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## Implementation of Pushing Reminder Technique for Women During The First Stage of Labor and Perineal Rupture Events

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### Abstract

**Background:** Rupture of the birth canal or perineal tear cannot be considered a minor injury because it contributes to maternal morbidity and mortality. The perineal rupture causes pain and can increase until the seventh day. Perineal rupture also causes 4-5% of mortality in postpartum mothers.

**Objective:** The purpose of this study is to find out the effect of pushing reminder technique implementation on women during the first stage of labor and perineal rupture event.

**Method:** The research method used was pre-experimental with intact group comparison design (post-test only control with 15 control respondents and 15 intervention respondents).

**Results:** The results showed that the average age of the respondents was 26 years old with status as a housewives (93.3%), and the majority of the educational background was high school graduate (86%). By using the Mann-Whitney test, the results of alpha is <0.05 (0.369), so there is no relationship between the reminder of pushing technique and the occurrence of perineal rupture.

**Conclusion:** There are other factors that affected the tears of the perineum such as baby's weight, previous history of perineal rupture, the rigidity of perineal muscles and lack of skills of health care providers to hold the perineum at the moment of baby's head expulsion, this indicated that is no relationship between the reminder of pushing technique and the occurrence of perineal rupture.

**Recommendation:** It is advised for Public Health Care Center is to provide educational media containing information for pregnant woman in a form of electronic media in the waiting room and through education of pregnant women regarding labor and perineum tear so that pregnant women understand the causes of perineal tear.

**Keywords:** Perineal Rupture, Pushing Reminder Technique

### INTRODUCTION

75% of all mothers who have undergone labor experienced perineal rupture, which causes them to have wound at their perineum. 57% of them get stitches at the perineum due to spontaneous rupture (29%) and episiotomy (28%) (ministry of health Indonesia, 2013). Perineal rupture occurs in almost every delivery and can occur in subsequent deliveries (Rofasari, 2009).

Perineal rupture contributes to morbidity and mortality rates in mothers. The morbidity rates that occur in mothers after childbirth after perineal rupture is caused by the pain sensation of the perineal rupture. In addition, 52% of multiparous mothers said that they still experienced perineal rupture after delivery and 77% for primiparous mothers. The uncomfortable

feeling caused by perineal rupture will increase until the seventh day (Zhang. et al., 2013). In addition to maternal pain after giving birth, there is also a risk of bleeding in varying amounts.

Bleeding from the perineum must always be monitored regarding its' source and amount of bleeding so that it can be treated properly (Prawirodhardjo, 2009). Bleeding in the perineum can cause death by 4-5%. This number is smaller than uterine atony cases with 50-60% but still has a deadly impact if not evaluated optimally in mothers after childbirth (Wiknjosastro, 2010). This makes researcher interested in researching the implementation of straining reminder technique to women during the first stage of labor and perineal rupture events.

**METHODS**

This study is analytic research with a pre-experimental with intact group comparison design (post-test only control with 15 respondents and 15 interventions respondents). The samples of this study were women during their first stage of labor in *Puskesmas* Gembor. The total sample consists of 30 women, where 15 respondents were the control group and another 15 were the experimental group. The sampling technique used was accidental sampling techniques (Notoatmodjo, 2010).

Sample criterias for this research are, women who were in their first stage of labor with normal deliveries, women who have checked their health at a public health center and/or obstetrician, women who never use any assistive devices for labor at previous deliveries such as vacuum, cunam, etc., women who have received information about pushing technique both for experiment and control groups.

The data collected using observation sheets if there was perineal rupture in the mother after the placenta had been completely born (stage III). Before the observation is done, respondents were reminded of how to apply the correct pushing techniques using a leaflet in the experimental group, which contained pictures of how to practice the right pushing technique. The control group was not given information about pushing

techniques, only given general information on labor preparation.

**RESULTS**

*Respondents Characteristics*

In table 1, the mean of women's age in this study was 26 years old. While the youngest was 19 years old, and the oldest was 34 years old. Most of the women's educational background was junior or middle school with 86.6% (26 people), and most of the women work as housewives with 93.3% (28 women), table 2.

*Frequency Distribution of Perineal Rupture*

Tabel 3, the perineal rupture happened in women on labor of the control group was 86.7% (13 women), and 73.3% (11 women) of the woman in the intervention group.

*Correlation between pushing reminder technique and perineal rupture event*

Data normality analysis of pushing reminder technique and perineal rupture event using *Kolmogorov - Smirnov* dan *Shapiro-Wilk* showed that both data did not normally distributed as shown in table 4. In this case, the Mann Whitney test was used, and the result was 0.3689 or > 0.05, which means there is no correlation between pushing reminder technique and perineal rupture event (table 5).

