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Factors Related to Stress Levels in Pregnant Women During Childhood

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Abstract. Pregnancy can trigger a maturity crisis that can cause stress. Stress in pregnant women is related to stress during pregnancy, childbirth, and postpartum. The purpose of this study was to examine factors related to stress levels in pregnant women facing childbirth. This type of research was an analytical survey with a cross-sectional approach conducted in the Lubuk Buaya Community Health Center Work Area from April 25 to May 7, 2022. The population was all pregnant women who visited the Lubuk Buaya Community Health Center Work Area in Padang in 2022, totaling 178 people, with a sample of 64 people, using an accidental sampling technique. Data were collected using a questionnaire with a validity analysis result of r>0.267 and a reliability test with a Cronbach's Alpha value>0.7. They were processed manually, using univariate and bivariate analysis with the chi-square test. The results of the study showed that 26.6% experienced moderate stress, 37.5% had poor family support, 37.5% had poor husband support, 40.6% had trauma, 46.9% had a personal readiness level in the unprepared category, and 46.9% had a heavy activity level. There is a relationship between family support and stress levels, there is a relationship between husband support and stress levels, there is a relationship between traumatic experiences and stress levels, there is a relationship between personal readiness levels and stress levels, and there is a relationship between activity levels and stress levels.

Keywords: Family Support; Husband Support; Personal Readiness; Pregnancy Stress; Traumatic Experiences

1. INTRODUCTION

Pregnancy is a natural occurrence for women of childbearing age. During pregnancy, both physical and psychological changes occur in the mother. Generally, physical changes during pregnancy include the absence of menstruation, breast enlargement, changes in the shape of the uterus, changes in the functioning of the body's organs, an enlarged abdomen, weight gain, weakening of the digestive tract muscles, increased sensory sensitivity, and enlargement of the feet and hands (Pieter & Lubis, 2010). During pregnancy, the mother experiences physical and psychological changes due to an imbalance in the hormones progesterone and estrogen, the female hormones present in the mother's body from the onset of pregnancy. Therefore, a pregnant woman must prepare herself physically and psychologically for pregnancy and childbirth to ensure a smooth and successful pregnancy and childbirth (Kartini & Kartono, 2010).

Research by Leifer in Sambara's journal on stress during pregnancy and childbirth, as well as research by Radley on stress in everyday life, indicates that stress in women is linked to stress during pregnancy and childbirth. Other stressors in pregnant women relate to the safety and health of their unborn baby, the costs of labor and delivery, and the care of the newborn. Fears include the fear of death after delivery. A recent study showed that pregnant women with high levels of stress are at increased risk of having children with emotional/cognitive problems, attention deficit hyperactivity disorder (ADHD), and language delays (Townsend, 2014).

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Several studies indicate that stress levels during the first trimester of pregnancy are similar to those in general, while stress levels during the second and third trimesters are nearly double those in the first trimester. A survey conducted in Colombia among 650 low-risk pregnant women between 35 and 39 weeks of gestation found that 25% experienced high levels of fear of childbirth, and this was positively correlated with stress. Fear of childbirth remains a complex part of women's emotional experiences during pregnancy. A Swedish study of antenatal care at 35 weeks of pregnancy found that 24% experienced anxiety and 22% experienced stress. In Hong Kong, 54% of pregnant women experienced anxiety, and 37% experienced symptoms of stress in their first, second, and third trimesters. A study in Pakistan of 165 pregnant women found that 70% experienced anxiety and stress. In Indonesia, a study of primigravidas in their third trimester found that 33.93% experienced stress. Other studies indicate that 47.7% of normal pregnant women experienced severe stress during childbirth, 16.9% experienced moderate stress, and 35.4% experienced mild stress.

Stress is a psychological reaction or response that humans experience when faced with circumstances that are perceived as overwhelming or difficult to handle (Smeltzer and Bare, 2008). Stress can arise when an external stimulus affects an individual's physical or mental well-being. The stimulus that causes stress is called a stressor. Stressors are psychological or physical stimuli that are inconsistent with bodily functions and require adaptation (Varcarolis & Halter, 2010). The cause of stress in mothers approaching labor is that approximately 95% of health workers do not pay much attention to the psychological condition of pregnant women but rather pay attention to the physical condition of the mother and the baby she will give birth to (Istikhomah & Suryani, 2014).

Symptoms of stress encompass both physical and psychological aspects. These include chest pain, headaches, nausea, palpitations, fatigue, and difficulty sleeping. Psychological symptoms of stress include irritability, inability to concentrate, overreaction to small things, inability to relax, and uncontrolled emotions toward every demand, which causes tension and disrupts the stability of daily life in pregnant women (Mumpuni & Wulandari, 2010). Stress in pregnant women is influenced by several factors, such as family support, husband's support, the mother's traumatic experiences, the mother's level of personal preparedness, and activity level (Janiwarty & Pieter, 2013). Several studies have shown that family support can reduce maternal stress levels during pregnancy and during labor. Pregnant women who receive family support experience reduced stress levels during pregnancy and before labor, while pregnant women who receive low family support experience higher stress levels (Afrino & Janah, 2019).

