The Effectiveness of OSOC (One Student One Client) to Reduce Anxiety of Third Trimester Mothers in Facing Childbirth and Breastfeeding Practices in the Era of the Covid-19 Pandemic

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ABSTRACT

The research results on pregnant women during the covid-19 pandemic indicate that Covid-19 pandemic greatly affects the mental health of pregnant women. Mortality Rate is with the OSOC method. The Continuity of Care model of midwifery care in OSOC clinical education (One Student One Client) is a method used by midwife students to collect data and assist pregnant women during pregnancy, childbirth, postpartum, new-born babies to family planning for the health of mothers and babies. The purpose of the study was to determine the effectiveness of OSOC (One Student One Client) in reducing the anxiety of third trimester pregnant women in facing childbirth and breastfeeding practices in the era of the covid-19 pandemic. The research design used was pre-experimental with one group pre-test – post-test design. While the number of samples was 13 pregnant women in the third trimester, and they were willing to be respondents. Sampling technique used was the purposive sampling. The data analysis and interpretation were bivariate and univariate. The bivariate analysis used the frequency distribution table, and the univariate analysis employed the Paired Sample T Test. The results of the study pointed that the average value (mean) of anxiety before being given the OSOC intervention was 9.3077 and the average value (mean) of anxiety after being given the OSOC intervention was 1.0769. The significance value (2-tailed) of the data was 0.002 (p < 0.05). Therefore, the results of the OSOC treatment before and after experienced were significantly changed. The conclusion was that OSOC is effective in reducing the anxiety of Third Trimester pregnant women in dealing with childbirth and breastfeeding practices in the era of the Covid-19 pandemic.

1. Introduction

In Indonesia, there are 107,000 (28.7%) pregnant women who experience anxiety in facing childbirth [1]. In a study conducted by Astria (2009) showed that anxiety was more experienced in primigravida pregnant women (first pregnancy) as much as 66.2%, compared to anxiety in multigravida pregnant women as much as 42.2%. [1]. In the third trimester, mothers tend to feel higher anxiety compared to the previous trimester. Causes of anxiety in pregnant women third trimester, one of which is the lack of assistance from family, cadres and health workers during pregnancy [2].

One of the efforts to improve the qualifications of midwives is to implement a model of sustainable midwifery care (Continuity of Care/CoC) in clinical education [3]. This effort can involve various sectors to carry out assistance to pregnant women as a promotive and preventive effort.
starting from the time a pregnant woman is found until the woman in the postpartum period ends through counseling, information and education (KIE) and the ability to identify risks for pregnant women so that they are able to make referrals or those who are commonly referred to as prenatal and postnatal classes [4].

One of the strategies the Ministry of Health and Higher Education improving the health status of the community was community service through mentoring pregnant women by students to increase access to maternal and child health services [5]. According to (Hadju, Syamsuddin, 2020) that assistance for pregnant women is very important, especially if you want to give birth [6]. The results of the analysis show that mentoring pregnant women increases mother's knowledge about the danger signs of pregnancy, postpartum and newborns [7]. In addition, assistance to pregnant women can increase the utilization of maternal and child health services [8]. However, considering the high cost of the unit for assisting pregnant women, this program is expected to be included in the midwifery higher education curriculum through community service activities to ensure the continuity of the mentoring program [9].

Most complications can be avoided if maternal health problems are intervened early on. One of the efforts in optimizing the detection of high-risk maternal and neonatal, pregnant and postpartum women need continuous assistance [10]. Therefore, it is necessary to carry out a series of efforts, one of which is to involve educational institutions by integrating them into educational programs, in addition to community empowerment efforts that have been implemented but have not yet synergized with education. The contribution of midwifery education in this step is by bringing the learning experience closer to the source of the problem, namely by proactively visiting clients in the community [11].

Several studies related to the OSOC program gave results about the effect of OSOC assistance on pregnant women [12]. Research conducted by Muliatul, Arum with the title The Effect of Osoc Mentoring on Satisfaction of Pregnant Women in the Third Trimester [13]. The results showed that there was an effect of mentoring pregnant women with OSOC on satisfaction, which was 4.741. It could be concluded that there was an effect of OSOC assistance on the satisfaction of pregnant women in the third trimester [14].

