Predisposing Factors of Vaginal Discharge in Pregnant Women in the Coastal Area of Bengkulu City

Sinta Oktalia Agni, 1Kurnia Dewiani, 1Riana Versita, 1Novianti, 1Linda Yulyani

Corresponding Author: *kdewiani@unib.ac.id

1University of Bengkulu, Bengkulu, Indonesia

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ABSTRACT

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Pregnancy, a natural process, entails physiological discomfort, such as vaginal discharge. This discharge is categorized as normal (physiological) or abnormal (pathological). Normal discharge is colorless, odorless, and not excessive, while abnormal discharge is cloudy, thick, and may have unpleasant odors and itchiness. This study in the coastal area of Bengkulu City aims to identify characteristics of pregnant women and explore predisposing factors for vaginal discharge. Utilizing a quantitative survey method with 107 purposively sampled pregnant women, the study focused on independent variables like Knowledge and Personal Hygiene, with vaginal discharge as the dependent variable. The results indicate that over half of the respondents (57%) demonstrated good knowledge, 52.3% exhibited good personal hygiene behavior, and 61% experienced physiological vaginal discharge. In conclusion, knowledge and personal hygiene emerge as critical factors influencing vaginal discharge in pregnant women.

Keywords
Bengkulu
Predisposing
Pregnant Women
Vaginal Discharge

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Introduction

Pregnancy is the process of intrauterine growth and development of the fetus from conception and ends until the start of labor. The length of pregnancy from ovulation to delivery

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Pregnancy is a natural (normal) process. Still, in normal pregnancy, physiological discomfort often occurs, such as frequent urination, hemorrhoids, constipation, shortness of breath, ligament pain, flatulence, dizziness, upper and lower back pain, varicose veins in the legs, and vaginal discharge [2]. Vaginal discharge is a discharge from the genitals that is not blood but is a clinical manifestation of various infections, malignant tumors, or benign tumors in the reproductive organs [3]. Vaginal discharge is divided into two types, namely normal (physiological) vaginal discharge and abnormal (pathological) vaginal discharge. Physiological vaginal discharge is vaginal discharge that is colorless (transparent), odorless and not itchy, and not excessive. Pathological vaginal discharge is a vaginal discharge that is cloudy and thick, yellowish, grayish, or greenish, smells terrible, fishy and itchy. The most common causes of abnormal vaginal discharge are bacteria, fungi, and parasites [4]-[6].

Many pregnant women consider vaginal discharge to be expected and underestimate it. Some mothers are not bothered by the vaginal discharge they experience, but the vaginal discharge can endanger pregnancy and childbirth. The impact of vaginal discharge on pregnant women includes that it can cause premature labor, premature rupture of membranes, and low birth weight (LBW) [7]. Physiological vaginal discharge can be overcome by maintaining cleanliness and excessive humidity [8]. Maintaining the cleanliness of the reproductive organ area by adopting a healthy lifestyle, using underwear made from an absorbent material such as cotton, washing the vagina from front to back, changing underwear if dirty or wet at least three times, not wearing clothes that are too tight, and avoiding using feminine soap too often [9].

The factors that cause vaginal discharge are divided into two, namely external factors and internal factors. External factors include temperature/humidity, entry of foreign objects into the vagina [10]. Internal factors that cause vaginal discharge are related to hormonal changes. During pregnancy, there is an increase and presence of mucosal hyperplasia, which can cause an increase in cervical mucus production. Dead cells from the vaginal walls all come out of the cervix. This fluid is called vaginal discharge. This discharge of vaginal mucus that is more than usual causes discomfort for pregnant women [11]. The predisposing factors that cause vaginal discharge are personal hygiene and knowledge. Knowledge is everything obtained from the contact of the five senses with particular objects. Knowledge results from seeing, hearing, feeling, and thinking, the basis for human behavior and action [12].

Internal and external factors influence knowledge; internal factors can include education, employment, age, and external factors, namely, environmental factors, social culture, economic status, and sources of information [13]. According to Ref. [14], factors influencing the implementation of self-care during pregnancy, namely age, education,
Employment, parity, family, and economic support, were found. Ref. [15] showed that almost all pregnant women had good knowledge about Flour Albus, 23 (77%). Another result of Ref. [16] showed that the Personal Hygiene Practices of External Genital Organs were primarily suitable.