Husbands' support can influence pregnant women during labor. This refers to the Buffering Hypothesis theory, which posits that social support influences health by protecting individuals from the negative effects of stress. Support given to a mother, especially from her husband, will foster feelings of calm, happiness, and a positive attitude toward herself and her pregnancy until delivery (Astria, 2009). A negative experience during pregnancy or childbirth that leaves a mother with severe trauma can also lead to emotional disturbances that affect her pregnancy (Safitri, 2018). Traumatic maternal experiences can influence stress in pregnant women because they are linked to psychological aspects. First-time mothers often have no idea what to expect during labor and are often frightened by hearing horrific stories from friends or relatives about birth experiences, such as the death of a mother or baby. This can influence the mother's perception of the frightening process of childbirth (Amalia, 2009).

A mother's personal preparedness during pregnancy is her ability to balance changes in her psychological state. The physical and mental burdens of pregnancy are normal for pregnant women, such as an expanding body and unstable emotions. However, these burdens are often exacerbated by pregnancy trauma, further complicating the challenges faced. When a mother finds out she is pregnant, it is a shock, but even so, all preparations for parenthood must be planned as early as possible, together with her partner, during pregnancy, unlike women who are not prepared for their pregnancy (Astria, 2009). Pregnant women who have more demands than those who do not work. Pregnant women who work are likely to be more stressed because they have dual roles from work and family. Pregnant women who work must continue to complete their work, while the health of the unborn baby and themselves needs to be maintained (Sambara et al., 2010).

Pregnancy stress is a phenomenon experienced by every mother, especially first-time mothers, triggered by negative expectations about what will happen to them during childbirth, based on previous experiences, especially those experienced directly during pregnancy. One cause of stress is the production of adrenaline and noradrenaline, which impacts the mother, especially the baby, in the form of abortion, low birth weight (LBW), premature birth, and even fetal death (Afrino & Janah, 2019). The release of these stress hormones causes systemic vasoconstriction, including constriction of the uteroplacental vessels, which disrupts blood flow in the uterus, disrupting oxygen delivery to the myometrium and resulting in weak uterine muscle contractions. Adverse effects of stress on pregnant women include bleeding, eclampsia, and infection. These consequences can increase the Maternal Mortality Rate (MMR). If this is allowed to happen, the mortality and morbidity rates will increase (Sulistyawati, 2010).

According to the WHO in 2010, 536,000 women died due to childbirth. Ninety-nine percent of maternal deaths due to labor or delivery problems occur in developing countries. The maternal mortality ratio in developing countries is the highest, at 450 maternal deaths per 100,000 live births, compared to the maternal mortality ratios in nine developed countries and 51 Commonwealth countries. Indonesia's maternal mortality rate remains relatively high compared to other ASEAN countries. According to the Ministry of Health in 2008, Singapore's maternal mortality rate was 6 per 100,000 live births, while Malaysia's maternal mortality rate was 100,000 live births. Vietnam's maternal mortality rate, similar to Malaysia's, reached 160 per 100,000 live births, the Philippines' 112 per 100,000 live births, Brunei Darussalam's 33 per 100,000 live births, and Indonesia's 228 per 100,000 live births.

According to the Indonesian Data Center and the Ministry of Health, 2010. The maternal mortality rate and infant mortality rate are still high compared to the ASEAN region, although there has been a decline from 270 per 100,000 live births in 2006 to 228 per 100,000 live births in 2007 and down again to 226 per 100,000 live births in 2009. According to the Padang City Health Office in 2020, the Maternal Mortality Rate in West Sumatra in 2019 was 104 cases. Based on data from the Padang City Health Office in 2020, data from all health centers in Padang City recorded 5 health centers with the highest data on pregnant women, namely the Lubuk Buaya Health Center, Andalas Health Center, Pauh Health Center, Lubuk Begalung Health Center, and Belimbing Health Center. In 2019, the Lubuk Buaya Padang Community Health Center recorded 2,151 pregnant women in one year. This resulted in a high number of pregnancy detections, reaching 480.

Based on a preliminary survey conducted by researchers on December 2, 2021, in the Lubuk Buaya Padang Community Health Center work area, the survey of 10 pregnant women revealed that 30% experienced mild stress because they felt they received good family support. Fifty percent of pregnant women experienced moderate stress. Of these, 20% reported moderate stress because they felt they received insufficient attention from their husbands. Another 30% experienced moderate stress, despite receiving good support from their families and husbands, being prepared for their pregnancy, and not having multiple roles. Twenty percent of pregnant women experienced severe stress because this was their first pregnancy, lacked experience with childbirth, and experienced high-risk pregnancies, leading them to fear that something bad might happen to themselves or their babies, such as death or disability. This study aimed to determine the factors related to stress levels in pregnant women when facing childbirth in the working area of the Lubuk Buaya Padang Community Health Center.

