

Knowledge of Diastasis Recti Abdominalis: A Descriptive Study of Women of Reproductive Age

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ABSTRACT

Diastasis Recti Abdominis (DRA) is a separation of the rectus abdominis muscle along the linea alba, which is common in pregnant and postpartum women. Many mothers are unaware of this condition, which can cause lower back pain, incontinence, and abdominal aesthetic issues. The purpose of this study was to evaluate the level of knowledge and understanding of DRA among women of childbearing age, as well as its impact on physical health. Methods: This was a descriptive or cross-sectional study using a questionnaire among women of childbearing age. A structured questionnaire that has passed the test for reliability and reliability was used. Results: The study often shows that mothers' knowledge of DRA is still lacking. Many mothers do not know how to check for DRA or safe physical exercise. Conclusion: Comprehensive education is needed regarding the prevention, early detection, and management of DRA through appropriate postpartum exercise to improve mothers' quality of life.

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INTRODUCTION

Diastasis Recti Abdominalis (DRA) occurs when the connective tissue (linea alba) stretches and thins, creating a gap between the right and left sides of the abdominal muscles. The main symptoms are a protruding or "pot-shaped" abdomen despite weight loss, as well as a bulge during activities that put pressure on the abdominal muscles (such as getting out of bed) (Sperstad et al., 2016).

Pressure from the enlarging uterus during pregnancy, especially in the third trimester, is the primary cause. Risk factors include multiple pregnancies, closely spaced pregnancies, maternal age over 35, and a history of obesity (Benjamin et al., 2014).

Health Impacts: In addition to aesthetic concerns, untreated DRA can lead to lower back pain, urinary incontinence, poor posture, and an increased risk of umbilical hernias (Keramidas et al., 2022).

Women of childbearing age (15–49 years) are the group most at risk of developing DRA due to pregnancy and childbirth. Globally, the incidence of DRA in the third trimester of pregnancy and the postpartum period is very high, ranging from 35% to 100%. In Indonesia, local studies indicate that approximately 46.3% to 52.8% of postpartum mothers experience abdominal muscle separation of more than 2.5 cm. This high rate indicates that ARF is not a rare case, but rather a common condition that is often overlooked (Cavalli et al., 2021). The prevalence of diastasis rectus abdominis (DRA) varies across conditions, with 33.1% occurring at 21 weeks of gestation, 60% at 6 weeks postpartum, 45.4% at 6 months postpartum, and 32.6% at 12 months postpartum (Spitznagle et al., 2007).

Diastasis Rectus Abdominis, which has not closed after delivery, contributes to various conditions such as lower back pain, pelvic instability, urinary and fecal incontinence, vestibulitis syndrome, cystitis, or herniated discs (A-d & A-c, 2018).

Despite its high prevalence, women of childbearing age (WUS) still have low levels of knowledge about DRA. Many women are unaware that they have DRA because the symptoms are often considered normal postpartum physical changes.

Given this high prevalence and the resulting health impacts, it is important to further examine women of childbearing age's understanding of DRA. This knowledge base is expected to raise awareness among women of childbearing age about DRA, which can become a problem later in life, particularly the discomfort associated with DRA. This will help women of childbearing age maintain an optimal quality of life after their reproductive years.

METHOD

This study used a quantitative descriptive approach with a cross-sectional approach. The study population was women of childbearing age (WUS) in the community health center area of Mojokerto City. The sample was taken using the Simple Random Sampling or Accidental Sampling technique. The sample obtained was 50 women of childbearing age. The research instrument used was a structured questionnaire that had passed validity and reliability tests. This study has received ethical approval with ethical clearance number No. 28/KEP/Unhassa/11/2025.

FINDING AND DISCUSSION

RESEARCH RESULT

Table 1. Characteristics of Research Subjects

Characteristic of Research Subject	Distribusi Frekuensi	
Age		
< 20 y.o	5	10%
20 -35 y.o	35	70%
>35 y.o	10	20%
Paritas		
1 child (Primipara)	24	48%

2-3 children	12	24%
>3 children (Multipara)	13	26%
Mode of delivery		
Spontan Pervaginam	24	48%
SC	26	52%
IMT		
Thin	10	20%
Normal	15	30%
Overweight	12	24%
Obesity	13	26%
Baby's weight		
<2500 gr	7	14%
2500 – 3500 gr	30	60%
>3500 gr	13	26%

Table 2: Knowledge of women of childbearing about Diastasis Recti Abdominalis

Knowledge about DRA	Distribusi Frekuensi	
Enough	12	24%
Not enough	38	76%

DISCUSSION

Research shows a low level of knowledge among women of childbearing age about diastasis recti abdominalis. Postpartum care has traditionally focused on wound healing, lactation, and infant care. Cultural practices related to maintaining posture, such as wearing bandages or applying herbal remedies to the abdomen, have been abandoned (A-d & A-c, 2018) and (Estiani, 2022).