The results of an initial survey conducted by researchers in three working areas of the Pasar Ikan Community Health Center, Penurunan Community Health Center, and Kuala Lempuing Community Health Center, Bengkulu City, showed that 15 pregnant women experienced complaints of vaginal discharge in the form of itching, burning, slimy, smelly, sticky and lumpy, which disturbed the mother’s comfort. All pregnant women who were interviewed hoped to know other factors that cause vaginal discharge in pregnant women in the Coastal Area of Bengkulu City. The factors that cause vaginal discharge in general need to be explored further, especially in the knowledge and personal hygiene that occurs in pregnant women so that pregnant women can know more deeply about the predisposing factors that cause vaginal discharge and can prevent and overcome these problems. The research aims to contribute insights into the factors influencing vaginal discharge during pregnancy, with a focus on enhancing understanding and informing potential interventions for maternal health in the coastal region of Bengkulu City.

Methods

The method used in this research is a quantitative survey. This research was carried out in three working areas of the Pasar Ikan Community Health Center, Penurunan Community Health Center, and Kuala Lempuing Community Health Center, Bengkulu City, from 29 March 2023 to 30 April 2023. The population in this study was all pregnant women in the coastal area of Bengkulu city, Indonesia. The research sample was selected using a purposive sampling technique, with 107 respondents in this study. The independent variables are Knowledge and Personal Hygiene. The dependent variable is vaginal discharge. Data was analyzed using univariate analysis to see the frequency distribution.

Results

The data obtained (Table 1) shows that the pregnant mother in the coastal area of Bengkulu City experienced physiological and pathological vaginal discharge.

Table 1. Frequency distribution of vaginal discharge in pregnant women

<table>
<thead>
<tr>
<th>Vaginal discharge</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiological</td>
<td>65</td>
<td>61%</td>
</tr>
<tr>
<td>Pathological</td>
<td>42</td>
<td>39%</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100%</td>
</tr>
</tbody>
</table>
Based on Table 1, it shows that of the 107 respondents from pregnant women in the coastal area of Bengkulu City, the small number of pregnant women with pathological vaginal discharge was 42 (39%) respondents. Meanwhile, the majority of pregnant women with physiological vaginal discharge were 65 (61%) respondents. Table 2 shows the frequency distribution of knowledge among pregnant women.

**Table 2. Frequency distribution of knowledge among pregnant women**

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>61</td>
<td>57 %</td>
</tr>
<tr>
<td>Enough</td>
<td>44</td>
<td>41.1 %</td>
</tr>
<tr>
<td>Bad</td>
<td>2</td>
<td>1.9 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Based on Table 2, of the 107 pregnant women respondents in the coastal area of Bengkulu city, a small portion had poor knowledge, and 2 (1.9%) and 44 (41.1%) respondents had sufficient knowledge. Meanwhile, the majority, 61 (57%) respondents, had good knowledge.

Table 3 shows that of the 107 respondents from pregnant women in the coastal area of Bengkulu City, a small number with poor personal hygiene behavior was 51 (47.7%). Meanwhile, 56 (52.3%) respondents had good individual hygiene behavior.

**Table 3. Frequency distribution of personal hygiene behavior in pregnant women**

<table>
<thead>
<tr>
<th>Personal Hygiene Behavior</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>56</td>
<td>52.3 %</td>
</tr>
<tr>
<td>Bad</td>
<td>51</td>
<td>47.7 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>107</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**Discussion**

The research results showed that of the 107 respondents from pregnant women in the coastal area of Bengkulu City, a small percentage had poor knowledge, 2 (1.9%) and 44 (41.1%) respondents had sufficient knowledge. Meanwhile, the majority, 61 (57%) respondents, had good knowledge. It is in line with research by Ref. [15], [17]-[19], which found that almost all pregnant women had good knowledge about Flour Albus.