2. RESEARCH METHOD

This research is an analytical survey with a cross-sectional approach, where the independent and dependent variables are studied simultaneously. The independent variables are (family support, husband support, maternal traumatic experiences, maternal personal preparedness, and activity level), and the dependent variable is (stress level). This research was conducted from September 2021 to August 2022. Data collection took place from April 25 to May 7, 2022, in the KIA room at the Lubuk Buaya Padang Community Health Center. The sample for this study was premenopausal women (40–50 years old). The sampling technique used was accidental sampling. The researchers waited at the community health center and sampled 64 respondents who visited the community health center. Inclusion criteria were willingness to participate, pregnant women in their third trimester visiting the community health center, and pregnant women who could read.

The research instrument used in this study is as follows: a questionnaire, which contains questions about independent variables (family support, husband's support, mother's traumatic experiences, mother's personal readiness level, and activity level) with a dependent variable (stress level) using the DASS questionnaire (Depression Anxiety Stress Scale, Nursalam 2013). The data has been edited, processed, and analyzed manually. Univariate analysis to determine the frequency distribution of independent and dependent variables. Data in the form of tables is analyzed using percentage techniques. Bivariate analysis to see the relationship between dependent and independent variables, the data is presented in the form of a cross-table. Using chi-square to state the relationship between dependent and independent variables.

3. RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Respondents Based on Stress Levels in Pregnant Women (n=64)

Stress Level	f	%
No stress	27	42.2
Mild stress	20	31.2
Moderate stress	17	26.6

Table 1 shows that a small proportion (26.6%) of respondents experienced moderate stress in the Lubuk Buaya Padang Community Health Center work area.

Table 2. Frequency Distribution of Respondents Based on Family Support for Pregnant Women (n=64)

Family Support	f	%
Good	40	62.5
Not Good	24	37.5

Table 2 shows that a small percentage (37.5%) of respondents in the Lubuk Buaya Padang Community Health Center work area have poor family support.

Table 3. Frequency Distribution of Respondents Based on Husband's Support for Pregnant Women (n=64)

Husband's Support	f	%
Good	40	62.5
Not Good	24	37.5

Table 3 shows that a small percentage (37.5%) of respondents in the Lubuk Buaya Padang Community Health Center work area reported poor husband support.

Table 4. Frequency Distribution of Respondents Based on Traumatic Experiences in Pregnant Women (n=64)

Traumatic Experiences	f	%
No Trauma	38	59.4
Trauma	26	40.6

Table 4 shows that less than half (40.6%) of respondents experienced trauma in the Lubuk Buaya Padang Community Health Center work area.

Table 5. Frequency Distribution of Respondents Based on Personal Readiness Level for Pregnant Women (n=64)

Personal Readiness Level	f	%
Ready	34	53.1
Not Ready	30	46.9

Table 5 shows that less than half (46.9%) of mothers in the Lubuk Buaya Community Health Center work area are considered unprepared.

Table 6. Frequency Distribution of Respondents Based on Activity Level in Pregnant Women (n=64)

Activity Level	f	%
Light	34	53.1
Heavy	30	46.9

Table 6 shows that less than half (46.9%) of respondents' activity levels were in the heavy category in the Lubuk Buaya Padang Community Health Center Work Area.

Table 7. Relationship between Family Support and Stress Levels in Pregnant Women (n=64)

Family Support	Stress Level						Total	%
	No stress		Mild stress		Moderate stress			
	f	%	f	%	f	%		
Good	22	55,0	13	32,5	5	12,5	40	100,0
Not Good	5	20,8	7	29,2	12	50,0	24	100,0
X^2 of the table is 5.991				X^2 count is 12.1				

Table 7 shows that the highest proportion of stress levels was among pregnant women who received poor family support (50.0%), with moderate stress (12.5%), compared to pregnant women who received good family support (12.1%). Based on the statistical test, the

calculated X^2 of 12.1 ≥ X^2 of 5.991 indicates a relationship between family support and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center Work Area.

Table 8. Relationship between Husband's Support and Stress Levels in Pregnant Women (n=64)

Husband's Support	Stress Level						Total	%
	No stress		Mild stress		Moderate stress			
	f	%	f	%	f	%		
Good	24	60,0	15	37,5	1	2,5	40	100,0
Not Good	3	12,5	5	20,8	16	66,7	24	100,0
X^2 of the table is 5.991				X^2 count is 23,89				

Table 8 shows that the highest proportion of stress levels was among pregnant women who received poor husband support (66.7%), with moderate stress levels, compared to those who received good husband support (2.5%). Based on the statistical test, the calculated X^2 of 23.89 ≥ X^2 of 5.991 indicates a relationship between husband support and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center Work Area.

