmas facilities, as they must traverse mountainous terrain and roads that are narrow, stony, steep, and difficult to negotiate by motorcycle	Couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women experience difficulty in reaching Posyandu and Puskesmas facilities, as they must traverse mountainous terrain and roads that are narrow, stony, steep, and difficult to negotiate by motorcycle	Couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women have difficulty reaching Posyandu and Puskesmas facilities	Barriers among couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women in efforts to prevent high-risk pregnancy
Couples of	Need	Dissemination	

Code	Subcategory	Category	Theme
reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women perceive contraception to be unsuitable for them and therefore use no contraception	for health personnel and cadres to provide education concerning family planning and the various types of contraceptive method to couples of reproductive age (CRA) predisposed to high-risk pregnancy and to pregnant women	nation of information concerning contraception and family planning	

Educational Needs

Participants with high-risk pregnancy on the basis of maternal age, interval since the last child, and obstetric history (previous abortion, previous ectopic pregnancy) reported that they had indeed hoped to become pregnant again, as they had no children with their current husband and wished to have additional children before the age of 40 years.

This is evident from the following participant statements:

"To be honest, I do know about it... but with this most recent marriage of mine I simply was not using

contraception. It was not that we had planned to have a child, there was no plan at all, and then suddenly it happened..." (P3)

"Yes, at first I was rather stressed, when the test first came back positive." (P3)

"We had indeed planned with my husband before we married how many children we would have." (P1)

"The plan was four, because before the age of 40 there should be at least four, since after 40 it becomes more risky on account of age." (P1)

"Yes, I shall keep trying; this is a struggle." (P1)

Participants among couples of reproductive age (CRA) predisposed to high-risk pregnancy on the basis of maternal age, number of children, interval since the last child, and obstetric history (previous abortion) had not yet understood the concept of high-risk pregnancy and stated that they still hoped to become pregnant again.

This is evident from the following participant statements:

"High risk, as far as I know, is something like having rather many children, or something along those lines..." (P2)

"In my case, with four children... I would not be considered high risk if I became pregnant again, because I already know what the experience is like." (P4)

"High risk means haemorrhage and the interval between children." (P1)

"Well... age is also a high-risk factor." (P3)

"As for contraception, I do not dare. This is also a new husband, and he does not yet have any children; he did once, with his previous wife, but she has passed away." (P3)

"I want to add another one, because some people say do not stop at four, add one more and make it five." (P4)

"What can I say, ma'am... all my children are boys; if possible, one more, a girl." (P1)

"After the first child I did use contraception, but after that... I never used it again." (P1)

Husbands' Support System for Couples of Reproductive Age (CRA) Predisposed to High-Risk Pregnancy

Participants among couples of reproductive age (CRA) predisposed to high-risk pregnancy on the basis of maternal age, number of children, interval since the last child, and obstetric history (previous abortion) reported that their husbands did not support them in preventing high-risk pregnancy.

This is evident from the following participant statements:

"Yes, my husband supports my becoming pregnant again." (P3)

"My husband hopes to have a child with me, because the child from his marriage to his previous wife has died." (P4)

"My husband wants me to become pregnant again because he wishes to have another daughter; three of his sons are boarding at an Islamic boarding school, and our one daughter at home has no companion." (P3)

"Because we have no daughter, all five of the children being boys, my husband hopes I will become pregnant again, wanting a girl." (P2)

"My husband says that in the past women became pregnant at 40 to 50 years of age and remained perfectly healthy; nowadays it is agricultural factors that give rise to so many health problems." (P1)

Husbands' Support System for Pregnant Women

Participants with high-risk pregnancy on the basis of maternal age, number of children, interval since the last child, obstetric history (previous abortion), ectopic pregnancy, and chronic energy deficiency reported that their husbands did indeed hope for a further pregnancy, as they had no children together and wished to increase family size.

This is evident from the following participant statements:

"This is my husband's second marriage with me, so he hopes to

have a child with me. He had a child previously with his former wife, but that child has passed away." (P3)

"My husband says... lifespan and sustenance are all ordained by God." (P3)

"My husband says that if I am able to carry a pregnancy, then it is perfectly acceptable to become pregnant again." (P1)

"My husband did not even know that my haemoglobin was low; after we married I became pregnant the following month." (P2)

Barriers among Couples of Reproductive Age (CRA) Predisposed to High-Risk Pregnancy and Pregnant Women

Participants among couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women reported that the Posyandu and Puskesmas were located far from their homes.

This is evident from the following participant statements:

"Yes, ma'am, it is a long way to travel to the Posyandu." (P1)

"It is difficult, ma'am; the Puskesmas and the Posyandu are far away." (P2)

Participants among couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women reported that contraception did not suit them.

This is evident from the following participant statements:

"Yes, I once used contraception, at the time of my first child; I used the injectable method, but it did not suit me, so I have not used contraception since."