Pregnant women who have gained knowledge about what is happening to them will face this problem more calmly and rationally [20]. Pregnant women will respond to these physical disorders as a normal process because, previously, pregnant women have received adequate knowledge from various sources. Even pregnant women can react with a positive attitude so they can better overcome problems. Pregnant women also have high self-
confidence and a positive and more optimistic outlook. However, pregnant women who do not have adequate knowledge about vaginal discharge will experience difficulties in dealing with vaginal discharge [18]. Vaginal discharge will be seen as something scary that will cause problems with self-confidence.

Knowledge is the main trigger for the occurrence of Flour Albus in pregnant women because a lack of knowledge can result in poor/poor personal hygiene. Knowledge and personal hygiene are the most critical factors in preventing pathological Flour albus and in reproductive health that must be considered to avoid reproductive organ problems.

Factors influencing a person's knowledge are education, employment, age, environmental factors, social culture, and information [13]. Learning is based on age, stating that age influences a person's grasping power and thought patterns. The older you get, the more your understanding and thinking patterns will develop, so the knowledge you gain will improve. Another factor that influences knowledge is education. Education can bring insight or expertise to a person. In general, a person with a high level of education will have broader knowledge than someone with a low level of education. This theory is based on the results of research conducted and proven by the results of good knowledge among pregnant women, with the majority having a high school education.

The next factor that influences knowledge is work. By working, a person can do something valuable and worthwhile and gain various experiences. Apart from that, a piece also affects a person's purchasing power, so they can obtain more sources of information to increase their insight and knowledge [21]. This theory is based on the results of research conducted and proven by the results of good knowledge among pregnant women who do not work or are homemakers.

Meanwhile, according to Ref. [22], knowledge is based on parity. The more equality, the higher the knowledge; this is related to the influence of one's own experience during pregnancy or from other people, just as mothers with two or more children will gain more experience during pregnancy compared to mothers who have just had one child or those who have not yet had children. This theory is based on the results of research conducted, as proven by the knowledge of pregnant women based on parity; good knowledge was found in multiparas.

**Conclusion**

Among pregnant women in the coastal area of Bengkulu city, there is a notable prevalence of individuals in the 20-35 age group, a significant percentage of whom are not employed. While most have a high school education, the demographic characteristics are diverse. In terms of health-related indicators, a considerable portion of pregnant women demonstrates good knowledge, personal hygiene behavior, and experience physiological
vaginal discharge. These findings could serve as a basis for targeted healthcare interventions and educational programs to improve pregnant women’s overall well-being in this region. Additionally, future research and initiatives may explore the factors influencing employment status and academic levels among pregnant women in the area.

**Conflict of Interest**

The authors declare that there is no conflict of interest.

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Authors

**Sinta Oktalia Agni** is a dedicated Diploma Midwifery (D3) Study Program student, Faculty of Mathematics and Natural Sciences, University of Bengkulu, Jalan Indra Giri No 4 Padang Harapan, Bengkulu, Indonesia. (email: sintaoktaliaagni@gmail.com).

**Kurnia Dewiani** is a researcher and lecturer of the Midwifery Study Program, Faculty of Mathematics and Natural Sciences, University of Bengkulu, Jalan Indragiri No 4, Padang Harapan, Bengkulu 38225, Indonesia. (email: kdewiani@unib.ac.id).

**Riana Versita** is a researcher and lecturer in the Pharmacy Study Program, Faculty of Mathematics and Natural Sciences, University of Bengkulu, Jalan Indragiri No 4, Padang Harapan, Bengkulu 38225, Indonesia. (email: riana.versita@unib.ac.id).

**Novianti** is a researcher and lecturer of the Midwifery Study Program, Faculty of Mathematics and Natural Science, University of Bengkulu, Jalan Indragiri No 4, Padang Harapan, Bengkulu 38225, Indonesia. (email: novianti@unib.ac.id).

**Linda Yulyani** is a researcher and lecturer of the Midwifery Study Program, Faculty of Mathematics and Natural Sciences, University of Bengkulu, Jalan Indragiri No 4, Padang Harapan, Bengkulu 38225, Indonesia. (email: linda.yulyani13@gmail.com).