**Table 1. The Characteristics of Respondents; Age**

| Category | Mean  | Median | Modus | Min-max |
|----------|-------|--------|-------|---------|
| Age      | 26.93 | 27.50  | 27    | 19-34   |

**Table 2. The Characteristics of Respondents; Education Level and Status**

| Education Level | n  | f (%) | Status       | n  | f (%) |
|-----------------|----|-------|--------------|----|-------|
| Low             | 2  | 6.7   | Housewives   | 28 | 93.3  |
| Middle          | 26 | 86.6  | Career Women | 2  | 6.7   |
| High            | 2  | 6.7   |              |    |       |

**Table 3. Frequency Distribution of Rupture Perineal Events in Control and Intervention Group**

| Control Group          | n  | f (%) | Intervention Group        | n  | f (%) |
|------------------------|----|-------|---------------------------|----|-------|
| Intact                 | 2  | 13.3  | Intact                    | 4  | 26.7  |
| Perineal Perineal Tear | 13 | 86.7  | Perineal Perineal rupture | 11 | 73.3  |

**Table 4. Normality Test of Pushing Reminder Technique and Perineal Rupture Event**

| Pushing Reminder Intervention | Kolmogorov-smirnov |    |      | Shapiro-Wilk |    |      |
|-------------------------------|--------------------|----|------|--------------|----|------|
|                               | Stat.              | Df | Sig. | Stat.        | Df | Sig. |
|                               | .337               | 30 | .000 | .638         | 30 | .000 |
| Perineal rupture Event        | Kolmogorov-smirnov |    |      | Shapiro-Wilk |    |      |
|                               | Stat.              | Df | Sig. | Stat.        | Df | Sig. |
|                               | .488               | 30 | .000 | .492         | 30 | .000 |

**Table 5. Correlation between Implementation of Straining Reminder Technique and perineal rupture Event in Women during the First Stage of Labor with Mann-Whitney Test**

|                       | Straining Reminder Technique |
|-----------------------|------------------------------|
| Asymp. Sig (2-tailed) | 0.369                        |

## DISCUSSION

### *Pushing Reminder Technique*

The study showed that 15 out of 30 women in labor stage one admitted that they did not know about the straining technique for labor. Then the rest admitted they taught about pushing techniques while doing routine pregnancy appointments.

This result also in line with the previous study from Ardiani, 2015, that 23 out of 32 women (71.9%) do not perform the pushing technique properly. Another result also shows that 57% of women do not perform pushing techniques properly at Midwives Private Practice Aengsareh Sampang (Ardiani, 2013). While at a different place, 73.3% of women can not do the pushing technique correctly at Midwives Private Practice "R" in Bukittinggi.

Mujab, Rusmiyati, Purnomo (2014) also stated that 21 women did not perform the pushing technique properly. 71.4% had perineal tear of grade II while 28.6% got the grade I. Then, of the 13 women who performed the pushing technique

correctly, 84.6% had perineal tear grade I, and 15.4% got perineal tear of grade II.

From several studies, most women in labor do not perform pushing techniques properly, which leads to perineal tear. Thus, an improper straining technique is often influenced by several activities, such as the tendency to uplift buttocks, shouting, and closing eyes (Ardiani, 2015).

### *Perineal rupture Events in Intervention Group*

In the study, from 15 women in labor stage I, 4 out of 15 do not have perineal rupture after reminded about the pushing technique. While three women had perineal rupture of grade I and eight women had perineal rupture of grade II. Even though they have been informed about the psuhing technique, there are still many women who got perineal rupture.

Other factors also contribute to perineal ruptures, such as wrong position, primigravida (first pregnancy), the previous scar of perineal rupture of the previous delivery, large baby, inadequate supervision from healthcare providers in labor, uncontrollable quick labor, labor without the supervision of health care providers, women can not stop straining, women performed pushing impatiently with overstraining, oedema, fragile perineal's muscles. Besides, perineal rupture is also influenced by anxiety and fearfulness of the women related to labor (Ardiani, 2015).

### *Perineal rupture Event in Control Group*

The study shows that of the 15 women in the control group, three women had perineal tear of grade I, ten women had perineal rupture of grade II, and the rest didn't get perineal rupture. 2 of the women did not have perineal rupture because their vagina elasticity was good. One of them had just given birth to her third child with a weight of 2,600 grams, and the other one had just given birth to her second child with a weight of 2,800 grams. This results is in line with previous research by Ardiani (2015), which states that 25 out of 32 women (78.2%) in labor had a perineal rupture. Factors that prevent women from having perineal ruptures such as multipara, small baby (weight less than 3,000 grams), elastic perineal, and the mother able to perform pushing properly while the baby's head tries to expulse (Mochtar, 2012).