"I have used contraception, but it did not suit me."

"Because I do not use contraception, I simply take precautions... but if another child is granted to us, I accept it with resignation."

DISCUSSION

Educational Needs of Couples of Reproductive Age (CRA)

Couples of reproductive age (CRA) constitute a group comprising married couples in which the wife falls within the reproductive age range, namely between 15

and 49 years. This group represents a principal focus of reproductive health programmes owing to its potential for conception and childbearing. Attention to couples of reproductive age is of particular importance in the context of preventing high-risk pregnancy. Pregnancy occurring at too young or too advanced an age, too frequently, or at too short an interval may increase the risk of complications for both mother and infant. Health promotion, education, and family planning services must therefore be directed towards this group.

In addition, the active involvement of both parties, husband as well as wife, is essential to the formation of responsible decisions in pregnancy planning. The husband, as part of the couple of reproductive age, likewise plays an important role in supporting his wife through a healthy pregnancy, in ensuring regular antenatal examinations, and in recognising danger signs. Family-based health services and community-based educational approaches have proven more effective in reaching couples of reproductive age, particularly in areas with limited access to information and health facilities (Irma, 2025).

High-risk pregnancy remains a substantial challenge in efforts to improve maternal and child health status, particularly in developing countries. This condition may be precipitated by various factors, such as maternal age that is too young or too advanced, excessively short interpregnancy intervals, a history of previous pregnancy complications, or the presence of comorbid disease. In this context, couples of reproductive age (CRA), and husbands in particular, hold an important role in supporting the achievement of healthy and planned pregnancy. However, husbands' involvement in reproductive health remains relatively low owing to limited knowledge, insufficient awareness, and patriarchal cultural norms that regard pregnancy as the sole responsibility of the wife.

Education directed at husbands within couples of reproductive age is nevertheless essential in order to improve their understanding of pregnancy risks and the importance of family planning. With appropriate education, husbands may

participate more actively in joint decision-making with their wives regarding contraceptive use, antenatal examination, and the selection of safe delivery facilities. The provision of information and health education targeted directly at husbands must therefore form an integral component of reproductive health programmes. Such measures hold the potential to reduce the incidence of high-risk pregnancy while simultaneously improving overall family welfare (Yusuf, 2025).

Educational Needs of Pregnant Women

Pregnancy is a physiological process which, in a proportion of cases, may progress to a pathological condition if not appropriately managed. High-risk pregnancy is a condition with the potential to give rise to serious complications for both mother and fetus during pregnancy, delivery, and the puerperium. Such risk factors include maternal age that is too young (<20 years) or too advanced (>35 years), poor obstetric history, comorbid conditions such as hypertension, diabetes, and anaemia, as well as pregnancies occurring too frequently or at excessively short intervals. One important strategy for preventing high-risk pregnancy is the provision of appropriate education to pregnant women, thereby improving knowledge, attitudes, and behaviour in maintaining a healthy pregnancy. Such educational content encompasses recognition of pregnancy danger signs, the importance of antenatal care (ANC) visits, the fulfilment of balanced nutritional requirements, and the importance of family support.

Regrettably, many pregnant women have yet to receive adequate education owing to resource constraints, low educational attainment, and insufficient initiative among health personnel in conveying information comprehensively. Effective education can nevertheless encourage pregnant women to undertake early detection of risk conditions and to access appropriate health services promptly. This study is therefore of importance in determining the extent of the role of education in preventing high-risk pregnancy and in assessing its effectiveness in modifying the behaviour of pregnant women towards a healthy and monitored pregnancy (Rina, 2025).

Pregnancy is a period of considerable importance requiring full attention and support, not only from health personnel but also from the family, and from the husband in particular. The husband holds a strategic role in maintaining the health of the pregnant woman, physically, psychologically, and socially. In the context of high-risk pregnancy, such as pregnancy at too young or too advanced an age, excessively short interpregnancy intervals, a history of obstetric complications, and comorbid conditions such as hypertension and anaemia, the husband's support and understanding become increasingly crucial. Many husbands, however, do not yet understand the danger signs of pregnancy or the importance of their own role, and consequently tend to remain passive and to delegate the entire responsibility to their wives.

Education directed at husbands constitutes an effective preventive strategy for increasing their involvement and awareness in supporting pregnancy. Such education may be delivered through counselling, fathers' classes, information media, or community-based approaches, enabling husbands to become active partners in maintaining a healthy pregnancy, detecting danger signs early, and encouraging their wives to obtain timely health services. With sound understanding, husbands' involvement has been shown to reduce the risk of complications during pregnancy and delivery. It is therefore important to conduct research examining the effect of education directed at the husbands of pregnant women in preventing the occurrence of high-risk pregnancy (Andika, 2025).