Research conducted by Arum, Muliatul with the title The Difference Of Comfort And Anxiety Level In Third Trimester Pregnant Women With One Student One Client (OSOC) And Conventional Pregnancy Care [15]. The results showed that the results of the study there were significant differences (p < 0.05), and the effect of OSOC assistance on comforting pregnant women was 2.357, and there was a significant difference between anxiety in third trimester pregnant women with OSOC assistance and conventional pregnancy care, and the effect of OSOC assistance on the anxiety of pregnant women is 7.703 [16]. The conclusion of this study is that there is a significant difference between the comfort and anxiety of third trimester pregnant women with the help of OSOC and conventional pregnancy care [17].

Assistance for pregnant women through the OSOC program based on continuity of care can help increase knowledge, awareness, and welfare of the mother [18]. The continuity of the care model or the continuity of care (CoC) for mothers and babies is a way to ensure that mothers and babies receive the best care from midwives on an ongoing basis starting from pre, intra, and postnatal [19].

2. Materials and Method

This research was conducted in Surakarta area. The research design used the one group before and after method or grouping sample members with certain criteria in the treatment group to see the effect of the treatment, namely before and after the intervention. In this study, one group was used, namely the group that was given the treatment of third trimester pregnant women with OSOC.

Research subjects are LTA respondents from level III students of ITS PKU Muhammadiyah Surakarta. The inclusion criteria in this study were respondents from level III students in LTA, and were willing to become respondents by signing informed consent. Exclusion criteria are not willing to be a respondent. Large sample obtained the number of samples as many as 13 people. Subjects who met the inclusion criteria were then included in the study. Respondents were accompanied by Midwifery students level III ITS PKU Muhammadiyah Surakarta from pregnancy, childbirth, postpartum, newborn and family planning. During the assistance from pregnancy, childbirth to postpartum, three (3) meetings were held by three parties (tri-partite meetings) between students, lecturers and midwives to discuss the progress of learning to improve care at a later stage.

The population in this study were TM III pregnant women in Surakarta, the number of samples was 13 third trimester pregnant women, and were willing to be respondents. Sampling
technique with purposive sampling. The independent variable in this study is the OSOC method (one student one client). The dependent variable in this study was the anxiety of pregnant women TM III in dealing with childbirth and breastfeeding practices in the era of the covid-19 pandemic.

The data obtained were statistically analyzed using the SPSS computer program. The normality test of the data was carried out using the Shapiro-Wilk test with a sig value for Shapiro Wilk of 0.173. The sig value was greater than the significance level of 5% (α=0.05), so the data were normally distributed. Analysis of the effectiveness of OSOC on the anxiety of pregnant women using analysis using the paired sample t test. The significance value (2-tailed) of the data was 0.002 (p < 0.05). So that the results of the OSOC treatment before and after experienced significant (meaningful) changes. So it can be concluded that OSOC affects the level of anxiety. This research has received ethical approval from the Health Research Ethics Commission of ITS PKU Muhammadiyah Surakarta with No. 120A/LPPM/ITS.PKU/IX/2021 on September 1, 2021.

3. Results and Discussion
3.1. Results
3.1.1. Characteristics of Respondents

Table 1 shows the characteristics of the respondents which include maternal age, pregnancy history, mother's education and occupation.