The primary cause of this low level of knowledge among women of childbearing age is the lack of education about abdominal muscle health during antenatal and postnatal care. Reproductive health services in Indonesia currently focus on fetal health, maternal nutrition, and contraception. DRA is often considered a "cosmetic" problem or a natural consequence of pregnancy that does not require specific medical intervention, resulting in health professionals rarely providing in-depth information on early detection and prevention (Cavalli et al., 2021).

Socioculturally, many women of childbearing age (WUS) consider persistent abdominal protrusion or weakening of the abdominal muscles after childbirth to be normal ("dropped belly" or "stretched belly"). Ignorance that this condition is a medical condition called Diastasis Recti prevents women from seeking treatment. This low health literacy leads to delays in treatment, with many women only realizing the problem when complications such as chronic back pain or a hernia develop (Lin et al., 2024), (Du et al., 2025).

This low level of knowledge is directly proportional to the ability to perform early detection. Most women of childbearing age are unaware that DRA can be self-examined through simple palpation techniques (measuring the gap between the rectus muscles). Without knowledge of self-examination, the incidence of DRA in the field is often the tip of the iceberg—only a small number are detected, while many cases remain undiagnosed and untreated (Nahabedian, 2018).

Although information is now readily accessible online, not all women of childbearing age (WUS) have the ability to seek specific health literacy. Often, information circulating on social media focuses more on "how to reduce belly fat" in general, without considering the safety of women with DRA. The lack of targeted digital literacy regarding postpartum health exacerbates this knowledge gap, especially among women with low education levels or those living in areas with limited access to information (Pada et al., 2018).

If this lack of knowledge continues, the impact will extend to: Risk of Injury: Women with DRA who are unaware of it may engage in strenuous exercise (such as sit-ups or crunches) that actually worsen abdominal muscle separation. Decreased Quality of Life: Impaired core muscle function will impact women's physical mobility and self-confidence (body image).

CONCLUSION

Most women of childbearing age are not yet familiar with the terms, causes, or specific symptoms of DRA, so they often misinterpret abdominal muscle separation as a natural physical change or simply a problem of excess weight after giving birth.

REFERENCES

- A-d, D. G., & A-c, A. T. (2018). *Exercises for pregnant and postpartum women with diastasis recti abdominis – literature review* *Ćwiczenia u kobiet w ciąży i po porodzie z rozstępem mięśnia prostego brzucha – przegląd piśmiennictwa*. 3, 27–35.
- Benjamin, D. R., van de Water, A. T. M., & Peiris, C. L. (2014). Effects of exercise on diastasis of the rectus abdominis muscle in the antenatal and postnatal periods: A systematic review. *Physiotherapy (United Kingdom)*, 100(1), 1–8. <https://doi.org/10.1016/j.physio.2013.08.005>
- Cavalli, M., Aiolfi, A., Bruni, P. G., Manfredini, L., Lombardo, F., Bonfanti, M. T., Bona, D., & Campanelli, G. (2021). Prevalence and risk factors for diastasis recti abdominis: a review and proposal of a new anatomical variation. *Hernia*, 25(4), 883–890. <https://doi.org/10.1007/s10029-021-02468-8>
- Du, Y., Huang, M., Wang, S., Yang, L., Lin, Y., Yu, W., Pan, Z., & Ye, Z. (2025). Diastasis recti abdominis: A comprehensive review. *Hernia*, 29(1), 1–12. <https://doi.org/10.1007/s10029-025-03417-5>
- Estiani, M. (2022). *Pelatihan Mengenalkan Diastasis Rektus Abdominis pada Tenaga Kesehatan di Desa Talang Jawa UPTD Puskesmas Tanjung Agung*. 3(April), 287–302.

- Keramidas, E., Rodopoulou, S., & Gavala, M. I. (2022). A Proposed Classification and Treatment Algorithm for Rectus Diastasis: A Prospective Study. *Aesthetic Plastic Surgery*, 46(5), 2323–2332. <https://doi.org/10.1007/s00266-021-02739-w>
- Lin, S., Lu, J., Wang, L., Zhang, Y., Zhu, C., & Qian, S. (2024). *Prevalence and risk factors of diastasis recti abdominis in the long-term postpartum : a cross-sectional study*. 1–12.
- Nahabedian, M. Y. (2018). *Management Strategies for Diastasis Recti*.
- Pada, A., Post, I. B. U., Di, P., & Kerja, W. (2018). FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN KEJADIAN DIASTASIS REKTI. 5(2355), 24–31.
- Sperstad, J. B., Tennfjord, M. K., Hilde, G., Ellström-Engh, M., & Bø, K. (2016). Diastasis recti abdominis during pregnancy and 12 months after childbirth: Prevalence, risk factors and report of lumbopelvic pain. *British Journal of Sports Medicine*, 50(17), 1092–1096. <https://doi.org/10.1136/bjsports-2016-096065>
- Spitznagle, T. M., Leong, F. C., & Van Dillen, L. R. (2007). Prevalence of diastasis recti abdominis in a urogynecological patient population. *International Urogynecology Journal*, 18(3), 321–328. <https://doi.org/10.1007/s00192-006-0143-5>