Discussion

The participant with high-risk pregnancy on the basis of maternal age and interpregnancy interval (aged 43 years, with an interval of 20 years since the last child) had from the outset desired the pregnancy and had not used contraception, as she had no children from her marriage to her second husband; she expressed resignation to the will of God. This high-risk pregnancy with dual predisposition ought not to have occurred, since pregnancy beyond 35 years of age carries consequences including complications such as pre-eclampsia,

gestational diabetes, preterm birth, low birth weight (LBW), and chromosomal abnormalities. This is supported by the Reproductive Life Cycle Theory of Mosher and Bumpass (1976). This theory holds that a woman's reproductive life comprises critical phases, extending from menarche through the period of optimal fertility to menopause. Maternal health risks increase where pregnancy occurs outside the safe reproductive age range (20-35 years) or where the interpregnancy interval is excessively long. In this context, pregnancy beyond 35 years of age carries high risk because reproductive organ function declines and the likelihood of complications such as pre-eclampsia, haemorrhage, and chromosomal abnormalities increases. An interpregnancy interval exceeding 20 years likewise renders the maternal reproductive condition comparable to that of a first pregnancy, such that the body must readapt to the changes of pregnancy. This increases maternal susceptibility to obstetric complications and heightens risk to both mother and fetus.

This is further supported by the findings of Glick (2021), "Improving Outcomes for Mother and Baby", published in the *International Journal of Women's Health*. That article presents a comprehensive review of maternal and perinatal complications associated with maternal age above 35 years. Risks such as pre-eclampsia, gestational diabetes, caesarean delivery, and stillbirth, together with neonatal complications including intrauterine growth restriction, respiratory compromise, and admission to the Neonatal Intensive Care Unit (NICU), are discussed in detail.

The participant with high-risk pregnancy on the basis of obstetric history (previous abortion, ectopic pregnancy) strongly desired her pregnancy, having reached an agreement with her husband that they would have four children before she reached 40 years of age. She regarded the pregnancy and delivery risks likely to arise as a struggle that must be confronted. The consequences of pregnancy in a woman with a history of miscarriage include an increased likelihood of miscarriage or abortion in subsequent pregnancies, together with risks relating to physical and psychological

condition and to infection. The risk in a woman with a history of ectopic pregnancy is a higher likelihood of recurrent ectopic pregnancy in subsequent conceptions, in addition to other complications such as internal haemorrhage, fallopian tube damage, and psychological sequelae such as depression. This relates to the Reproductive History Theory advanced by Bentler in the 1980s. This theory emphasises that prior reproductive history (such as miscarriage, ectopic pregnancy, and obstetric complications) constitutes a significant determinant of the health of subsequent pregnancies. According to this theory, a woman with a history of miscarriage carries a higher risk of recurrent miscarriage, preterm delivery, and placental complications, whereas a woman with a history of ectopic pregnancy is at risk of recurrent ectopic pregnancy, secondary infertility, and pregnancy complications arising from fallopian tube damage.

This is further supported by the findings of Chouinard et al. (2019), "Ectopic pregnancy and outcomes of future intrauterine pregnancies". This population-based longitudinal cohort study (Quebec, Canada, 1989-2013) found that women with a previous ectopic pregnancy carried an increased risk of various complications in subsequent intrauterine pregnancies, including preterm delivery (1.27-fold), low birth weight (1.20-fold), placental abruption (1.21-fold), and placenta praevia (1.45-fold). Turesheva et al. (2023), in "Recurrent Pregnancy Loss: Etiology, Risk Factors, and Clinical Management", likewise reported that the risk of spontaneous miscarriage following a single previous miscarriage lies in the range of 12-20%. These findings indicate that even a single experience of miscarriage exerts a demonstrable effect on subsequent reproductive risk, albeit not to the degree observed in cases of recurrent miscarriage.

The participant with high-risk pregnancy attributable to chronic energy deficiency, arising from delayed notification of her marriage plans to health personnel, left health workers without sufficient time to prepare the prospective bride so that she might be fit and healthy for pregnancy. Pregnancy complicated by chronic energy deficiency may give rise to various risks and

complications for both mother and fetus. Potential risks include anaemia, haemorrhage, and difficulty during delivery. Chronic energy deficiency may further result in preterm birth, low birth weight, and impaired brain development. This relates to the Balanced Nutrition Theory advanced by Helen Keller International and the Indonesian Ministry of Health during the 1990s. This theory emphasises that sound nutritional status results from the balance between nutrient intake and bodily requirements. Imbalance, whether through deficiency or excess, affects health, including that of pregnant women. In the context of pregnant women with chronic energy deficiency, maternal risks are characterised by ready fatigue, anaemia, obstetric complications (prolonged labour, haemorrhage), and even maternal death; fetal risks are characterised by low birth weight (LBW), preterm birth, impaired fetal growth, and an increased risk of stunting.

