

The Relationship between Mother Pregnancy at a Young Age and the Emotional Development of Children Aged 3-5 Years

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Abstract:

The prevalence of emotional and behavioral disorders in preschool children is relatively high. One factor influencing children's emotional development is the mother's age during pregnancy. This study aimed to determine the relationship between maternal pregnancy at a young age and the emotional development of children aged 3-5 years. This study used a cross-sectional survey approach. The research subjects were all pregnant women and comprised 64 respondents, taken by simple random sampling. The independent variable is the emotional development of children aged 3-5 years as measured using the SDQ questionnaire. The dependent variable, namely the mother's age, was measured using a questionnaire. Data collection included coding, editing, data entry, and tabulation, then analyzed using a computer with chi-square. Of the 64 respondents studied, 54 respondents (84.4%) were pregnant women aged <20 years and experienced abnormal child emotional development, and 52 respondents (81.3%). The correlation test results between the mother's age during pregnancy and the child's emotional development obtained a coefficient of 0.565 with a significance value of 0.001. It can be concluded that a relationship exists between maternal pregnancy at a young age and the emotional development of children aged 3-5 years. Suggestions for adolescents, families, and health workers not to get married before the age of 20 so that there are no disturbances in the emotional development of children aged 3-5 years.

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INTRODUCTION

Preschoolers are children aged 36-72 months who have their characteristics in terms of growth and development. Every child experience different growth and development (Heri et al., 2022). The child's cognitive development reaches 50% when the child is four years old, 80% when the child is eight, and even 100% when the child is 18. Growth and development experience a rapid increase at an early age, from 0 to 5 years. This period is often referred to as the "Golden Age" phase. Preschool-age children are children aged 3-5 years, where most body systems are mature and stable and can adapt to environmental changes (Santrock, 2018). Changes in child development occur in several aspects, such as motor movements, language/communication, intelligence, and social aspects (Kurniyawan et al., 2023)

Children experience extraordinary development in the first year of their life; apart from physical and cognitive development, there is also social and emotional development at the beginning of a child's life. Preschool-aged children will experience a slowing down of their physical development stages, while the social-emotional and cognitive stages will speed up (Palintan,

2020). Children begin progressing in emotions such as anger, fear, and sadness. Parenting is closely related to developing a child's personality (Kurniyawan et al., 2021).

One factor that influences children's emotional development is the mother's age when pregnant. Pregnancy is something every woman looks forward to because pregnancy is a significant life event, although major changes can occur that can endanger health (Novelia et al., 2023). During the nine months of pregnancy, the baby must grow and develop in the womb (Laiskodat et al., 2021). The expectant mother may complain that she will experience discomfort. Discomfort can disturb pregnant women; one of the discomforts experienced is nausea and vomiting (Hamidah et al., 2022). Low back pain is also one of the discomforts experienced by third-trimester pregnant women (Novelia et al., 2021). Discomfort during pregnancy will exacerbate the stress experienced by pregnant women.

Pregnancy at a young age is a pregnancy that occurs in women aged <20 years. Young women experience a process of physical maturation faster than their psychosocial maturation. Therefore, emotional imbalance often occurs, making it susceptible and prone to stress. This harms the fetus's health, growth, and development because the reproductive organs are immature to become pregnant, especially with psychological, social, and economic stress. Young pregnant women who experience stress or pressure can affect the growth and development of their fetus in the womb because the fetus can feel when the mother is sad (Mardjan, 2016).

High-stress levels negatively affect physical and mental health (distress or unfavorable stress) (Wuryaningsih et al., 2018). Stress is normal in everyday life, but excessive stress will also cause mental health problems (Ariviana et al., 2021; Putri et al., 2021). Pregnant women who experience stress due to life pressure problems will show several psychological responses that cause disturbances such as cognition, emotion, and social behavior (Cahyani et al., 2022). Stress causes a person's perception to decrease, and she tends to focus more on small things (Patuh et al., 2021; Afandi et al., 2021).

Data regarding pregnancy at a young age can be seen from data on young deliveries in Ranubedali Village which shows that the number of young deliveries in 2019 was 31 people or 30.1% of a total of 103 pregnancies; in 2020, there were 31 people or 26.5% of a total of 117 pregnancies. Meanwhile, in 2021 as many as 20 people, or 24% of 98 pregnancies. The accumulated number of deliveries from 2019 to 2021 is 318 in total. Adolescent deliveries in Ranubedali Village from 2019 to 2021 show a high number, namely 82 young deliveries out of 318 total deliveries (Ranuyoso Health Center Data, 2021).

