

Effectiveness of Bengkung Post Natal Care on Size of Diastasis Rectus Abdominis (DRA)

Arfiana Arfiana *

Universitas Negeri Semarang, Indonesia

*Corresponding Author: arfiedenazh@gmail.com

Abstract. Diastasis Rectus Abdominis can cause various problems in the puerperal mother, including causing weakness of the abdominal wall, thus endangering for future pregnancies, can cause the occurrence of a hanging stomach, so that it inhibits the process of the baby's head entering the birth canal, disrupting maternal activity, resulting in back pain, pelvic floor dysfunction, hernias, and cosmetic disorders that affect the psychological childbirth. Pelvic pain is the most common manifestation of Diastasis Rectus Abdominis (DRA). This study aims to determine the effectiveness of the curve to reduce DRA.

The study was conducted in the working area of the North Magelang Public Health Center in Magelang City, with 30 postpartum mothers and put on postnatal care curves, for 10 days, which were divided into intervention groups (use of curves since in the first 7 days of puerperium / early) and control groups (use of curves started after 7 days postpartum / later).

Wilcoxon test results show that the use of curves both early and slow is effective to reduce the size of the DRA and the Mann Whitney test shows that there is no significant decrease in the size of the DRA in the use of curvature in the early or slow postpartum period, but the mean and standard deviation indicate that early use can reduce the size of the DRA more.

Health workers are expected to adopt the use of curves to help accelerate the reduction in the size of postpartum maternal DRA.

Keywords: Bengkung Post Natal Care; Diastasis Rectus Abdominis; Post Partum Mother

INTRODUCTION

Postpartum (puerperium) is a period that begins after the placenta comes out and ends when the uterine devices recover as before. During the recovery period, the mother will experience many physical changes that are physiological in nature and cause a lot of discomfort in the early postpartum period, which does not rule out the possibility of becoming pathological if not followed by good care.

The puerperium is a period in the first weeks after birth. The length of this period is uncertain, most consider it to be between 4 to 6 weeks. Although it is a relatively uncomplicated period compared to pregnancy, the puerperium is marked by many physiological changes. The physical change that often occurs in postpartum mothers is the occurrence of Diastasis Rectus Abdominis (DRA). Diastasis Rectus Abdominis (DRA) is separation musclerectus abdominis more than 2.5 cm at full height umbilicus, as a result of influence hormone during pregnancy of the linea alba and due to mechanical stretching of the wall abdomen, when pregnancy occurs. Diastasis Rectus Abdominis (DRA) generally occurs around the umbilicus, but can also occur between the xiphoid process and the pubic bone (pubis). This is the result of weakness in stretching the abdominal muscles due to changes in the mother's hormones and increased tension

due to the enlargement of the uterus by the pregnancy process. Diastasis rectus abdominis can occur in various degrees and should be resolved gradually after the postpartum mother.

Diastasis Rectus Abdominis can cause various problems in postpartum mothers, including causing weakness of the abdominal wall, which is dangerous for future pregnancies, can cause hanging stomach, thus hindering the process of entering the baby's head into the birth canal, interfering with the mother's activities, causing back pain, dysfunction pelvic floor, hernias, and cosmetic disorders that affect the psychology of postpartum women. Pelvic pain is the most common manifestation of Diastasis Rectus Abdominis (DRA). A retrospective study conducted in 2007 by Spitznagle et al examined the prevalence of diastasis recti abdominis in a population of urogynecological patients and found 66% of all patients with diastasis recti abdominis had support related to hip dysfunction (SPFD), a stress diagnosis,

Conservative management, such as specific therapy exercises directed by a physiotherapist, or a health professional who is very knowledgeable about Diastasis Rectus Abdominis (DRA), is usually the most preferred intervention. The exercise aims to strengthen core muscles such as the transverse abdominis and pelvic floor muscles. Poor abdominal exercise can cause an increase in intra-abdominal pressure, this exercise

can cause Diastasis Rectus Abdominis (DRA) to be more severe and can lead to hernias which further exacerbate the situation.