This is further corroborated by the findings of Tamiang et al. (2022), "The Relationship between Chronic Energy Deficiency and Anemia in Pregnant Women". That study found that 93.3% of pregnant women with chronic energy deficiency were anaemic, compared with only 26.8% of women without chronic energy deficiency, and that this association was statistically significant ($p < 0.05$).

The couple of reproductive age (CRA) predisposed to high-risk pregnancy on the basis of maternal age of 43 years, an interval of 13 years since the last child, and a history of abortion were not using contraception and still hoped for a further pregnancy, as the wife had no children from her present marriage to her second husband. Couples of reproductive age predisposed to high-risk pregnancy with a history of abortion should ideally not undergo further pregnancy, since pregnancy in a woman with a history of abortion (miscarriage) carries a risk of complications such as severe haemorrhage, infection, fertility problems, ectopic pregnancy, and preterm delivery. This relates to the Weathering Theory advanced by Arline Geronimus (1992). Weathering Theory explains how cumulative physiological degradation resulting from long-term stress exposure accelerates biological ageing, rendering bodily systems

more vulnerable to a range of health risks. Very advanced reproductive age (>43 years) carries high risk because the body has already aged biologically and the quality of the reproductive system has declined. An interpregnancy interval exceeding 13 years, meanwhile, obliges the body to readapt as though facing a first pregnancy, thereby increasing susceptibility to obstetric complications and disorders of metabolic adaptation.

This is further confirmed by the findings of Hochler et al. (2023), "Maternal and Neonatal Complications with Advancing Maternal Age". Based on the distribution of maternal age, this study found that the rate of caesarean delivery increased significantly with advancing age, exceeding 20% among women aged 43 years and above. In addition, admission to the Neonatal Intensive Care Unit (NICU) rose from 2.7% among younger women to approximately 6% among women aged 45-46 years.

The couple of reproductive age (CRA) predisposed to high-risk pregnancy on the basis of parity and maternal age (five living children and aged 41 years) were not using contraception, reported that contraception did not suit them, and still desired a further pregnancy in the hope of having a daughter, all five of their children being sons. This parity constitutes a high-risk factor, in that a fifth or subsequent pregnancy may increase health risks for both mother and infant. Maternal risks include pre-eclampsia (hypertension), gestational diabetes, and placenta praevia (in which the placenta covers the birth canal). This relates to the Disposable Soma Theory (Kirkwood and Holliday, 1979), an evolutionary biological theory. This theory holds that the body possesses finite resources which are allocated between somatic maintenance and reproduction. Where reproduction is repeated and prolonged, as in a woman undergoing a sixth pregnancy at 41 years of age, resources for bodily maintenance are depleted, resulting in a reduced capacity to withstand physiological stress and to recover. The maternal body consequently becomes vulnerable to pregnancy complications such as haemorrhage, hypertension, malpresentation, and impaired fetal growth. This theory affirms that the severity of risk increases with the number of

pregnancies, particularly at an age that is no longer biologically optimal.

This is further supported by the findings of Peled et al. (2024), "Perinatal outcomes in grand multiparous women stratified". That study demonstrated that parity greater than five is associated with an increased risk of postpartum haemorrhage (PPH) and placental abruption, together with neonatal problems such as hypoglycaemia and neonatal seizures. These findings support the concept that repeated pregnancy depletes maternal physical capacity.

Findings of Other Studies on Education for Women of Reproductive Age

This relates to the study conducted by Raihany et al. (2022), which reported an increase in the knowledge of women of reproductive age (WRA) regarding preconception counselling in preparation for pregnancy following the provision of health education. A similar study by Arsulfa et al. (2024) demonstrated that, following health education, the knowledge and attitudes of the majority of women of reproductive age concerning the importance of preventing early-age pregnancy and chronic energy deficiency were good and positive. A subsequent study by Nurdewi (2024) reported an increase in knowledge among 38 participants, predominantly women of reproductive age, who participated actively in the discussion. A further study by Rahayu (2024) found that screening and educational media were capable of improving the knowledge, attitudes, and healthy pregnancy preparedness of women of reproductive age.

This relates to the study conducted by Anita et al. (2024), in which education concerning high-risk pregnancy delivered through home visits improved knowledge of pregnancy complications and of methods for screening high-risk pregnancy. A further study by Ina et al. (2023) found that the provision of education produced change through improved knowledge among pregnant women regarding pregnancy risks and reinforced their commitment to attending routine antenatal examinations. A subsequent study by Erma et al. (2022) recorded a 50% increase in knowledge (prior to health education, three pregnant women (30%) demonstrated good knowledge, whereas following health education this

increased to eight pregnant women (80%) with good knowledge).

Interview Findings Concerning Educational Needs

From the interview findings presented above it may be concluded that knowledge concerning high-risk pregnancy and efforts to prevent high-risk pregnancy remains limited among couples of reproductive age (CRA) predisposed to high-risk pregnancy, in that a woman aged 41 years with five living children, the youngest of whom is five years old, still desired a further pregnancy solely in the hope of having a daughter.