<table>
<thead>
<tr>
<th>Characteristics of Respondents</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother's Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25</td>
<td>5</td>
<td>38.46</td>
</tr>
<tr>
<td>25-30</td>
<td>2</td>
<td>15.38</td>
</tr>
<tr>
<td>30-35</td>
<td>3</td>
<td>23.08</td>
</tr>
<tr>
<td>35-40</td>
<td>3</td>
<td>23.08</td>
</tr>
<tr>
<td>Pregnancy History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primigravida</td>
<td>6</td>
<td>46.15</td>
</tr>
<tr>
<td>Multigravida</td>
<td>7</td>
<td>53.85</td>
</tr>
<tr>
<td>Job status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>housewife</td>
<td>8</td>
<td>61.54</td>
</tr>
<tr>
<td>teacher</td>
<td>1</td>
<td>7.69</td>
</tr>
<tr>
<td>general employees</td>
<td>4</td>
<td>30.77</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior High School</td>
<td>2</td>
<td>15.38</td>
</tr>
<tr>
<td>Senior High School</td>
<td>8</td>
<td>61.54</td>
</tr>
<tr>
<td>Bachelor</td>
<td>3</td>
<td>23.08</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on Table 1, it was obtained data that most of the respondents aged 20-25 years were 5 people (38.46%), the history of pregnancy were mostly multigravida as many as 7 people (53.85%), the education level of the respondents was mostly high school level as many as 8 people (54.3%), and most of the respondents became housewives as many as 8 people (61.54%).

A. Anxiety
1. NORMALITY TEST

<table>
<thead>
<tr>
<th>Tests of Normality</th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolmogorov-Smirnova</td>
<td>.177</td>
<td>13</td>
<td>.200</td>
</tr>
<tr>
<td>Shapiro-Wilk</td>
<td>.908</td>
<td>13</td>
<td>.173</td>
</tr>
</tbody>
</table>

*: This is a lower bound of the true significance.
Based on the output above, it is known that the sig value for Shapiro Wilk is 0.173. The sig value is greater than the 5% significance level (α=0.05), so the data is normally distributed. The Paired Samples Statistics table shows the descriptive value of each variable in the paired sample. The degree of anxiety before being given OSOC has an average value (mean) of 9.3077 from 13 data. The distribution of data (Std. Deviation) obtained is 8.90117 with a standard error of 2.46874. The degree of anxiety before being given OSOC has an average value (mean) of 1.0769 from 13 data. The distribution of data (Std. Deviation) obtained is 1.84669 with a standard error of 0.51218. This shows that the level of anxiety before being treated with OSOC is higher than after being treated with OSOC. With the data distribution range, the degree of anxiety after OSOC is also smaller than before being treated with OSOC.

The Paired Samples Correlations table shows the correlation value which shows the relationship between the two variables in the paired sample. This is obtained from the bivariate Pearson correlation coefficient (with two-tailed significance test) for each pair of variables included.

The Paired Samples Test table is the main table of output that shows the results of the tests carried out. This can be seen from the significance value (2-tailed) in the table. The significance value (2-tailed) of the data was 0.002 (p < 0.05). So that the results of the OSOC treatment before and after experienced significant (meaningful) changes. So it can be concluded that OSOC can affect the level of anxiety.

Table 1. This is a Table

<table>
<thead>
<tr>
<th>Entry 1</th>
<th>Data</th>
<th>Data</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry 2</td>
<td>Data</td>
<td>Data</td>
<td>Data</td>
</tr>
</tbody>
</table>

Figure 1. Example of a Figure Caption

3.2. Discussion

Based on the results of the study, it was found that the anxiety of TM III pregnant women in dealing with childbirth and breastfeeding practices decreased after being provided with assistance from students of the Midwifery Study Program in the form of OSOC (one student one client) [20]. Anxiety in the Dorland medical dictionary is defined as an unpleasant emotional condition in the form of psychophysiological actions that appear as a projection of an unreal or imaginary threat caused by an intrapsychic conflict that is not directly realized [21]. Factors that influence anxiety include:
potential stressor, maturation, educational status and economic status, level of knowledge, physical condition, personality type, socio-cultural environment or situation, age, gender [22].

Based on Table 1, it was found that most of the respondents aged 20-25 years were 5 people (38.46%). This is supported by those who argue that the young age factor is easier to experience anxiety than the old age. The education level of most of the respondents at the high school level was 8 people (54.3%), and most of the respondents became housewives as many as 8 people (61.54%). This is supported by the educational status and low economic status of a person causing the person to experience anxiety compared to those with high educational status and economic status. Based on the results of research, student assistance using the OSOC method is effective in reducing the anxiety of TM III pregnant women in dealing with childbirth and breastfeeding practices [23].