The latest regulation in Law Number 16 Number 2019 states that the minimum age for women to marry is 19. This regulation is a substitute for the provisions contained in Law Number 1 of 1974 concerning Marriage which states that the minimum age for women to marry is 16 years. Implementing this regulation was found to be quite effective in suppressing child marriage. It is proven that the number of child marriages is decreasing (Safutra, 2018).

The results of preliminary study were for mothers who were less than 20 years old at the time of pregnancy and had children aged 3-5 years. From 6 respondents, the results obtained were four child respondents experiencing emotional development disorders and two mothers not experiencing emotional disorders. This study aimed to determine the relationship between maternal pregnancy at a young age and the emotional development of children aged 3-5 years.

METHOD

This study used quantitative analysis with a cross-sectional survey approach. In this study, researchers looked at the relationship between maternal pregnancy at a young age and the

emotional development of children aged 3-5 years in Ranubedali Village, Ranuyoso District, Lumajang Regency, by considering external variables of parenting, number of children, gender of children, mother's education, father's education, and parental income. The research subjects were pregnant women from 2019 to 2021 in the Ranuyoso Lumajang Health Center, East Java. The research sample consisted of 64 respondents, taken by simple random sampling. The independent variable is the emotional development of children aged 3-5 years as measured using the SDQ questionnaire. The dependent variable, namely the mother's age, was measured using a questionnaire. Data collection included coding, editing, data entry, and tabulation, then analyzed using a computer with chi-square.

RESULT

Table 1. Characteristics of Respondents' Mother and Father (n=64)

Variables	Frequency	Percentage
Mother Education		
Elementary school	45	70.3
Junior high school	5	7.8
Senior high school	13	20.3
Bachelor's degree	1	1.6
Mother Occupation		
Teacher	1	1.6
Housewife	63	98.4
Father Occupation		
Private sector	18	28.1
Farmer	39	60.9
Construction worker	4	6.3
Laborer	2	3.1
Heaver	1	1.6
Parenting Style by Mother		
Mother	56	87.5
Grandmother	8	12.5
Number of Children		
1	56	87.5
2	6	9.4
3	2	3.1
Family Income		
Lower than regional minimum wage	8	12.5
Higher than regional minimum wage	56	87.5
Mothers' Pregnancy at Young Age		
<20 years	54	84.4
≥20 years	10	15.6

Table 1 shows that of the 64 respondents, the majority of respondents had elementary school mothers, with a total of 45 respondents (70.3%); most of them work as housewives, with 63 respondents (98.4%); the majority of respondents were mothers' upbringing, with a total of 56 respondents (87.5%); the majority of respondents had one child, with a total of 56 respondents (87.5%); the majority of the respondent's father's work was as a farmer, with 39 respondents (60.9%); most of the respondents had incomes above the minimum wage, with a total of 56 respondents (87.5%); and the majority were aged <20 years during pregnancy, with a total of 54 respondents (84.4%).

Table 2. Children Aged 3-5 Years' Emotional Development (n=64)

Variables	Frequency	Percentage
Childrens' Emotional Development		
Abnormal	52	81.3
Normal	12	18.8

Table 2 shows that of the 64 respondents, most experienced abnormal child emotional development, namely 52 people (81.3%).

Table 3. Cross-tabulation of Mother's Age at Pregnancy with Child's Emotional Development

Mother's Age at Pregnancy	Childrens' Emotional Development				Total		p
	Abnormal		Normal		n	%	
	n	%	n	%			
<20 Years	49	76.6	5	7.8	54	84.4	0.001
≥20 Years	3	4.7	7	10.9	10	15.6	
Total	52	81.3	12	18.8	64	100	

Cross-tabulation of maternal age during pregnancy with children's emotional development was obtained from 54 respondents of pregnant women aged <20 years; 49 respondents (76.6%) mothers had children with abnormal emotional development, and five people (7.8%) mothers had children with normal emotional development. Then, from 10 pregnant women aged ≥20 years, 3 (4.7%) mothers had children with abnormal emotional development, and 7 (10.9%) mothers had children with normal emotional development. The correlation test is a test to examine the relationship between two variables, namely, between the mother's age during pregnancy and the child's emotional development. Correlation testing was done using the Spearman correlation test with the following results.

Spearman's correlation test results between the mother's age during pregnancy and the child's emotional development obtained a correlation coefficient of 1.000 with a significance value of 0.001. It is stated that there is a significant positive correlation between the mother's age during pregnancy and the child's emotional development. The lower the mother's age during pregnancy will significantly affect the child's emotional development, the more abnormal. Conversely, the higher the mother's age during pregnancy, the steadier the child's emotional development will be.