Knowledge concerning high-risk pregnancy and efforts to prevent high-risk pregnancy likewise remains limited among pregnant women, in that a woman with a history of abortion and of ectopic pregnancy nevertheless became pregnant again solely in pursuit of a target and a prior agreement with her husband that they would have four children before she reached 40 years of age. Knowledge remains limited among the husbands of couples of reproductive age (CRA) predisposed to high-risk pregnancy, in that they continue to expect their wives to become pregnant again in the hope of an additional daughter, despite the couple already having three sons and one daughter. Knowledge likewise remains limited among the husbands of women with high-risk pregnancy, in that they continue to expect their wives to become pregnant again, holding that lifespan and sustenance are divinely ordained, notwithstanding that the wife is 43 years of age and the youngest child is already 20 years old.

Discussion of the Support System

Husbands' Support System for Couples of Reproductive Age (CRA)

The husband, as part of the couple of reproductive age (CRA), holds a role of considerable importance in establishing an effective support system for the prevention of high-risk pregnancy. High-risk pregnancy may arise from maternal age that is too young or too advanced, excessively short interpregnancy intervals, or certain uncontrolled health conditions. In this regard, the husband's support encompasses physical, emotional, and psychological dimensions, together with joint decision-making relating to reproductive health. This

role constitutes an essential foundation for ensuring that pregnancy proceeds in a healthy and safe manner for both mother and fetus.

An attentive husband will provide support in the form of monitoring his wife's health status, accompanying her to antenatal care examinations, assisting with household tasks, and ensuring the adequacy of her nutrition and rest. In addition, the husband holds an important role in planning a healthy pregnancy through consideration of contraceptive use and access to health services. Without the husband's support, the mother is at risk of undergoing pregnancy under suboptimal conditions and of facing complications that may endanger the safety of both mother and fetus. The husband's active role as a support system therefore constitutes an inseparable component of the strategy for preventing high-risk pregnancy and must be reinforced through appropriate and continuous education (Nurul, 2025).

Husbands' Support System for Pregnant Women

The husband, as part of the couple of reproductive age, holds a crucial role in establishing a strong support system for his wife during pregnancy, particularly in the prevention of high-risk pregnancy. The support provided by the husband is not confined to material provision but likewise encompasses emotional and psychological support, together with decision-making relating to reproductive health. An ideal support system encompasses the husband's involvement in routine antenatal care examinations, the fulfilment of the pregnant woman's nutritional requirements, the regulation of interpregnancy intervals through the use of appropriate contraceptive methods, and preparedness to respond to pregnancy danger signs.

The husband likewise holds an important role in supporting his wife in maintaining a healthy lifestyle, avoiding excessive stress, and preserving a safe and comfortable environment throughout pregnancy. Research demonstrates that strong spousal support can improve pregnant women's adherence to health services, expedite decision-making regarding medical referral, and reduce the incidence of pregnancy complications. Conversely, insufficient spousal support constitutes a risk

factor for delayed management, which may aggravate the condition of both mother and fetus. Empowerment and education directed at husbands therefore constitute a principal key to establishing an effective support system for preventing high-risk pregnancy (Aditya, 2025).

The couple of reproductive age (CRA) predisposed to high-risk pregnancy on the basis of maternal age and parity (aged 41 years, with an interval of five years since the last child) reported that the husband still wished the wife to become pregnant again in the hope of a daughter. The family already comprised three sons and one daughter, and the husband stated that he wished to add one further daughter because the existing daughter had no companion, the three sons boarding at a Dayah/Islamic boarding school. A woman of 41 years should ideally not undergo further pregnancy.

This is because pregnancy beyond 35 years of age carries the risk of pregnancy complications such as gestational diabetes, pre-eclampsia, and placental disorders, together with a possible increase in the risk of chromosomal abnormalities in the infant, such as Down syndrome, and an increased risk of miscarriage and preterm birth. The risks associated with pregnancy following an interval of more than five years since the last child include a possible increase in pregnancy complications such as gestational diabetes, pre-eclampsia, preterm birth, and placental problems, together with an increased risk of miscarriage and of infants born with genetic abnormalities. This relates to the Ecological Systems Theory of Urie Bronfenbrenner (1979). This theory holds that an individual's development and health are influenced by layered interactions within their environment, extending from the microsystem (family, husband and wife), through the mesosystem (the relationship between family and health services), to the macrosystem (culture, norms, and policy). In the context of couples of reproductive age at risk by virtue of advanced maternal age and long interpregnancy intervals, the husband, as part of the microsystem, plays a direct role in providing emotional support, in decisions regarding contraceptive use, and in access to health services. Spousal support can reduce the wife's anxiety, improve adherence to family planning and antenatal

care programmes, and prevent pregnancy complications. Conversely, without a support system from the husband, the mother is at high risk of delayed management on account of maternal age and an interpregnancy interval that is no longer ideal.