Almost all post partum mothers want their body shape to return to how it was before giving birth, that is, the stomach is slim and flat again, so it looks beautiful. Diastasis Rectus Abdominis (DRA) can cause cosmetic disturbances due to an enlarged abdomen, it can also be a triggering factor for post partum blues, where post partum mothers experience body image disturbances which cause a lack of confidence. The appearance of postpartum blues symptoms needs to be considered by both families and health workers, especially midwives. Lack of attention to psychological conditions can cause post partum mothers to tend to try to solve their own problems so that they are more prone to experiencing postpartum blues. Disorders of feeling in mothers who have just given birth such as postpartum blues can cause serious problems for the mother herself, which can result in caring for her baby, especially disturbances in milk production and in the end it can also have an impact on her relationship with her husband. Psychological disorders experienced by postpartum mothers will result in reduced interest and interest in their babies. Mothers who experience symptoms of depression are also unable to care for their babies optimally because they feel helpless or incapable so they will avoid their responsibilities (Sylvia, 2006). The impact that occurs next, children experience a lack of nutritional intake, especially breast milk, which can cause growth and development disorders, stunting,

Swelling in post partum mothers is a traditional behavior that has been applied to post partum mothers since the time of their ancestors, with the hope that post partum mothers will return to shrinking their enlarged stomachs due to the pregnancy process. In line with the development of science, bengkung is considered disturbing and dangerous for post partum mothers, because in ancient times it was applied immediately after the mother gave birth, and it was used from the chest to almost above the knee so that it interfered with the mobility of the mother and disrupted the process of uterine involution.

Currently, along with modernization, every woman is required to always appear perfect in front of the public, so that the changing state of the body, especially the abdomen, greatly disturbs the confidence of post partum mothers. Traditionally, Koesmariyah argues that the use of a bengkung (stagen) can slim back a stretched

stomach, especially for women after giving birth. This is due to the presence of pressure into the abdominal cavity so that it can help contract the uterus to its original shape (Indah, 2006). With a quicker return to body shape, it will increase the mother's self-confidence, so that the mother will feel more psychologically calm, more comfortable and more confident in caring for her baby, so that the risk of post partum blues can be reduced. Mothers who are psychologically calm and comfortable,

Based on a preliminary survey in January 2019, in the Salam Health Center area of Magelang district, 80% of post partum mothers felt a disturbing situation with changes in their body shape, and hoped to get action that could restore their body condition in the near future, 10% of mothers felt worried if their husbands ask about her changing condition and don't care anymore, and hope that her body can return to its pre-pregnancy state soon and 10% of mothers feel normal about the changes that are happening to their body.

Based on the phenomenon above, the authors are interested in researching "the effectiveness of Swelling Postnatal care on the size of Diastasis rectus Abdominis (DRA)"

METHOD

Research with the method used in this study is analytic survey with a prospective approach by collecting DRA data before and after the use of bengkung. The purpose is to determine the effectiveness of Swollen Post Natal Care on the size of Diastasis Rectus Abdominis (DRA). Research population post partum mothers in the City of Magelang with a total sample population of post partum mothers of 30. To analyze the difference in the decrease in the size of the DRA in the intervention group and the control group which is a hypothesis 2, the data group is unpaired with a ratio measurement scale but with data that is not normally distributed, a test is carried out with the Mann-Whitney test.

RESULTS AND DISCUSSION

Respondents in this study totaled 30 people who were divided into 2 groups, namely 15 respondents in the intervention group and 15 people in the control group. The intervention group was the group that received the intervention for using bengkung from the first 7

days after giving birth and the control group received the intervention using the bengkung after the first 7 days after giving birth.

All respondents in the intervention group

and the control group had no problems in using bengkung and did not experience discomfort in using bengkung so that all of them participated in the intervention for 10 days.

Table 1. Diastasis of the rectie abdominis muscles Pre and Post use of swelling in the intervention group and the control group

group	Means		Median		Std Deviation		Minimum		Maximum		Wilcoxon test			
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	(-) ranks	(+) ranks	ties	Pvalue
Intervention	20.0	9,2	20	10	2.88	1.78	15	5	27	10	15	0	0	0.001
Control	19,7	9,8	20	10	1.29	0.77	15	7	20	10	15	0	0	0.00

Table 1 shows that the level of diastasis of the rectie abdominis muscles (DRA) before and after the swelling intervention in both groups decreased in mean, median, standard deviation, minimum and maximum values. It is clarified that the results of the Wilcoxon test on the different test DRA levels before and after using bengkung both in the intervention group and the control

group had significant differences, namely the intervention group had a pvalue of 0.001 and all respondents experienced a decrease in DRA levels. The control group also had a significant difference in the DRA level where the pvalue was 0.00 and also all respondents experienced a decrease in the DRA level.