Assistance for pregnant women through the OSOC program based on continuity of care can help increase knowledge, awareness, mother and infant welfare [24]. The continuity of the nursing model or the continuity of care (CoC) for mothers and babies is a way to ensure that mothers and babies get the best care from nurses on an ongoing basis starting from pre, intra, and postnatal [25]. Information from health workers is an important external factor for pregnant women because the information obtained can affect the level of anxiety of pregnant women in facing childbirth [26]. Belief in internal factors is a response to believe or not believe from pregnant women about stories or myths that are heard from other people or that developed in their area of origin or place of residence [27]. Meanwhile, the feeling before childbirth is related to the feeling of fear or not being afraid experienced by the mother before giving birth [28].

According to Natoatmodjo (2005), the completeness of the information obtained regarding further conditions regarding her pregnancy, including the presence of comorbidities in pregnancy [29], makes pregnant women more prepared for all the possibilities that will occur during childbirth and mothers are not burdened with feelings of fear and anxiety [30]. Based on research by Srivasta et al. 2015 Pregnancy satisfaction cannot be separated from several other factors, such as anxiety, family assistance, midwife assistance, and so on [31]. This research has been carried out simultaneously with the OSOC mentoring team related to these factors, with the results that OSOC assistance affects the anxiety of pregnant women in the third trimester (p<0.05) and OSOC assistance affects the comfort of pregnant women in the third trimester (p<0.05) [32].

Based on the results of Meriani's research, Jannah. 2018 that there was a significant difference (p < 0.05), and the effect of OSOC assistance on pregnant women was 2,357, and that there was a significant difference between anxiety in third trimester pregnant women with OSOC assistance and conventional pregnancy care, and the effect of OSOC assistance on anxiety pregnant women is 7,703 there is a significant difference between the comfort and anxiety of third trimester pregnant women with the help of OSOC and conventional pregnancy care [33].

A study published several things that caused anxiety and concern related to COVID-19 in pregnant women and postpartum mothers, namely visits to the hospital for pregnancy check-ups (72.65%), COVID-19 protection methods (60.17%), messages in the media social welfare (52, 14 %), baby safety from infection after birth (52,14), effect of COVID-19 on fetus (45.76%) and pregnancy outcome (44.92) as well as safety for breastfeeding (44.44%) [34]. Factors that affect anxiety in pregnant women in the pandemic era include: Mother's readiness in facing childbirth, among others, low understanding of pregnant women about efforts to prevent Covid-19 infection during pregnancy due to false information in the wider community regarding transmission, treatment and prevention of contracting Covid. -19 and government regulations to quarantine those who are infected with the coronavirus are one of the factors that can affect the anxiety of pregnant women [35].

Sustainability of breastfeeding during the pandemic is influenced by various factors, including the knowledge factor [36]. Knowledge about Covid-19 is not only carried out by the infected [37]. All parties must understand that they can make appropriate efforts to protect themselves and others, including postpartum and breastfeeding mothers [38]. Breast milk is the best nutrition to protect infants and toddlers from various diseases, including during the COVID-19 outbreak. There is immunological protection in breast milk, so many experts agree that breastfeeding mothers should still breastfeed during the COVID-19 pandemic [39]. Breastfeeding mothers who are faced with the current covid-19 pandemic are a stimulus, it is hoped that mothers can make changes to appropriate breastfeeding patterns in accordance with health protocols as an effort to control and prevent the spread of COVID-19 during the breastfeeding process, because the benefits of breastfeeding far exceed the potential for transmission. covid-19 [40].

4. Conclusion
The conclusion in this study was that the degree of anxiety before being treated with OSOC was higher than after being treated with OSOC. With the data distribution range, the degree of anxiety after OSOC is also smaller than before being treated with OSOC. It can be concluded that OSOC can reduce the anxiety of TM III pregnant women in dealing with childbirth and breastfeeding practices in the era of the covid-19 pandemic.

Declaration
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Conflicts of Interest: The authors declare no conflict of interest.

References


