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Increasing the Capacity of Midwives in Managing Diastasis Recti Abdominalis in Postpartum Care Based on Evidence-Based Practice

Lasiyati Yuswo Yani
Midwifery Departement of Bina Sehat PPNI University Mojokerto

ABSTRACT

Diastasis Recti Abdominalis (DRA) is a postpartum musculoskeletal problem that is often overlooked, even though it poses a risk of reducing the quality of life of postpartum mothers. Midwives as the frontline of postpartum care need to have the capacity to detect and provide safe initial management. This Community Service (PKM) activity aims to improve midwives' knowledge and clinical skills in DRA management through structured *Postnatal Yoga technique training*. The service partner is the Indonesian Midwives Association (IBI) Branch X which involves 30 independent practicing midwives. The implementation method uses interactive lectures, manual detection demonstrations, and postpartum yoga movement modification *workshops. Evaluation of the activity was carried out using pre-test* and *post-test* knowledge instruments. The results of the activity showed a significant increase in the average midwives' knowledge score from 58.3 (poor category) to 87.5 (good category) after the training ($p < 0.001$). All participants (100%) were also able to demonstrate DRA screening and guide functional yoga movements correctly and safely. This capacity building is expected to optimize the quality of comprehensive postpartum care at the primary care level.

Keywords: *Diastasis Recti Abdominalis*

Corresponding author
Name: Lasiyati Yuswo Yani
Email: yuswoyani@gmail.com

INTRODUCTION

Postpartum care in Indonesia's primary healthcare system largely focuses on monitoring uterine involution, lochia discharge, and lactation. However, musculoskeletal recovery, particularly *diastasis recti abdominalis* (DRA), is often overlooked in routine screening. DRA is a condition characterized by stretching of the linea alba connective tissue*, causing* a separation of more than 2 cm between the right and left *rectus abdominis muscles*. If not properly managed, DRA can trigger chronic complaints such as *low back pain*, decreased pelvic stability, and even pelvic floor muscle dysfunction (urinary incontinence)(Saraswati et al., 2026).

More than 50% of postpartum mothers experience DRA, with the most common cases being mild diastasis recti, which exhibits mild to moderate symptoms, ranging from

discomfort and back pain to urinary incontinence(Yani, 2026). Many women assume it's normal because they don't understand diastasis recti. They are unable to perform self-examinations and manage diastasis recti appropriately (Yani, n.d.).

Postpartum care provided by midwives has focused on uterine involution and successful breastfeeding and exclusive breastfeeding. Consequently, muscle recovery related to complaints resulting from diastasis recti is under-recognized and often overlooked (Mansyur & Dahlan, 2016). Furthermore, not all midwives understand diastasis recti or know how to manage it.

Midwives play a strategic role as the primary caregivers for mothers during the postpartum period. Unfortunately, many midwives in the field have not yet received updated clinical information regarding the safe management of DRA. Some conventional postpartum exercise recommendations, such as *sit-ups* or even weight-bearing movements like the traditional *plank*, if performed too early, actually risk increasing intra-abdominal pressure, which can worsen DRA gaps (*coning/doming*). Based on recent clinical studies, integrative exercises such as *Postnatal Yoga* have been shown to be much safer and more effective in tightening muscle gaps from the inside out through isometric activation *of the Transversus Abdominis (TVA) muscle* .

Based on a situational analysis at Puskesmas Kranggan, it was found that 80% of midwives had never independently performed DRA screening on postpartum mothers and tended to attribute postpartum abdominal complaints to the use of tight corsets. Therefore, this community service activity is crucial to improve midwives' cognitive and psychomotor capacities in evidence-based DRA management (*evidence-based practice*).

METHOD

This PKM activity was held in May 2026 at the UPT. Puskesmas Kranggan, Mojokerto City, involving 30 midwives as target partners.

The program implementation is divided into three main stages (Amalia & Masita, 2019):

1. **Knowledge Transfer Stage (Cognitive):** Delivery of material through interactive lectures regarding the anatomy of the postpartum abdominal wall, the definition of DRA, the dangers of high intra-abdominal pressure, and the biomechanical advantages *of Postnatal Yoga*.
2. **Clinical Training Phase (Psychomotor):** *Peer-to-peer* live demonstrations and simulations of:
   a. Manual palpation technique (finger test) to measure the *Inter-Recti Distance* (IRD).
   b. Identify the danger signs *of doming* or *coning* on the abdominal wall.
   c. Postpartum yoga movement modules are safe (e.g.: Diaphragmatic *Pranayama*, modified *Cat-Cow Pose*, and *Bridge Pose* with deep muscle locking).
3. **Evaluation Stage:** Knowledge evaluation was measured using *pre-test* and *post-test questionnaires* (20 multiple choice questions).