Table 2. Data on Reducing Diastasis of the rectie abdominis muscles Pre and Post using bengkung in the intervention group and the control group

Group	Means	Median	Standard Deviation	The Mann Whitney test
Intervention	10.8	10	2.8	0.271
Control	9.9	10	1.6	

In table 2 it is known that there was a greater decrease in the level of DRA in the intervention group when compared to the control group, as seen from the mean value (10.8) and standard deviation (2.8), while in the control group it had

a mean value (9, 9) and standard deviation (1.6). In the results of the Mann Whitney test (pvalue 0.271) there was no significant difference in reducing DRA in the intervention group and the control group, but the mean and standard

deviation of the reduction in DRA in the intervention group showed that the use of bengkung which began in the first 7 days postpartum was more effective in reducing DRA rates were compared if use was delayed after 7 days postpartum.

Changes in the musculoskeletal system during the puerperium one of which occurs in the abdominal muscles, which is influenced by various factors experienced by the mother during pregnancy and childbirth such as the weight of the baby born, length of delivery, age and parity of the mother. The abdominal muscles function as a protector and barrier for the abdominal organs, so a fast recovery is needed so that there is no disturbance to the abdominal organs, including constipation, hemorrhoids, hernias or uterine inversion.

In accordance with the results of Sperstad's study (2016) that the incidence of diastasis recte abdominis (DRA) is influenced by factors such as age, height, pre-pregnancy weight, SC, birth weight, level of exercise/mobilization performed.

In the results of the study it was known that all respondents before receiving the intervention using bengkung had diastatic recte abdominis muscles in the range of 15 to 20 mm, which is the effect of weakening of the abdominal muscles due to stretching during pregnancy and childbirth. Even though the size of the DRA is still within normal limits, it will greatly help the mother in reducing discomfort during the puerperium if efforts are made to speed up the reduction in the size of the DRA.

The use of bengkung is expected to be used as early as possible after giving birth, the results in this study indicate that the use of bengkung early, namely starting within the first 7 days of puerperium, is effective in reducing DRA size (pvalue 0.001) and slowly, starting after 7 days of puerperium, it is also effective in reducing DRA size. (pvalue 0.000). In the different test results for decreasing DRA size in the use of early and slow bengkung, a p-value of 0.271 was obtained, which means that there was no significant difference in decreasing DRA size, but based on the mean and standard deviation values showed that using early bengkung was more effective in reducing DRA size when compared slow use of bends.

The benefit of using bengkung or stagen in postpartum mothers is to restore the tone of the abdominal and pelvic muscles so that they can return to their original shape. Bengkung which is made from cotton, has the advantages of being

softer, colder, flexible following the shape of the body with undiminished function, namely comfort, supports the spine so that it remains upright, warms the abdominal area, pelvis and lower back. In addition, it is useful for expelling wind in the abdominal cavity so that it makes the stomach feel comfortable, makes you feel confident, and reduces sagging stomach.

The use of bengkung in postpartum mothers provides comfort by providing restrictions on the relaxed abdominal muscles which at the same time will help restore the contours of the abdominal muscles which are characterized by increasingly narrowing of the linea alba which is known as diastasis of the recte abdominis muscles which will maintain the position of the abdominal organs so that each abdominal organ does not relax which can have an impact on digestive disorders or even uterine inversion can occur.

The earlier use of bengkung will reduce the burden on the abdominal muscles during the puerperium which is usually exacerbated by slowing intestinal peristalsis which will make the abdominal muscles weaker so that the decrease in DRA size will be slower.

A bengkung that is used correctly will not interfere with the uterine involution process because it will still provide space for the uterine muscles to contract properly so that the mother will not experience postpartum hemorrhage.

Another change in the musculoskeletal system is the weakening of the ligaments that support the pelvic organs, the weakening of these ligaments can cause discomfort to the postpartum woman which in turn can inhibit mobilization which ultimately impacts on the weakening of the circulatory system which ultimately slows down the recovery process during the postpartum period. The use of bengkung will help the ligaments in fixing the organs in the pelvic space thereby reducing the pain experienced by the mother so that mobilization can be carried out adequately and recovery during the puerperium and takes place more quickly. This is in accordance with the results of a study by Hetil (2017) which states that DRA can cause a decrease in quality of life due to complaints of lower back pain and urinary incontinence.

CONCLUSIONS

The use of bengkung in the early and late postpartum period is effective in reducing the size of DRA

1. There is no significant difference in the effectiveness of using bengkung in the early and late postpartum period
2. Early decrease in DRA size is faster than slow use of bengkung

Suggestion

1. Health workers can assist mothers in using puerperal swelling so that it can accelerate the reduction in the size of DRA
2. Postpartum mothers can use bengkung during the postpartum period in the right way so that they can get better benefits and avoid the effects of improper use of bengkung
3. Future researchers are expected to be able to conduct experimental research with a modified curved model so that it makes it easier to use.

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