The couple of reproductive age (CRA) predisposed to high-risk pregnancy on the basis of maternal age, parity, and interval since the last child (aged 41 years, five living children, the youngest aged 5.5 years) reported that the husband still hoped his wife would become pregnant again because he desired a daughter, all five of their children being sons. Couples of reproductive age with such dual predisposition should receive support from the husband not to undergo further pregnancy, given the likelihood of risk to both mother and fetus. With regard to parity, the risks that may arise should the woman become pregnant again include increased health risks for both mother and infant; maternal risks include severe haemorrhage, placenta praevia, gestational diabetes, and hypertension. The risks associated with pregnancy following an interval of more than five years since the last child include an increased risk during pregnancy and delivery, namely operative delivery, pre-eclampsia, severe haemorrhage, fetal growth restriction, congenital anomalies in the infant, miscarriage, preterm birth, and low birth weight. The risks associated with a sixth pregnancy include an increased likelihood of maternal problems such as pre-eclampsia, gestational diabetes, and delivery complications, together with risks to the infant such as preterm birth, low birth weight, and genetic abnormalities.

The participant with high-risk pregnancy on the basis of maternal age, parity, and interpregnancy interval (aged 43 years, with an interval of 20 years since the last child) reported that her husband did indeed hope she would become pregnant again and maintained that lifespan and sustenance are divinely ordained. This woman should ideally not have fallen within the high-risk pregnancy category, that is, she should not have become pregnant again, given the magnitude of the risks associated with pregnancy following an interval of more than 20 years since the last child.

These risks include an increased maternal risk of pre-eclampsia, preterm birth, low birth weight in the infant, and potential problems in subsequent pregnancies.

The participant with high-risk pregnancy on the basis of maternal age and interpregnancy interval (aged 43 years, with an interval of 20 years since the last child) reported that she did indeed hope for the pregnancy, as she had no children from her marriage to her second husband. The risks she may face include pre-eclampsia, diabetes, and haemorrhage, together with the possibility of difficulty in meeting the physical and emotional needs of a newborn as well as of older children, particularly where accompanying health problems are present.

The Conservation of Resources Theory (Hobfoll, 1989) holds that stress arises when an individual loses resources, is threatened with their loss, or fails to obtain the resources required to meet life's demands. In the context of a woman of advanced maternal age with more than five children, the mother faces the loss of physical energy, time, and even social support owing to the demands of caring for numerous children. Pregnancy at advanced age adds health risks that deplete physiological resources (for example, physical strength, nutritional status, and psychological condition). Spousal support, whether emotional, financial, or practical, constitutes a principal resource capable of protecting the mother from excessive stress, improving adherence to antenatal care, and preventing obstetric complications.

This is further corroborated by the findings of Ahmadpour et al. (2023), "Family and Spousal Support Are Associated with Higher Maternal Functioning". That study demonstrated that receipt of support from husband and family significantly improved postpartum maternal functioning. Women with low spousal support recorded lower maternal functioning scores than those receiving high levels of support.

The participant with high-risk pregnancy on the basis of obstetric history (previous miscarriage and previous ectopic pregnancy) reported that her husband left the decision entirely to her, stating that if she felt able to carry a pregnancy she was free to become pregnant again. The risks faced by a

pregnant woman with a history of miscarriage include a higher risk of further miscarriage in subsequent pregnancies, particularly where miscarriage has occurred repeatedly. This relates to the Stress and Coping Theory of Lazarus and Folkman (1984). This theory holds that individuals confronting stress (for example, medical trauma such as ectopic pregnancy) undertake a cognitive appraisal of the situation and then attempt to manage it through coping strategies, whether problem-focused (seeking medical solutions, following clinical advice) or emotion-focused (emotional support, prayer, and faith).

In the context of pregnant women with a history of ectopic pregnancy, spousal support constitutes a principal protective factor in reducing anxiety, depression, and fear of failure in subsequent pregnancy. With such a support system in place, the wife is better able to comply with recommendations for routine examination, to maintain a healthy lifestyle, and to approach pregnancy with greater confidence.

In the absence of support, high psychological stress may aggravate the mother's condition and even influence pregnancy outcomes.

This is further corroborated by the findings of Ren N. (2023), "Research Progress on Psychological Distress in Patients". That study affirmed that family support, and that of the husband in particular, constitutes an essential element in assisting patients following ectopic pregnancy to confront a series of psychological and physiological changes, including emotional fluctuation, loss of control, and social stigma. Spousal support delivered through an emotional approach exerts a considerable influence in alleviating anxiety and in restoring the wife's confidence.