Table 9. Relationship between Traumatic Experiences and Stress Levels in Pregnant Women (n=64)

Traumatic Experiences	Stress Level						Total	%
	No stress		Mild stress		Moderate stress			
	f	%	f	%	f	%		
No Trauma	23	60,5	9	23,7	6	15,8	38	100,0
Trauma	4	15,4	11	42,3	11	42,3	26	100,0
X^2 of the table is 5.991				X^2 count is 13,26				

Table 9 shows that the highest proportion of stress levels was among pregnant women who experienced trauma (42.3%), with moderate stress levels, compared to pregnant women who did not experience trauma (15.8%). Based on the statistical test, the calculated X^2 of 13.26 ≥ X^2 of 5.991 indicates a relationship between traumatic experiences and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center Work Area.

Table 10. Relationship between Personal Readiness Level and Stress Levels in Pregnant Women (n=64)

Personal Readiness Level	Stress Level						Total	%
	No stress		Mild stress		Moderate stress			
	f	%	f	%	f	%		
Ready	25	73,5	7	20,6	2	5,9	34	100,0
Not Ready	2	6,7	13	43,3	15	50,0	20	100,0
X^2 of the table is 5.991				X^2 count is 31,19				

Table 10 shows that the highest proportion of stress levels was among pregnant women with a personal preparedness level in the unprepared category (50.0%), with moderate stress (5.9%), compared to pregnant women with a personal preparedness level in the ready category

(5.9%). Based on the statistical test, the calculated X^2 was 31.19 ≥ X^2 table 5.991, indicating a relationship between the level of personal preparedness and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center Work Area.

Table 11. Relationship between Activity Level and Stress Level in Pregnant Women (n=64)

Activity Level	Stress Level						Total	%
	No stress		Mild stress		Moderate stress			
	f	%	f	%	f	%		
Light	26	76,5	7	20,6	1	2,9	34	100,0
Heavy	1	3,3	13	43,3	16	53,3	30	100,0
X^2 of the table is 5.991				X^2 count is 31,11				

Table 11 shows that the highest proportion of stress levels in pregnant women with heavy activity levels (53.3%) experienced moderate stress, compared to pregnant women with light activity levels (2.9%) experienced moderate stress. Based on the statistical test, it was obtained that X^2 count 31.11 ≥ X^2 table 5.991 means that there is a relationship between activity levels and stress levels in pregnant women in the Lubuk Buaya Padang Health Center Working Area.

Discussion

Stress Levels

Table 1 shows that a small percentage (26.6%) of respondents experienced moderate stress in the Lubuk Buaya Padang Community Health Center (Puskesmas) work area. The results of this study are similar to those of Rahmi (2010) on the relationship between age, education level, husband's support, and family support, with stress levels before delivery in primigravida mothers in the third trimester at the Obstetrics Polyclinic at Dr. M. Djamil Hospital, Padang, where 33.93% of mothers experienced stress. This similarity is due to the respondents' similar gestational ages. The third trimester is known as the period of cautious waiting. During this period, women begin to recognize the presence of the baby as a separate entity, leading to eager anticipation. The third trimester is a time of active preparation, seen in anticipation of the birth of the baby and parenthood, while women's primary focus is on the unborn child (Anggraini & Werdani, 2017).

Feelings of fear may arise. Mothers may feel anxious about their baby's health and themselves, such as whether the baby will be born abnormally, concerns about labor (pain, loss of control, etc.), concerns about their safety, and concerns about the baby's birth being abnormal. Psychological changes in pregnant women during the third trimester appear more complex and increase compared to the previous trimester. This is due to the increasing size of the pregnancy. This often leads to problems such as uncomfortable sleeping positions, fatigue, and emotional fluctuations or instability (Bethsaida & Herri, 2013).

According to researchers' analysis of stress experienced by pregnant women during childbirth in the Lubuk Buaya Padang Community Health Center (Puskesmas) working area in 2016, a small percentage of pregnant women experienced stress. Questionnaire results showed that 26.6% of pregnant women experienced moderate stress, 31.2% experienced mild stress, and 42.2% experienced no stress. These results indicate that some pregnant women still experience stress. This can be seen from the results of the questionnaire completed by respondents, namely mothers becoming angry over small things, mothers feeling drained of energy due to anxiety, and mothers feeling irritable. Pregnancy has different stress levels in each trimester, with the mother's gestational age increasing in severity. In the third trimester, mothers experience a high level of fear of childbirth, which is positively correlated with stress.

The results of this study indicate that some pregnant women still experience stress. These women experienced mild to moderate stress in the third trimester. This can be seen from the questionnaires completed by respondents, which showed mothers becoming angry over small things, feeling drained of energy due to anxiety, and feeling easily irritated (Zamriati et al., 2013). Pregnant women who experience stress and fear during labor will undoubtedly harm the health of both mother and baby, as their thoughts often revolve around negative aspects of labor, such as the death of the mother or baby. Therefore, health workers need to provide information to pregnant women about preparing for labor and take steps to reduce their stress levels, such as developing psychological preparedness with the support of their husband and family. Efforts to change negative thoughts about the terrifying process of labor can help prevent further fear and stress during labor (Hidayat, 2013).