*Correlation between Implementation of Pushing Technique and Perineal rupture in Women in Labor Stage I*

Based on the bivariate test, the p-value is 0,369. If p value is  $>0,05$ , then  $H_0$  is accepted and  $H_a$  is rejected, which means there is no correlation between the implementation of pushing reminder technique and perineal rupture in women in labor stage I in 2018.

The conclusion is there is no correlation between them because some women had scars from previous labor, fragile perineal, edema, some of them also primigravida (first pregnancy), they also had quick labor. Thus other factors that cause perineal tear from the baby like big weight baby, deflection head position, shoulder dystocia position. Then, the health care providers' ability to hold the perineum while the baby is trying to propel out from the womb also contributed (Manuaba, 2009).

However most women still perform pushing technique incorrectly by closing their eyes, screaming, breathing haphazardly, tend to uplift their hip and buttock and pushed before instruction (Ningsih, 2010). Those behaviors were caused by anxiety that women had when facing the labor process, so they did not focus and did not perform the pushing technique as instructed previously. Most of the thoughts that cause anxiety for women in labor could be the health and safety of the mother and her baby, and the financial burdem (Hinayah & Hidayat, 2013).

This research is conducted only on one health center and with few respondents, making the result just as expected by the researchers.

### CONCLUSIONS

The analysis showed no correlation between the implementation of the Pushing reminder technique with perineal rupture in labor stage I. Based on the result of this study it is advised especially for Public Health Center to provide an educational media for pregnant women such as educational videos which can be played repeatedly with the aim that every Sumarah. (2009). *Perawatan Ibu Bersalin*.

pregnant woman can watch it while waiting for their appointment so they will be able to obtain information easily and completely. Therefore, the more educated the mothers are the more they can skillfully take care of their babies and themselves during pregnancy and in preparation for their labor and their life after labor, in hope that every woman can have a healthy life physically and mentally during pregnancy and after pregnancy.

### REFERENCES

- Ardiani, Y. (2015). Hubungan Teknik Meneran Dengan Kejadian Ruptur Perineum. *Jurnal STIKes Yarsi Sumbar*.
- Dinkes. (2013). *Profil Kesehatan Indonesia*. Jakarta
- hidayat, H. (2013). Faktor-faktor resiko yang mempengaruhi kejadian pendarahan postpartum primer pada ibu bersalin di rsud panembahan senopati bantul diy tahun 2012. *Stikes aisyiyah yogyakarta*.
- Manuaba, I. B. (2009). *Gawat Darurat Obstetri Ginekologi & Obstetri Ginekologi Sosial untuk Profesi Bidan*.
- Manuaba, I. B. (2009). *Memahami Kesehatan Reproduksi Wanita*.
- Mochtar, R. (2012. ). *Sinopsis Obstetri Obstetri Fisiologi Obstetri Patologi Jilid 1*.
- Mujab, R., Purnomo (2016). Pengaruh Tehnik Meneran Terhadap Laserasi Jalan Lahir Pada Ibu Inpartu Primigravida Di Rumah Bersalin Semarang. *Pengaruh Tehnik Meneran Terhadap Laserasi Jalan Lahir Pada Ibu Inpartu Primigravida Di Rumah Bersalin Semarang*.
- Ningsih. (2010). Faktor-faktor yang Berhubungan dengan Kejadian Kelahiran Bayi Prematur. . *Faktor-faktor yang Berhubungan dengan Kejadian Kelahiran Bayi Prematur*.
- Notoatmodjo, S. (2010). *Metodologi Penelitian Kesehatan*.
- Prawirohardjo, S. (2010). *Ilmu Kebidanan*. .
- Proverawati, W. (2010). *Senam kesehatan*.
- Rofasari, L. (2009). Hubungan berat badan bayi baru lahir dengan derajat rupture perineum pada persalinan normal dirumah sakit umum daerah kota surakarta. *Tesis. Univ. sebelas maret*.

- Wiknjosastro. (2010). *Buku Panduan Praktis Pelayanan Kesehatan Maternal dan Neonatal, Edisi 1. Cet. 12.*
- Zhang, e. a. (2013). Contemporary patterns of spontaneous labor with normal neonatal outcomes. *Obstet gynecol.* 2010 dec; 116(6): 1281–1287. *Obstet gynecol.* 2010 dec; 116(6): 1281–1287