This relates to the study conducted by Siti et al. (2024), which found an association between spousal support and the incidence of unmet need among couples of reproductive age (CRA). A further study by Nur et al. (2024) likewise found that age, education, parity, knowledge, and spousal support were associated with the selection of tubectomy as a contraceptive method among couples of reproductive age. A subsequent study by Elis (2020) demonstrated an effect

of spousal support on the incidence of unmet need among couples of reproductive age.

Findings of Other Studies on Husbands' Support Systems for Pregnant Women

The study conducted by Damayanty et al. (2024) found that spousal support exerted a significant effect on the fulfilment of the physical and emotional needs of pregnant women. Comparable findings were reported by Siti Asiyah et al. (2020), namely that the majority of husbands did not support their wives in meeting their contraceptive needs. A further study by Sahda (2025) revealed that local culture and spousal support exerted a significant influence on the incidence of unmet need for family planning.

From the foregoing account it may be concluded that the support system provided by husbands to couples of reproductive age (CRA) predisposed to high-risk pregnancy, concerning high-risk pregnancy and efforts towards its prevention in their wives, remains suboptimal, in that husbands continue to expect their wives to become pregnant again solely from a desire for an additional daughter, notwithstanding that the family already comprises four children, three sons and one daughter.

The support system provided by husbands to women with high-risk pregnancy likewise remains suboptimal, in that husbands continue to hope their wives will become pregnant, holding that sustenance and lifespan are divinely ordained, notwithstanding that the wife is already 43 years of age and the youngest child is already 20 years old.

Discussion of Barriers

Barriers among Couples of Reproductive Age (CRA)

Couples of reproductive age (CRA) constitute the group that should serve as the vanguard of healthy pregnancy planning. In practice, however, many couples encounter various barriers in preventing high-risk pregnancy. One principal barrier is limited knowledge and understanding of high-risk pregnancy, such as non-ideal maternal age, excessively short interpregnancy intervals, or the presence of comorbid disease.

In addition, cultural factors and social norms frequently constitute obstacles, in that the notion persists that a greater number of children is preferable, or that pregnancy is a

matter for women alone. Ineffective communication between husband and wife, together with low levels of husbands' involvement in reproductive health matters, further aggravates this situation. Additional barriers include limited access to health services, fear of contraceptive side effects, and minimal support from the surrounding environment. All these factors are interrelated and contribute to the low level of preventive effort against high-risk pregnancy among couples of reproductive age. An educational, participatory, and community-based approach capable of addressing these barriers holistically and sustainably is therefore required (Dian, 2025).

Barriers among Pregnant Women

The barriers faced by pregnant women in preventing high-risk pregnancy encompass factors of access, knowledge, and environmental support. Many pregnant women in extensive and densely populated areas experience difficulty in reaching health facilities owing to distance, limited transport, and high travel costs. Limitations in medical personnel and medical equipment at Puskesmas or Posyandu facilities likewise impede routine examination. In addition, pregnant women's limited knowledge concerning pregnancy danger signs and the risks associated with maternal age that is too young or too advanced, or with excessively short interpregnancy intervals, results in some women being insufficiently proactive in seeking health services. These barriers are further aggravated where the family and community environment provides insufficient moral or financial support.

Limited knowledge, restricted access to health services, and minimal family support constitute the dominant factors impeding pregnant women in preventing high-risk pregnancy. That research likewise emphasised the importance of continuous educational intervention, whether through health personnel or information media, in order to raise awareness among pregnant women. In addition, the active involvement of husbands and the immediate family is essential in order that pregnant women feel safe, supported, and motivated to attend routine examinations and to follow medical advice,

thereby reducing the risk of pregnancy complications (Sari et al., 2025).

Couples of reproductive age (CRA) and pregnant women encounter barriers in accessing health services at both Posyandu and Puskesmas facilities, including the difficulty of reaching these facilities owing to the distance involved, the mountainous roads to be traversed, and roads that are narrow, stony, and difficult to negotiate by motorcycle, notwithstanding that the government has at present given attention to this matter through the forthcoming operation of a newly established Puskesmas. This relates to Structural Inequality Theory (Link and Phelan, 1995). This theory holds that barriers to health are frequently rooted in structural factors such as poverty, low educational attainment, and limited infrastructure. Such barriers give rise to inequality in access to and quality of health services.

In the context of couples of reproductive age at high risk, extensive and densely populated geographical conditions create inequality of access between those residing in urban areas (close to health facilities) and those in remote areas. Couples of reproductive age living far from health facilities are more vulnerable to not receiving education, examination, or preventive services relating to high-risk pregnancy. Structural support from government (the provision of village midwives, Posyandu facilities, and mobile Puskesmas services) is therefore of considerable importance in reducing this gap.