Age significantly influences attention during labor. The younger the mother, the less attention and experience she has due to her lack of preparation for pregnancy. As can be seen in the master table, less than half of the respondents were in the age category >35 (Afrino & Janah, 2019). Pregnancy and childbirth are generally considered safe between the ages of 20 and 35. High-risk pregnancies occur when a woman becomes pregnant and gives birth under 20 or over 35 (Ministry of Health, Republic of Indonesia, 2007). In pregnancies under 20, the mother's uterus and pelvis are underdeveloped and relatively small, biologically ready but psychologically immature. Pregnancies over 35 carry a higher risk of health problems such as hypertension, diabetes mellitus, anemia, prolonged labor, bleeding, and birth defects (Rika & Aryanti, 2014).

The results of this study support previous research by Masruroh (2015), which found that, besides gestational age, stress can be linked to maternal age, which impacts feelings of fear and anxiety. This is especially true for pregnancies under 20 and over 35-40, as these ages

are considered high-risk pregnancies. Older mothers face a higher risk of giving birth to a baby with birth defects and Down syndrome. In addition to age, education also influences attention during labor. As can be seen in the master table, the majority of respondents had a secondary education, namely high school. Education level also determines how easily someone absorbs and understands knowledge about a healthy pregnancy, the importance of prenatal checkups, and healthy food (Amini et al., 2018). According to Notoatmodjo (2012), education level also determines how well someone absorbs and utilizes knowledge. Research results (Hilmi & Kirnantoro, 2014) show that people with higher levels of education have broader perspectives and experience, making it easier to solve problems and learn how to use positive coping mechanisms. The higher a person's level of knowledge or education, the lower their stress levels, and vice versa.

Family Support

Table 2 shows that a small percentage (37.5%) of respondents in the Lubuk Buaya Padang Community Health Center work area have poor family support. The results of this study are similar to those conducted by Izzah et al. (2014) on the relationship between family support and stress levels among pregnant women facing childbirth at the Budilatama Community Health Center, Gadung District, Buol Regency, Central Sulawesi Province, where 46.9% of mothers had poor family support. Family support is the willingness and involvement of the family to provide assistance to a family member in need, whether in terms of problem-solving, providing security, and enhancing self-esteem (Hilmi & Kirnantoro, 2014).

Pregnant women often feel dependent on others, but this dependency is even greater when giving birth. A mother's dependency is more influenced by the need for security, especially regarding safety and security during childbirth. Support from extended family members, both the wife's and husband's families, is essential (Masruroh, 2015). According to the researchers' analysis, the results of this study indicate that some pregnant women still receive inadequate family support. This is evident from the respondents' questionnaire responses, which revealed that some families provided insufficient support to pregnant women during childbirth and that their families also provided insufficient attention to the mothers.

Husband's Support

Table 3 shows that a small percentage (37.5%) of respondents in the Lubuk Buaya Padang Community Health Center (Puskesmas) work area experienced inadequate husband support. This study's findings are similar to those conducted by Sulistyawati (2010) on the influence of husbands' support on wives experiencing stress during the third trimester of pregnancy in Gianyar Regency, where 57% of mothers received inadequate husband support.

Husband's support is the primary source of encouragement for a wife, before others contribute. A husband's support and attention to a pregnant wife will impact the baby's behavior through verbal and nonverbal information or behavior provided by close social contacts, which can provide emotional benefits (Melati & Raudatussalamah, 2012). Husband's support is one source of social support that comes from the family (Prabandi, 2009).

The husband's support that wives expect includes: the husband's eagerness for a baby in his wife's womb, the husband's joy at having a child, the husband's happiness during the pregnancy, the husband's concern for his wife's health by asking about her/the fetus's condition, the husband's non-harm to his wife, the husband's comfort/reassurance when his wife encounters problems, the husband's advice to avoid overworking, the husband's assistance with his wife's chores, the husband's prayers for his wife's health, the husband's prayers for his wife's health and safety, the husband's presence during childbirth, and the husband's presence during surgery (Kusmiyati, 2009).

According to Sulistiyaningsih et al. (2019), there are four types of support a husband can provide: emotional support, appreciation support, instrumental support, and informative support, all of which contribute to positive outcomes for pregnant women, especially in the third trimester. According to the researchers' analysis, the results of this study indicate that some pregnant women still receive inadequate support from their husbands. This can be seen from the respondents' questionnaire responses, which showed that some husbands did not accompany their mothers for pregnancy checkups at the community health center, and some husbands did not fulfill their mothers' cravings.

