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The Incident Prevalence of 4T High Risk Pregnant Women

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Article Information	Abstract
	Pregnancy is a physiological condition, but pregnancy can also become pathological when accompanied by high-risk conditions. Restful (high risk) pregnancies are found in pregnant women who are too old, too young, too many and too close (4T). The aim of this research was to determine the prevalence of 4T high risk pregnant women in Gresik Regency. The type of research used quantitative descriptive with a survey research design. The population in this study was all 6,929 pregnant women in Gresik Regency. The results of this study showed that the highest incidence of 4T in pregnant women in Gresik Regency was at ages over 35 years, amounting to 22.7%, which occurred in Gresik District. Health workers are expected to pay more attention to the problems they face, to prevent problems that can increase maternal mortality.

INTRODUCTION

Maternal Mortality Rate (MMR) is the death of women (mothers) caused by pregnancy, childbirth and postpartum processes which result directly from obstetric cases per 100,000 live births in a certain period which is not the result of an accident. (Indonesian Ministry of Health n.d.). Cases of maternal mortality in the world are still a common concern. Based on existing data from 2000 - 2020, the global maternal mortality ratio has decreased by 34 percent, from 342 deaths to 223 deaths per 100,000 live births (WHO and UNICEF 2023). In Indonesia alone, the maternal mortality rate according to data from the Central Statistics Agency (BPS) is 189 per 100,000 live births, while in East Java the maternal mortality rate reaches 184 per 100,000 live births (Bps.go.id 2020). The decline in MMR that has occurred has not yet reached the target expected by the Sustainable Development Goals (SDGs), namely the maternal mortality rate in 2030 to 70 per 100,000 live births in 2030 (Bappenas 2022). The factors that cause maternal death are divided into two factors, namely direct factors and indirect factors. The direct factors of death are caused by bleeding, hypertension in pregnancy or preeclampsia, and the occurrence of infection, while the indirect causes are factors 3 too late and 4T late (Respati, Sulistyowati, and Nababan 2019). Being late includes being late in reaching the facility (far facility), being late in getting fast and appropriate service, being late in recognizing the danger signs of pregnancy and childbirth. Meanwhile, the 4T factors are Too Old, Too Young, Too Close, and Too Many. (Respati et al. 2019). Based on the urine above, condition 4 is also an indirect cause of death that often occurs during pregnancy. Pregnancy is a physiological condition, but pregnancy can also turn pathological if accompanied by high-risk conditions such as the occurrence of 4T in the mother. Research shows that mothers who are too young or too old will experience an increased potential for problems in their pregnancy. Apart from that, children who are too close and have too many children will affect the parenting style provided by their parents and increase the risk of health problems for children (Gladeva Yugi Antari 2022). The danger of 4t causing many losses for health, mental health and psychology, this also triggers cervical cancer, defects in the child who will be born, heavy bleeding, complications in pregnancy and can result in death in the mother.

The description of the prevalence of 4T will be a reference in the program or policy preparation process because by knowing the prevalence of 4T we can detect it early and make appropriate treatment efforts for 4T problems in mothers. Gresik Regency is one of the districts that has a high MMR and existing data from PK21 states that the 4t incidence in Gresik reached 2,932 people or around 42.3%. For this reason, researchers want to study further regarding the frequency distribution of the prevalence of too young, too old, too close, too many in Gresik in the hope that later it can be a reference in preparing programs because the 4t factor is the main trigger factor for complications in pregnancy and childbirth which can increase maternal mortality rates.

METHODS

The type of research used quantitative descriptive with a survey research design, namely research conducted on a large number of objects and within a certain period. The population was 1,291,581. The sample used total sampling technique by taking the entire population to be the variable measured in this study, namely the incidence of 4T in the entire population of pregnant women in 18 sub-districts in the Gresik Regency area. The data collection was done by looking at existing secondary data from the 2021 Family Data Collection of the KBPPPA Service. The data obtained was analyzed descriptively to determine the characteristics of the sample and presented in the form of frequency distributions and percentages.

RESULTS

Gresik Regency is divided into 18 sub-districts consisting of 330 villages and 26 sub-districts with an area of 1,191.25 km². The Gresik Regency area is a coastal area with a beach length of 140 km. The results of natural resources include the trade, industry, agriculture and fishing sectors. The livelihood of most of the population is industry. while others are traders, farmers and fishermen.

The territorial boundaries of Gresik Regency are divided into several, namely:

1)	Northern Boundary	Java Sea
2)	Eastern Boundary	Madura Strait, Surabaya city
3)	Western Border	Lamongan Regency
4)	Southern Boundary	Sidoarjo Regency and Mojokerto Regency

Total population
The population based on data in 2022 reached 1,291,581 people, consisting of a male population of 648,861 people and a female population of 642,657 people.

