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## ORIGINAL ARTICLE

### HEALTH PROFILE OF MOTHER IN KEBON PALA

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## ABSTRACT

**Background:** each mother facing physical challenges, during pregnancy, parturition and nurturing phase, that may alter their health profile, but in fact, no report about their physical health profile. This study conducted to find prevalence of low back pain, diastasis recti, overweight, central obesity, fatigue and their activities. **Methods:** this study is descriptive quantitative research with survey to find out health profile of mother in Kebon Pala, East Jakarta. Survey was conducted by local administrator of Kebon Pala, consisted their body weight, body height, waist circumference, symptoms of low back pain, symptoms of diastasis recti, Subjective Self Rating Test, and International Physical Activity Questionnaire. Data processed with Microsoft Excel. **Results:** there are 23.19% low back pain, 100% diastasis recti, 59.42% obesity, 69.57% central obesity, 7.24% were facing mild fatigue, and 75.36% were living a sedentary lifestyle. **Conclusion:** prevalence of low back and fatigue were relatively low, prevalence of diastasis recti, obesity, and sedentary lifestyle were relatively high. Education about exercise were need to do, to help them maintain their body weight and repair their muscles.

**Keywords:** low back pain, diastasis recti, obesity, activity

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## INTRODUCTION

Each mother was facing biomechanical challenge that needed to accommodate their children needs, and causing potential physical problems<sup>6,7,8</sup>, such as diastasis recti, low back pain, fatigue, sedentary lifestyle and overweight<sup>5</sup>. Diastasis recti occurs more frequently during pregnancy and even though supposed to regress spontaneously, in fact 33% of women still experience diastasis recti 12 months postpartum<sup>1</sup>. Prevalence of low back pain on pregnant and post-partum mother were about 61-88% in population<sup>2</sup>. Prevalence of fatigue were most highly experienced in first month post-partum, and supposed to decrease until 4 months post-partum<sup>3</sup>. This situation may decrease their quality of life<sup>9,10,11,12,13, 14</sup>, but in fact, we rarely find reports about this situation, and may cause limitation of health services toward them. Therefore, this research held to find prevalence of low back pain, diastasis recti, overweight, central obesity and fatigue of mother (whom has experienced pregnancy, parturition, and nurturing preschool children).

## METHODOLOGY

This study used a quantitative approach conducted in October 2022. Data collected throughout Kebon Pala, Jakarta. Participant were mother with experience of pregnancy, parturition, and nurturing toddlers using non-probability, voluntary sample method. Recruitment was based on in-person strategies, by local administrator that attaining informed consent approval. Ethics approval was obtained by Fakultas Vokasi Universitas Kristen Indonesia in August 2022. The measurement included age, body height, body weight, waist circumference<sup>17,18,23,24,25</sup>, symptoms of low back pain, symptoms of diastasis recti<sup>19,20,21</sup>, Subjective Self Rating Test<sup>15</sup>, and International Physical Activity Questionnaire<sup>14</sup>. Body height

was measured in standing position with digital body height counter, then recorded in meter. Body weight measured by digital body weight scale, recorded in kilogram. Waist circumference was measured with tape measurement, recorded in cm. Body mass index calculated and classified in Asia Pacific Classification<sup>15</sup>.

## RESULTS

We have 63 mothers, and their age and experience of pregnancy were shown on Table 1.

| Character                      | Amount | Percentage |
|--------------------------------|--------|------------|
| <b>Age</b>                     |        |            |
| <18 years old                  | 0      | 0%         |
| 18-25 years old                | 6      | 8.70%      |
| 26-30 years old                | 17     | 24.64%     |
| 31-35 years old                | 20     | 28.99%     |
| 36-40 years old                | 17     | 24.64%     |
| 41-45 years old                | 9      | 13.04%     |
| <b>Experience of Pregnancy</b> |        |            |
| 1 time                         | 12     | 17.39%     |
| 2 times                        | 29     | 42.03%     |
| 3 times                        | 22     | 31.88%     |
| 4 times                        | 6      | 8.70%      |

**Table 1:** Character of Respondents

Prevalence of low back pain were shown on Table 2, as we may found there are 23.19% mothers reporting low back pain in last month, yet 37.68% complaining postural problem and 21.74% complaining problems in their physical activity. Only 8.70% reporting have no problem in postural, functional activity and low back pain.

| Experience                               | Amount | Percentage |
|--|--------|------------|
| Experiencing low back pain on last month | 16     | 23.19%     |
| Postural problems                        | 26     | 37.68%     |
| Functional activity problems             | 15     | 21.74%     |
| No physical complains                    | 19     | 8.70%      |

Table 3 show us that all participants facing upper and lower diastasis recti, 21.74% complaining incontinent urin, 18.84% complaining bloated belly or tummy ache, 24.64% complaining low tone of core muscle, 18.84% complaining incontinent urin in increased intra-abdominal pressure, 59.42% complaining loss muscle tone.