Maternal Traumatic Experiences

Table 4 shows that less than half (40.6%) of respondents experienced trauma in the Lubuk Buaya Padang Community Health Center (Puskesmas) work area. This study's findings are similar to those of Zamriati et al. (2013), which examined factors related to stress levels in pregnant women approaching delivery at the Tuminting Community Health Clinic (PKM), which found that 60.3% of mothers experienced trauma. Maternal traumatic experiences, such as pregnancy or childbirth, can leave a mother severely traumatized and can also lead to emotional disturbances that affect her pregnancy (Sulistiyaningsih et al., 2019). Psychological factors originating from outside the mother can be in the form of the mother's experiences, for example, the mother experienced a happy childhood and received enough love, came from a happy family so that having children was considered something desired and enjoyable, then she will be psychologically motivated to be able to provide affection to her child. In addition, bad experiences regarding the pregnancy or childbirth process that left severe trauma for the

mother can also cause emotional disorders that affect her pregnancy (Sulistiyaningsih et al., 2019). Trauma during pregnancy is influenced by several factors, such as miscarriage, giving birth to a disabled baby and the experience of labor pain, mothers who like watching action horror films, scary, terrifying, or sad scenes can lead to the formation of traumatic emotions, such as the mother being afraid to go to the bathroom alone, afraid to drive a car, worried that something life-threatening will happen, feeling anxious when alone at night, and so on. The occurrence of excessive fear like this will hinder and disrupt the mother's mental immunity (Rahayu & Feriani, 2020).

The negative impact of trauma is that explosive emotions can affect heart rate, blood pressure, adrenaline production, sweat gland activity, gastric acid secretion, and other factors. Trauma, stress, or psychological pressure can cause physical symptoms such as fatigue, lethargy, irritability, anxiety, dizziness, nausea, and feelings of lethargy. This traumatic state can be felt by the fetus. In fact, the fetus has shown reactions to external stimulation from the mother's body (Zuhrotunida & Yudiharto, 2022). According to the researchers' analysis, the results of this study indicate that less than half of pregnant women in the Lubuk Buaya Padang Community Health Center work area experienced trauma. This was obtained from the respondents' questionnaire responses, which revealed that several mothers had experienced traumatic experiences such as miscarriage, giving birth to a disabled baby, and the pain of childbirth.

Mothers' Personal Readiness Level

Table 5 shows that less than half (46.9%) of mothers' personal readiness level was categorized as unprepared in the Lubuk Buaya Community Health Center work area. The results of this study indicate that less than half of pregnant women in the Lubuk Buaya Padang Community Health Center (Puskesmas) work area are considered unprepared. This was evident from the respondents' questionnaire responses, which revealed that several mothers were unable to balance their current physical changes. Personal readiness is a significant asset for a mother's physical and psychological health. Personal readiness refers to the ability to balance physical changes with one's psychological well-being, allowing for a joyful and mental transition without stress or depression (Bethsaida & Herri, 2013).

Pregnancy is a particularly anxious time for mothers, especially while awaiting birth. This can be alleviated by discussing any anxieties with their partners, family, and healthcare professionals. Learning that they are pregnant is a shock, but all preparations for parenthood should be planned as early as possible with their partners during pregnancy (Sulistiyaningsih et al., 2019). For new couples, pregnancy represents a transition from childhood to parenthood,

making it a crisis for family life, often accompanied by stress and anxiety (Susanti, 2008). Some of the mother's personal preparedness related to pregnancy includes her ability to balance changes in her psychological state. The physical and mental burdens of pregnancy are normal for pregnant women, such as an expanding body and unstable emotions. However, these burdens are often exacerbated by pregnancy trauma, further complicating the challenges faced (Musta'adah, 2019).

Activity Level

Table 6 shows that less than half (46.9%) of respondents in the Lubuk Buaya Padang Community Health Center (Puskesmas) work area have a high activity level. Activity is defined as the energy or state of movement that humans require to meet their daily needs. Activity in pregnant women refers to the movements they undertake to maintain their physical condition during pregnancy (Manuaba, 2009). Working pregnant women face greater demands than non-working pregnant women. Pregnant women who work are likely to experience more stress due to their dual roles of work and family. Pregnant women who work must still complete their work, while also taking care of their own health and that of their unborn baby (Sambara et al., 2010).

According to professional analysis Kusmiyati (2009), work or activities for pregnant women are not limited to work outside the home or at a specific institution, but also work or activities as a housewife within the home, including daily chores at home and childcare. Pregnant women should consider whether the work or activities pose risks to the pregnancy, for example: activities that increase stress, standing for long periods of time, lifting heavy objects, exposure to extreme high or low temperatures or humidity, or work involving radiation exposure. There is no evidence that regular activities, such as jogging, playing tennis, swimming, or having sex, can cause miscarriage or fetal malformation. Most doctors discourage new exercise programs in early pregnancy, except for prenatal exercises specifically designed for pregnant women. The most beneficial forms of exercise for pregnant women include movements that strengthen the abdominal wall to help support the uterus and hip muscles, which will be needed during pushing. Leg exercises are important for pregnant women to improve circulation and prevent muscle cramps (Masruroh, 2015). The results of this study indicate that less than half of pregnant women in the Lubuk Buaya Padang Community Health Center (Puskesmas) have a high activity level. This was evident from the respondents' questionnaire responses, which revealed that some women still stand for long periods of time, lift heavy objects, and engage in other activities.