This is further corroborated by the findings of Ni Ketut Aryastami et al. (2023), "Optimal Utilization of Maternal Health Services in Indonesia: A Cross-Sectional Study of Riskesdas 2018". This national study based on the 2018 Basic Health Research survey found that women in urban areas enjoyed considerably better access to maternal services than those residing in remote areas. One important factor was geographical access: those able to reach health facilities routinely recorded more optimal service utilisation scores.

A further problem encountered among couples of reproductive age (CRA) in efforts to prevent high-risk pregnancy is the perception that contraception does not suit

them, notwithstanding that they have not attempted a different contraceptive method; having tried only one method, they conclude that contraception is unsuitable for them. This warrants the attention of health personnel in disseminating information regarding the various types of contraception available. This relates to the Health Belief Model (Rosenstock, 1974; Becker, 1978). Among other propositions, this theory emphasises that an individual's health behaviour is influenced by perceived barriers, namely the obstacles they perceive (side effects, discomfort, unsuitability).

In the case of couples of reproductive age for whom contraception is perceived as unsuitable, the principal barrier lies in perceived barriers, namely the belief that contraception entails side effects or is unsuitable. Consequently, although aware of the high risks associated with pregnancy, they remain reluctant to use contraception.

This is further corroborated by the findings of Batek et al. (2024), "Facilitators and barriers to contraception access and use for adolescents in the United States". That study identified the principal barriers to contraceptive use, including perceived barriers such as intolerance of side effects, stigma, and limitations of physical access and of information. It noted that perceived barriers may prevent individuals from attempting alternative methods even where they are aware of pregnancy risk, precisely as observed among couples of reproductive age who cease attempting contraception on the basis of a single adverse experience.

The findings of Yulfira et al. (2014) revealed that the barriers to reducing the risk of maternal mortality comprise sociocultural barriers, geographical conditions and limited access to health services, the economic circumstances of the community, and the persistently low utilisation of local resources in efforts to care for pregnant and parturient women.

This relates to the study conducted by Maria (2022), in which 59.8% of poor urban women used modern contraception. The dominant factors influencing use were the husband's employment status and the desire to have children.

RESULTS

The findings of Phase I of the study (interviews) with couples of reproductive

age (CRA) predisposed to high-risk pregnancy and pregnant women were as follows:

1. Educational needs among couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women concerning efforts to prevent high-risk pregnancy require strengthening, because:
 - a. it was found that couples of reproductive age (CRA) in which the wife was over 35 years of age, with four living children, an interval of more than five years since the last child, and a history of miscarriage, still desired a further pregnancy;
 - b. pregnant women over 35 years of age with four living children, an interval of more than five years since the last child, a history of miscarriage, and a history of ectopic pregnancy were found to be determined to become pregnant again.
2. The support system provided by the husbands of couples of reproductive age (CRA) predisposed to high-risk pregnancy and by the husbands of pregnant women in efforts to prevent high-risk pregnancy remains markedly insufficient, because:
 - a. the husbands of couples of reproductive age (CRA) predisposed to high-risk pregnancy, with four living children, a history of abortion, an interval of more than five years since the last child, and a wife over 35 years of age, still wished their wives to become pregnant again;
 - b. the husbands of women with high-risk pregnancy (with a history of miscarriage, a history of ectopic pregnancy, aged over 35 years, and an interval of more than five years since the last child) did indeed hope their wives would become pregnant again,

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- holding that lifespan and sustenance are divinely ordained.
3. Barriers experienced by couples of reproductive age (CRA) predisposed to high-risk pregnancy and by pregnant women in efforts to prevent high-risk pregnancy
 - a. pregnant women reported that contraception did not suit them;
 - b. the extensive area and the distance of Posyandu and Puskesmas facilities from their homes rendered it difficult for couples of reproductive age and pregnant women to access health services.

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

The findings of Phase I of the study (interviews) with couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women were as follows:

- a. There is a need for education among couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women concerning efforts to prevent high-risk pregnancy.
- b. The support system provided by the husbands of couples of reproductive age (CRA) predisposed to high-risk pregnancy and by the husbands of pregnant women in efforts to prevent high-risk pregnancy is of considerable importance.
- c. The barriers experienced by couples of reproductive age (CRA) predisposed to high-risk pregnancy and by pregnant women in efforts to prevent high-risk pregnancy require to be addressed.

RECOMMENDATIONS

1. It is hoped that couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women will improve their knowledge concerning efforts to prevent high-risk pregnancy.

2. It is hoped that the husbands of couples of reproductive age (CRA) predisposed to high-risk pregnancy and the husbands of pregnant women will provide a support system to their wives in efforts to prevent high-risk pregnancy.
3. It is further hoped that:
 - a. couples of reproductive age (CRA) predisposed to high-risk pregnancy and pregnant women will improve their knowledge concerning the various contraceptive methods in particular and family planning in general;
 - b. the government will promptly open and render operational the newly established Puskesmas, so that the community may readily obtain access to health services.

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