FINDING AND DISCUSSION

The activity was very interactive and was fully attended by all participants from the beginning to the end of the session.

A. Improving Respondents' Knowledge (Midwives)

pre-test results showed that the majority of midwives had a misconception about postpartum exercise, with most still considering static horizontal *planks and sit-ups* safe for all postpartum mothers. However, after exposure to evidence-based materials, scores increased significantly.

Table 1. Distribution of Midwives' Knowledge Scores Before and After Training (n=30)

Variables Evaluation	Before Training (Mean ± SD)	After Training (Mean ± SD)	Value Enhancement	*p-value*
Score Knowledge	58.3 ± 11. 2	87. 5 ± 6. 4	29.2	<0.0001

Based on Table 1, the *Paired Sample T-Test* confirmed a statistically significant increase in knowledge capacity ($p < 0.001$). Midwives now understand that the *Transversus Abdominis* (TVA) muscle, as the body's natural corset, must be activated using diaphragmatic breathing before the mother is given a heavy physical exercise load.

B. Improving Midwives' Clinical Skills

Midwives are the first healthcare workers to reach postpartum mothers at the community level. Capacity building training for midwives aims to equip them with specific clinical skills, particularly in screening and providing recovery exercise education. This aligns with the goal of postpartum care to optimally restore the mother's physical and psychological function. (Perdok et al., 2018) .

Although village midwives have strong basic competencies in monitoring uterine involution and bleeding, their understanding of postpartum musculoskeletal dysfunction, particularly *Diastasis Recti Abdominis* (DRA), still requires refresher and improvement. This is in line with global studies showing that DRA is often overlooked in routine postpartum examinations, even though its prevalence reaches 30-60% in postpartum mothers. (Turan et al., 2011). Capacity building through knowledge transfer is a strategic step to bridge the gap *between* theoretical knowledge and clinical implementation at the community level.

Through a workshop session, midwives were trained to independently detect DRA using the two-finger palpation method above, just above, and below the umbilicus. Based on the evaluation of the observation sheets for practice and simulations, the level of understanding was Management of abdominal diastasis recti in postpartum care until with application level.

The improvement in knowledge and skills scores of village midwives after the intervention (training/education) proves that the interactive education method combined with practical demonstrations is very effective. Village midwives are now able to understand

that DRA detection is no longer just palpating the abdomen, but rather measuring *the Inter-Recti Distance* (IRD) precisely using the finger-width method at three key points: the xiphoid process, 3 cm above the umbilicus, and 2 cm below the umbilicus. Based on the latest *Evidence-Based Practice* (EBP), this early detection can be integrated from the first or second postpartum visit (KF) to prevent delays in treatment. (Ahmad et al., 2025).

One of the most important achievements of this community service was addressing misconceptions about postpartum physical exercise. Until now, some health workers and the public still considered *sit-ups* or *abdominal crunches* effective for reducing postpartum abdominal fat. Through this activity, village midwives' capacity was enhanced to understand the latest EBP, which states that conventional crunches *actually* increase intra-abdominal pressure (IAP) and worsen rectus abdominis muscle separation. Recent research has shown that deep *abdominal* muscle strengthening exercises started in the early postpartum period are much more effective in reducing the long-term incidence of DRA compared to general physical exercise. (Chiarello et al., 2005).

Empowering village midwives has a significant *multiplier effect* on maternal health in rural areas. Untreated DRA carries a high risk of causing lumbopelvic instability, which manifests as chronic *low back pain*, pelvic floor dysfunction, and urinary incontinence in the first months postpartum. By increasing the capacity of village midwives, early detection and independent intervention can be provided promptly at primary health care facilities. Postpartum mothers not only achieve faster physical recovery but also avoid long-term musculoskeletal complications that can reduce their quality of life.

Midwives successfully implemented clinical instructions safely. Mastery of *the Abdominal Drawing-In Maneuver* (ADIM) technique, combined with yoga asanas, was deemed by participants as a highly applicable new skill to teach to patients in their respective Midwifery Independent Practices (PMB) because it does not require expensive supporting equipment. This training breaks the cycle of clinical ignorance regarding DRA at the primary care level. By improving midwives' competency, early detection of postpartum musculoskeletal complications can be prevented, significantly reducing the incidence of back pain and postural disorders in women of childbearing age after delivery.

CONCLUSION

This community service activity significantly improved the midwives' cognitive (knowledge) and psychomotor (skills) capacity in *postnatal yoga*- based management of *diastasis recti abdominalis*. Midwives are now able to distinguish between safe exercises and those that could exacerbate postpartum abdominal wall injuries.

It is recommended that Postpartum care management follow up on this program by establishing manual DRA screening as one of the standard components in the Postpartum Care Sheet in their work area, as well as encouraging the preparation of IEC (Communication, Information, and Education) media in the form of independent yoga movement pamphlets for postpartum mothers.

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