Relationship between Family Support and Stress Levels

Table 7 shows that the highest proportion of stress levels is among pregnant women with poor family support (50.0%), with moderate stress (12.5%), compared to pregnant women with good family support (12.1%). The statistical test found that the calculated X^2 of 12.1 ≥ the table X^2 of 5.991 indicates a relationship between family support and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center. The results of this study are almost the same as those conducted by Izzah et al. (2014) regarding the relationship between family support and stress levels of pregnant women facing the labor process at the Budilatama Community Health Center, Gadung District, Buol Regency, Central Sulawesi Province, where a relationship was found between family support and stress levels. Several studies have stated that family support can reduce stress levels in pregnant women and during labor. Pregnant women who receive support from their families experience reduced stress during pregnancy and before labor, while pregnant women who receive low family support will experience high stress levels (Izzah, et al., 2014).

Family support is a lifelong process, and the nature and type of social support vary across the life cycle (Agustina et al., 2018). Stress around the time of birth often affects pregnant women, especially those experiencing childbirth for the first time and those who have never experienced childbirth. Therefore, to reduce stress levels in pregnant women and help smooth the birth process, pregnant women need family support. Support during pregnancy is essential for a pregnant woman, especially from those closest to her, especially for first-time mothers. A woman will feel calm and comfortable with the support and attention of those closest to her. Someone with a close relationship with their family is less likely to experience stress than someone with a distant relationship (Stanley & Beare, 2007). Researcher analysis indicates a relationship between family support and stress levels in pregnant women facing childbirth. This is because inadequate family support can increase maternal stress during pregnancy and childbirth. Pregnant women need social support to have a healthy pregnancy.

Relationship between Husband's Support and Stress Levels

Table 8 shows that the highest proportion of stress levels was among pregnant women who received poor husband support (66.7%). Pregnant women experienced moderate stress, compared to pregnant women who received good husband support (2.5%).

Pregnant women experienced moderate stress. Based on the statistical test, the calculated X^2 of 23.89 ≥ X^2 of 5.991 indicated a relationship between husband's support and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center (Puskesmas) work area. The results of this study are similar to those conducted by Sulistyawati

(2010) on the effect of husband's support on wives experiencing stress in the third trimester of pregnancy in Gianyar Regency, which found a relationship between husband's support and stress levels.

Husbands' support can influence stress in pregnant women approaching delivery. This refers to the Buffering Hypothesis theory, which posits that social support influences health by protecting individuals from the negative effects of stress. The support given to the mother, especially the support received from the husband, will create a feeling of calm, happiness, and a positive attitude towards herself and her pregnancy until the time of delivery arrives (Astria, 2009). Husband's support is the support given by the first and foremost person in encouraging the wife before other parties also provide encouragement, support and attention of a husband to a pregnant wife which will have an impact on the baby's attitude in the form of verbal and non-verbal information or behavior given by people who are familiar in their social environment which can provide emotional benefits (Astuti, 2016).

The husband's support that wives expect includes: the husband's eagerness for a baby in his wife's womb, the husband's joy at having a child, the husband's happiness during this pregnancy, the husband's concern for his wife's health by asking about her/the fetus's condition, the husband's non-harm to his wife, the husband's comfort/comfort when his wife faces problems, the husband's advice to avoid overworking, the husband's assistance with his wife's chores, the husband's prayers for his wife's health, the husband's prayers for his wife's health and safety, the husband's presence during childbirth, and the husband's presence during surgery (Kusmiyati, 2009). According to the researcher's analysis, there is a relationship between the husband's support and stress levels in pregnant women facing childbirth. This is because a husband's support is a primary source of encouragement for his wife, a form of attention and encouragement from a husband to his wife during pregnancy or childbirth.

Relationship between Maternal Traumatic Experiences and Stress Levels

Table 9 shows that the highest proportion of stress levels is among pregnant women who experienced trauma (42.3%), with moderate stress levels, compared to pregnant women who did not experience trauma (15.8%). Based on statistical tests, the calculated X^2 of 13.26 ≥ X^2 of 5.991 indicates a relationship between traumatic experiences and stress levels in pregnant women in the Lubuk Buaya Padang Community Health Center (Puskesmas) work area. The results of this study are similar to those conducted by Zamriati et al. (2013), on factors related to stress levels in pregnant women approaching delivery at the Tuminting Community Health Clinic (PKM), which found a relationship between maternal traumatic experiences and stress levels.

Maternal traumatic experiences are pregnancy or childbirth processes that leave a significant impact on the mother and can also cause emotional disturbances that affect her pregnancy (Yeyeh et al., 2009). Psychological factors originating from outside the mother can include maternal experiences, such as a happy childhood and sufficient love, or coming from a happy family, making having children desirable and enjoyable, which will psychologically motivate her to provide affection to her child. In addition, bad experiences regarding the pregnancy or childbirth process that leave severe trauma for the mother can also cause emotional disturbances that affect her pregnancy (Zuhrotunida & Yudiharto, 2022).