DISCUSSION

Mother's Pregnancy at a Young Age

Pregnant women at a young age can affect the psychological condition to become a mother. This can affect the development of the child to be born. In pregnant women at a young age, 54 respondents (84.4%) were pregnant at the age of <20 years and ten respondents (15.6%) were pregnant at the age ≥20 years. These results indicate that most pregnant women are <20 years old. These results indicate that most pregnant women are <20 years old. Children born to mothers who are pregnant at a young age <20 years have a risk of experiencing disturbances in the child's emotional development compared to mothers who are pregnant at an adult age. This can happen because pregnant women at a young age are often compassionate and prone to stress. This is detrimental to the fetus's health, growth, and development because the reproductive organs are immature to become pregnant, especially when coupled with psychological, social, and economic pressure (Dartiwen & Aryanti, 2021).

Most parenting patterns were obtained by 56 respondents (87.5%) mothers caring for children. Parenting style is often associated with the emotional development of children because this parenting style will meet the psychological needs of children, and parents tend to provide appropriate treatment for children's emotional expressions. Techniques in parenting style will influence the formation of a child's personality (intelligence, emotion, spiritual, and other psychological aspects) (Rasidi, 2021).

The large number of children in families with adequate socio-economic conditions will result in reduced attention and affection that children receive. The analysis showed that the number of children from 56 respondents (87.5%) had one child. This will have an impact on the development of children. In addition, the child's position as the only child, the eldest child, the middle child, or the youngest child can affect the pattern in which the child is managed and educated in the family, which in turn can affect the child's development (Soetjningsih, 2016).

What has a more significant relationship is family income. Income has a level of significance. Children aged 3-5 years with parents earning <IDR 2,000,607.20 have a risk of experiencing child emotional development disorders compared to parents earning \geq IDR 2,000,607.20 which is stated in the research results from 56 respondents (87.5%) have income $>$ UMR, namely \geq IDR 2,000,607.20. Parents with a low income will experience problems in fulfilling nutrition for their children; this will affect the growth and development of their children, including their social-emotional development.

Emotional Development of Children Aged 3-5 Years

This study states that emotional development in children is associated with several subject characteristics, namely parenting style, number of children, gender, mother's education, and father's occupation. This study shows a significant relationship between the mother's age when pregnant and the emotional development of children aged 3-5 years. Fifty-two respondents (81.3%) had abnormal emotional development, and 12 (18.8%) had normal emotional development.

Children born to mothers who are pregnant at a young age have an increased risk of having a child's emotional development disorder compared to mothers who are pregnant at an adult age. This can happen because pregnant women at a young age are often compassionate and prone to stress. This is detrimental to the fetus's health, growth, and development due to the immaturity of the reproductive organs, especially the uterus, which is not ready for pregnancy (Dartiwen & Aryanti, 2021). Their age influences the parenting style of children. Parents age is too young, causing their role to be not optimal because parenting requires physical and psychological strength (Kurniyawan et al., 2022). Mothers have more free time to care for and care for their children, so it is not uncommon for mothers to experience stress which will affect their children's emotions (Intiyakanti et al., 2021).

The Relationship between Pregnancy by Mothers at a Young Age and the Emotional Development of Children Aged 3-5 Years

From these results, there were 49 respondents (76.6%) respondents who experienced emotional development disorders in children during pregnancy aged <20 years and three respondents (4.7%) respondents who experienced emotional development disorders for mature ages. Emotions play an essential role in children's development at preschool and later stages because they influence children's behavior (Nurmalisari, 2015).

Emotional pressure that lasts a long time will affect the endocrine balance, so anxiety will continue to carry over into the post-natal period and significantly affect the adjustment to the child's

development (Kemenkes RI, 2016). From the Spearman correlation test results between the mother's age during pregnancy and the child's emotional development, a coefficient of 0.565 was obtained with a significance value of 0.001. It is stated that there is a significant positive correlation between the mother's age during pregnancy and the child's emotional development, meaning that the lower age of the mother during pregnancy will have a significant effect on the child's emotional development, the more abnormal. Conversely, the higher the mother's age during pregnancy, the steadier the child's emotional development will be. From the results of the above study, it can be concluded that there is a relationship between maternal pregnancy and the emotional development of children aged 3-5 years.

CONCLUSION

Most respondents were <20 years when pregnant, with 54 respondents (84.4%). Most respondents experienced abnormal child emotional development, namely 52 people (81.3%). There is a significant relationship between the mother's age when pregnant with impaired emotional development in children aged 3-5 years; from 54 respondents of pregnant women at the age of <20 years, it was found that 49 respondents (76.6%) had children with abnormal emotional development.

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CONFLICT OF INTEREST

There isn't any conflict of interest.

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