2.   Costum data
a.   Number of pregnant women
Table 1: Number of Pregnant Women in inciden prevalence of 4T high risk pregnant women in Gresik Regency

No	Subdistrict	F	%
1	Dukun	396	5,7
2	Balong Panggang	272	3,9
3	Panceng	324	4,7
4	Benjeng	334	4,8
5	Duduksampeyan	215	3,1
6	Wringinanom	354	5,1
7	Ujungpangkah	335	4,8
8	Kedamean	328	4,7
9	Sidayu	310	4,5
10	Manyar	688	9,9
11	Cerme	361	5,2
12	Bungah	430	6,2
13	Menganti	668	9,6
14	Kebomas	488	7,0
15	Driyorejo	783	11,3
16	Gresik	247	3,6
17	Sangkapura	263	3,8
18	Tambak	133	1,9
	Total	**6.929**	**100**

In table 1 we can see that in Gresik Regency the number of pregnant women is 6929 people and the largest number is Driyorejo District, namely 783 people or 11.3%.

b.   Pregnant women are too young
Table 2**:** Number of pregnant women too young in in inciden prevalence of 4T high risk pregnant women in Gresik Regency

No	Subdistrict	F	%
1	Dukun	3	0,8
2	Balong Panggang	5	1,8
3	Panceng	6	1,9
4	Benjeng	3	0,9
5	Duduksampeyan	0	0,0
6	Wringinanom	16	4,5
7	Ujungpangkah	7	2,1
8	Kedamean	9	2,7
9	Sidayu	2	0,6
10	Manyar	3	0,4
11	Cerme	1	0,3
12	Bungah	3	0,7
13	Menganti	11	1,6
14	Kebomas	1	0,2
15	Driyorejo	15	1,9
16	Gresik	1	0,4
17	Sangkapura	5	1,9
18	Tambak	8	6,0
	Total	99	1,4

In table 2 we can see that in Gresik Regency the highest number of pregnant women who are too young is in Tambak District, namely 8 people or 6.0%.

c.   Pregnant women who are too old

Table 3: Number of pregnant women who are too old in in inciden prevalence of 4T high risk pregnant women in Gresik Regency

No	Subdistrict	f	%
1	Dukun	70	17,7
2	Balong Panggang	37	13,6
3	Panceng	44	13,6
4	Benjeng	36	10,8
5	Duduksampeyan	31	14,4
6	Wringinanom	41	11,6
7	Ujungpangkah	57	17,0
8	Kedamean	36	11,0
9	Sidayu	57	18,4
10	Manyar	104	15,1
11	Cerme	68	18,8
12	Bungah	76	17,7
13	Menganti	100	15,0
14	Kebomas	87	17,8
15	Driyorejo	114	14,6
16	Gresik	56	22,7
17	Sangkapura	40	15,2
18	Tambak	25	18,8
	Total	1079	15,6

In table 3 we can see that in Gresik Regency the highest number of pregnant women who are too old is in Gresik District, namely 56 people or 22.7%.

d.   Too many pregnant women

Table 4: Number of pregnant women with too many children in in inciden prevalence of 4T high risk pregnant women in Gresik Regency

No	Subdistrict	F	%
1	Dukun	18	4,5
2	Balong Panggang	13	4,8
3	Panceng	13	4,0
4	Benjeng	4	1,2
5	Duduksampeyan	7	3,3
6	Wringinanom	7	2,0
7	Ujungpangkah	15	4,5
8	Kedamean	8	2,4
9	Sidayu	16	5,2
10	Manyar	49	7,1
11	Cerme	15	4,2
12	Bungah	19	4,4
13	Menganti	30	4,5
14	Kebomas	36	7,4
15	Driyorejo	40	5,1
16	Gresik	27	10,9
17	Sangkapura	20	7,6
18	Tambak	17	12,8
	Total	354	5,1

In table 4 we can see that in Gresik Regency, the highest number of pregnant women who have too many children or are pregnant too often is in Tambak District, namely 17 people or 12.8%.

e. Pregnant women too close together

Table 5: Number of pregnant women with pregnancies too close together in in inciden prevalence of 4T high risk pregnant women in Gresik Regency

No	Subdistrict	f	%
1	Dukun	33	8,3
2	Balong Panggang	11	4,0
3	Panceng	19	5,9
4	Benjeng	30	9,0
5	Duduksampeyan	19	8,8
6	Wringinanom	11	3,1
7	Ujungpangkah	26	7,8
8	Kedamean	15	4,6
9	Sidayu	28	9,0
10	Manyar	109	15,8
11	Cerme	25	6,9
12	Bungah	44	10,2
13	Menganti	55	8,2
14	Kebomas	85	17,4
15	Driyorejo	66	8,4
16	Gresik	38	15,4
17	Sangkapura	21	8,0
18	Tambak	8	6,0
	Total	643	9,3

In table 5 we can see that in Gresik Regency, the highest number of pregnant women whose pregnancies were too close together was in Kebomas District, namely 85 people or 17.4%.