**Table 2:** Prevalence of Low Back Pain

| Experience                                     | Amount | Percentage |
|--|--------|------------|
| Incontinentia uri                              | 15     | 21.74%     |
| Bloated belly/tummy ache                       | 13     | 18.84%     |
| Low tone of core muscle                        | 17     | 24.64%     |
| Hernia umbilicus                               | 0      | 0%         |
| Piss during increased intra-abdominal pressure | 13     | 18.84%     |
| Torn muscle during activities                  | 0      | 0%         |
| Loss muscle tone                               | 41     | 59.42%     |
| Gap on center of rectus abdominis              | 66     | 95.65%     |
| Gap on upper rectus abdominis                  | 69     | 100%       |
| Gap on lower rectus abdominis                  | 69     | 100%       |

**Table 3:** Prevalence of Diastasis Recti

As shown on Table 4 we found 17.39% participants were 2<sup>nd</sup> phase of obesity, 42.03%

were 1<sup>st</sup> phase of obesity and 23.19% were overweight.

| Nutrition Status | BMI         | Amount | Percentage |
|------------------|-------------|--------|------------|
| Underweight      | < 18,5      | 2      | 2.90%      |
| Normal           | 18,5 – 22,9 | 10     | 14.49%     |
| Overweight       | 23 – 24,9   | 16     | 23.19%     |
| Obesity I        | 25 – 29,9   | 29     | 42.03%     |
| Obesity II       | ≥ 30        | 12     | 17.39%     |

**Table 4:** Nutrition Status of Participants

For their waist circumference, there are 69.57% participants have more than 80 cm

waist circumference, and classified as central obesity as shown on Table 5.

| Category        | Waist circumference (cm) | Amount | Percentage |
|-----------------|--------------------------|--------|------------|
| Normal          | <80                      | 21     | 30.43%     |
| Central obesity | >80                      | 48     | 69.57%     |

**Table 5:** Prevalence of Central Obesity

As shown as Table 6, we found there are 7.24% participants were complaining mild fatigue, and 92.57% have no complains of fatigue, and with the fatigue were mostly report as 'feeling heavy head', 'feeling dizzy', and 'shoulder stiffness'.

| Category         | Amount | Percentage |
|------------------|--------|------------|
| No fatigue       | 64     | 92.75%     |
| Mild fatigue     | 5      | 7.24%      |
| Moderate fatigue | 0      | -          |
| Heavy fatigue    | 0      | -          |

**Table 6:** Prevalence of Fatigue

As shown on Table 7, 24.64% participants living an active lifestyle, and 75.36% living sedentary lifestyle.

| Category  | Amount | Percentage |
|-----------|--------|------------|
| Active    | 17     | 24.64%     |
| Sedentary | 52     | 75.36%     |

**Table 7:** Activity Status of Participants

## DISCUSSION

As we find that there are 23.19% mothers reporting low back pain in last month, yet 37.68% complaining postural problem and 21.74% complaining problems in their physical

activity. Postural problem and physical activity problems were reported in 7.24% participants that were complaining mild fatigue as 'feeling heavy head', 'feeling dizzy', and 'shoulder stiffness'.

Our data that stating that 100% of participants reporting diastasis recti were supported by our previous study<sup>20,21</sup>, and it may be related by their state of central obesity, as there are 69.57% participants classified as central obesity. This prevalence was higher than national reports that reporting 43.78% people in East Jakarta were facing central obesity<sup>22</sup>. The situation of central obesity may reflect that the abdominal muscle has not been recover after pregnancy, and care should take towards central obesity, as it put them at risk of metabolic diseases<sup>26,27</sup>.

Beside of central obesity, we find that our participant was facing obesity that classified from their body mass index. We urge us to focus our attention as in total, 82.61% of participants were facing overweight and obesity. This prevalence of overweight and obesity were greatly higher than national reports that stating that in East Jakarta, 16% people were overweight, and 36.60% people were obesity<sup>22</sup>.

We need, too, focus our attention to 75.36% of participants that living sedentary lifestyle. This

number were higher than national reports that stating 46.16% of people in East Jakarta living sedentary lifestyle<sup>22</sup>. As sedentary lifestyle may have direct relation lack of muscle activity, it may cause obesity, slower muscle recovery, and muscular problems such as low back pain and tension headache. We need to help them living an active lifestyle to diminished their problems<sup>28,29</sup>.

## CONCLUSION

As the prevalence of overweight, obesity, and sedentary lifestyle were high, and even higher than national report, it may relate those problems in our participants that still having diastasis recti, low back pain, headache, and shoulder stiffness. We suggest to take care of them by giving education and exercise to help them recover their muscle, improving their lifestyle, and maintain their body weight. The limitation of this study is that the number of participants of each age categories were not equal.

**Conflict of Interest:** The author has no conflict of interest to declare.

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**Compliance with Ethics:** This study was obtained ethical form University with reference number 0078/UKI.F8.D/PPM.1.6/2022.

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