Emotional disturbances in the form of stress or depression experienced during the first trimester of pregnancy will affect the fetus, because at that time, the fetus is in the formation period. This will result in stunted fetal growth or low birth weight (Yeyeh et al., 2009). Trauma during pregnancy is influenced by several factors, such as miscarriage, giving birth to a baby with disabilities and the experience of labor pain, mothers who like watching horror action films, scary, terrifying, or sad scenes can lead to the formation of traumatic emotions, such as mothers being afraid to go to the bathroom alone, afraid to drive a car, worrying that something life-threatening will happen, feeling anxious when alone at night, and so on. The occurrence of excessive fears like this will inhibit and disrupt the mother's mental immunity (Kusmiyati, 2009). According to the researcher's analysis, there is a relationship between traumatic experiences and stress levels in pregnant women facing childbirth. This is because unpleasant maternal experiences in the past are related to psychological aspects that cause stress.

Relationship between Maternal Personal Readiness Level and Stress Level

Table 10 shows that the highest proportion of stress levels is among pregnant women with a personal readiness level in the unprepared category (50.0%), with moderate stress, compared to pregnant women with a personal readiness level in the ready category (5.9%). Based on statistical tests, the calculated X^2 of 31.19 ≥ X^2 of 5.991 indicates a relationship between maternal personal readiness level and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center Work Area. Personal readiness is a significant asset for maternal physical and psychological health. Personal readiness relates to the ability to balance physical changes with psychological conditions so that physical and mental burdens can be overcome with joy, without stress or depression (Bethsaida & Herri, 2013).

Pregnancy is a very anxious time for mothers, especially when awaiting birth. This can be alleviated by discussing all the anxieties felt with partners, family, and health professionals. When a mother finds out she is pregnant, it is a shock, but nevertheless, all preparations for parenthood should be planned as early as possible together with her partner during pregnancy

(Agustina et al., 2018). Some personal readiness of the mother related to her pregnancy is her ability to balance changes in her psychological condition. Physical and mental burdens of the condition are normal for pregnant women, such as the expanding body shape and unstable emotional conditions. However, sometimes such burdens are often exacerbated by the emergence of pregnancy trauma, so that the problems faced become more complex (Bethsaida & Herri, 2013). According to the researcher's analysis, there is a relationship between the level of personal readiness of the mother and the level of stress in pregnant women facing childbirth. This is because personal preparedness is a significant factor in a mother's physical and psychological health. Lack of personal preparedness will prevent her from balancing physical changes with her psychological well-being.

Relationship between Activity Level and Stress Level

Table 11 shows that the highest proportion of stress levels is among pregnant women with high activity levels (53.3%), with moderate stress levels, compared to pregnant women with light activity levels (2.9%). A statistical test found a calculated X^2 of 31.11 ≥ X^2 of 5.991, indicating a relationship between activity level and stress levels among pregnant women in the Lubuk Buaya Padang Community Health Center work area. According to professional analysis (Kusmiyati, 2009), work or activity for pregnant women includes not only work outside the home or at a specific institution, but also work or activities as a housewife within the home, including daily chores at home and childcare. Things to consider when working or doing activities for pregnant women include whether the activity poses a risk to the pregnancy, for example: activities that increase stress, standing for long periods of time, lifting heavy objects, exposure to extreme high or low temperatures or humidity, and work involving radiation exposure.

Activity is the energy or state of movement that humans require to meet their daily needs. Activity for pregnant women refers to the movements they undertake to maintain their physical condition during pregnancy (Manuaba, 2009). Working pregnant women face greater demands than non-working pregnant women. Working pregnant women are likely to experience greater stress due to their dual roles of work and family. Pregnant women who work must continue to complete their work, while the health of their unborn baby and themselves needs to be maintained (Sambara et al., 2010). Researcher analysis indicates a relationship between activity levels and stress levels in pregnant women facing childbirth. This is because pregnant women experience greater stress due to their dual roles of work and family.

4. CONCLUSION AND SUGGESTIONS

Based on the results of the research conducted, it can be concluded as follows that a small portion of (26.6%) pregnant women experience moderate stress in facing childbirth, a small portion of (37.5%) pregnant women have poor family support in facing childbirth, a small portion of (37.5%) pregnant women have poor husband support in facing childbirth, less than half (40.6%) pregnant women experience trauma in facing childbirth, less than half (46.9%) of the mother's personal readiness level is in the category of not ready in facing childbirth, less than half (46.9%) of the respondent's activity level is in the heavy category in facing childbirth. There is a relationship between family support and stress levels in pregnant women, husbands' support, traumatic experiences of mothers, personal readiness levels of mothers, and activity levels with stress levels in pregnant women in facing childbirth in the Working Area of the Lubuk Buaya Padang Health Center.

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