DISCUSSION

Based on research results taken from data from the 2021 Family Data Collection of the Gresik Regency KBPPPA Service with a population of 6,929 pregnant women. According to research, it can be seen that a small percentage of pregnant women in Gresik Regency are too young, namely 1.4%. Pregnancy that is too young is a pregnancy that occurs at the age of less than 20 years or in adolescence. Pregnant women who are too young can pose risks to women's reproductive health and sexuality. This has major health consequences for teenage pregnant women and the fetuses they contain. Physically, at this age, we are still not ready for pregnancy or childbirth, so we are vulnerable to complications which are the cause of maternal death. Apart from the physical, this also has a negative psychological and social impact. This is in line with research (Setyaningsih and Sutiyarsih 2020) which states that getting pregnant at a young age will cause many health, mental and psychological losses. According to research (Sarwono 2010), women who are pregnant or give birth aged <20 years have a 2 to 5 times risk of maternal death, in addition to that, pregnant women aged less than 20 years have a 4 times risk of experiencing complications or complications which will cause death in the mother. .

Pregnancy at too old an age (> 35 years) in Gresik Regency is quite high in several sub-districts, namely the highest in Gresik sub-district which reaches 22.7%. This is really getting attention, because at the age of > 35 years women will experience changes in their tissue. in the reproductive organs, and loss of elasticity in the birth canal, this is included in the high risk category. Pregnancy at too old an age will increase the possibility of greater risks resulting in increased blood pressure (preeclampsia), congestion during the vaginal delivery process, inelastic pelvic floor muscles, bleeding, so there is a risk of complications and can increase the incidence of pregnancy. maternal death. According to research (Susanti 2020) which states that getting pregnant at an old age or >35 years will be at risk of complications during childbirth. This is in line with research (Rangkuti and Harahap 2020) which states that age >35 years is associated with high-risk pregnancy which can trigger complications and death.

Too many pregnancies in Gresik Regency are quite high in Tambak District, reaching 12.8%. This will of course pose a high risk for pregnant women. Having too many pregnancies will increase the risk of high maternal mortality rates. One of the high risk factors in pregnancy is multipara, where this condition will experience a decrease in uterine function along with the aging process of the mother's reproductive organs, so if the pregnant mother is older and has more than 3 pregnancies, there will be a very high risk of complications in the pregnancy. pregnant mother. This is in line with research (Gusta Anggraini Nursal 2015) which states that, the impact of high risk on pregnant women due to parity of more than three or more if food is not immediately handled will cause

bleeding in pregnant women.

Pregnancies that are too close together in Gresik Regency most often occur in Kebomas District, namely 17.4%, which is included in the high risk pregnancy category. Pregnancies that are too close apart are caused by not using contraception when the child is less than 2 years old, and lack of knowledge about pregnancy resulting in pregnancies that are too close apart. Too close a distance will be very dangerous for the mother and fetus, according to the BKKBN the ideal distance between pregnancies is at least 3 years (BKKBN 2018), this will minimize the risk of high pregnancy. The impacts that occur when a pregnancy is too close are anemia, premature birth, low birth weight (LBW), suboptimal growth and development of toddlers, and premature rupture of membranes (Nugraha et al. 2019). Birth spacing that is too close will result in the mother not having the opportunity to repair her body, where the mother also needs sufficient energy to recover after giving birth. Close-range pregnancies are very high risk because of the energy needs of the mother and the fetus as well as nutritional requirements for the breastfeeding baby. This will drain a lot of energy from the mother and if the mother's food consumption is not met it can make a high contribution to the risk of CED (Andrian, Agustina 2022). According to research (Gusnidarsih 2020) that pregnancies that are closely spaced can be at risk of developing anemia which is caused by a lack of optimal nutrition in pregnant women. This is also in line with research (Tanziha, Utama, and Rosmiati 2016) which states that pregnant women who have pregnancies that are too close together <2 years have a 2-3 times risk of developing anemia. Because the spacing of pregnancies is also very important to pay attention to, this condition can accelerate the occurrence of anemia in pregnant women.

CONCLUSION

This research can be concluded that pregnant women who have the highest risk of 4T many were those aged over 35 years at 22.7%. It is recommended that health workers play an active role in detecting high-risk pregnancies at every antenatal care (ANC) visit. Thus, midwives must provide counseling to pregnant women about the risk factors for 4T to avoid complications in pregnancy which will increase maternal mortality so this can help to reduce maternal mortality in Indonesia.

SUGGESTION

Health workers are expected to pay more attention to the problems they face, to prevent problems that can increase maternal mortality. In addition, it is recommended to provide health education regarding the dangers of high-risk pregnancy and avoid factors that can influence maternal death. Respondents were encouraged to increase their knowledge regarding factors that trigger high-risk pregnancies. The findings of this research can be used as a reference and provide valuable insight for future research efforts in developing a deeper understanding of the topic.

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CONFLICTS OF INTEREST

The author declares that there is no conflict of interest in this research.

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