The effect of audiovisual media use on the duration of exclusive breastfeeding in working mother

Uke Maharani Dewi, Yunik Windarti
Universitas Nahdlatul Ulama, Surabaya, Indonesia

Abstract
The success of breastfeeding for the first six months is a challenge that must be faced by working mothers. Workload and work stress sometimes become obstacles that cause irregular breastfeeding, rush and even boring and unpleasant activities. The purpose of this study was to analyze the effect of using audiovisual media on the duration of breastfeeding for working mothers. This research was conducted using the quasi-experimental method with the posttest control group design taking place in several workplace agencies in Wonokromo village area for the period February-September 2018. The control group was working mothers who breastfeed without using audiovisual media and the case group was working mothers who breastfeed using audiovisual media. Data was collected using observation sheets and bivariate analysis with independent sample t-test p = 0.02. The conclusion of the results of this study is the use of audiovisual media influences the duration of exclusive breastfeeding in working mothers.

Introduction
The failure of exclusive breastfeeding for six months is often experienced by working mothers. The most common reason for the failure of exclusive breastfeeding in working mothers is insufficient breast milk production in more than 90% of cases, and 10% is due to infant disease and maternal disease. The causes of the lack of breast milk production in working mothers are because of the stress experienced by working mothers. Working mothers have higher stress levels than mothers who do not work. Stress can inhibit the production and secretion of lactating hormones. Disruption of production and secretion of lactation hormone will cause the least production of breast milk which ultimately affects the length of breastfeeding. The increase in oxytocin is triggered by the sound of crying and laughing babies, nipple suction during the breastfeeding. Listening to baby cries has been shown to increase prolactin levels in pregnant and lactating women. Increased serum prolactin has been shown when mothers breastfeed their babies. This stimulation is not possible for a mother who works and is separated from her baby during working hours. Even when milking in the workplace the mind is also difficult to avoid the workload.

Materials and Methods
The study population was working mothers who had returned to work after maternity leave and obtained permission from their leaders to breastfeed at work. During working hours, the mother was separated from the baby (maximum working hours are ten hours). The age of the baby was between two and three months.

The audiovisual media used video recordings of baby activities stored on the personal cellphone of each working mother and seen at the start until the end of the milking activity. The research method used was quasi-experimental with a case-control approach. Samples were divided into two groups; the control group, and the case group. The control group is working mothers who breastfeed without using audiovisual media and the case group is working mothers who breastfeed using audiovisual media. The independent variable is the use of audiovisual media and the dependent variable is the duration of breastfeeding (duration of exclusive breastfeeding). Data was collected using observation sheets filled by respondents. Data analysis was performed using independent t-test.

Results
The survey results through the observation sheet are explained through Tables 1-3.

Discussion
The use of audiovisual media affects duration of exclusive breastfeeding. Although the interaction between mother and baby occurs indirectly, the bond is still formed and both babies-mother smiles. Oxytocin is a hormone that is conditioned on the mother’s feelings, such as touching, kissing or seeing her baby, or hearing the cry of her baby, or thinking about it with affection.

In this study statistical parity did not significantly influence the duration of exclusive breastfeeding, but from the data obtained multiparous mothers gave more exclusive breastfeeding for > 6 months. Multipara mothers are considered to have experience in giving breast milk to their...
babies and are better in overcoming difficulties in giving breast milk. The success of the previous breastfeeding is also a motivation for the success of subsequent breastfeeding. Primiparous mothers need to get support before and after the childbirth in order to be able to successfully breastfeed longer than multiparous mothers. Interventions for the success of exclusive breastfeeding must be oriented to the needs of each breastfeeding mother.

The mothers who gave vaginal birth in the case group mostly gave exclusive breastfeeding > 6 months. Vaginal delivery has a significant effect on the implementation of early breastfeeding initiation, not the duration of exclusive breastfeeding. The type of work does not significantly influence the duration of exclusive breastfeeding. Significant differences in exclusive breastfeeding are between mothers working in the formal work sector (16%) and informal (84%) (p = 0.020). The unavailability of lactation space in the workplace is not a barrier for working mothers to continue to provide exclusive breastfeeding. In this study, this did not significantly affect exclusive breastfeeding. However, the provision of special lactation rooms in the workplace affected the duration of breastfeeding.

**Conclusions**

The duration of exclusive breastfeeding in working mothers is strongly influenced by comfort feelings when giving breast milk while at work. By utilizing audiovisual media as a stress relief during breastfeeding, it can increase the duration of exclusive breastfeeding.

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**Table 1. Characteristics of respondents.**

| Characteristics | Total | Control | Percentage (%) |
|-----------------|-------|---------|----------------|
| Parity          |       |         |                |
| Primiparous     | 6     | 5       | 40.0           |
| Multiparous     | 9     | 10      | 60.0           |
| Type of labor   |       |         |                |
| Vaginal delivery| 11    | 9       | 73.3           |
| Cesarean Section| 4     | 6       | 28.6           |
| Type of Work    |       |         |                |
| Lecture         | 8     | 5       | 53.3           |
| Nurse           | 3     | 1       | 20.0           |
| Bank employees  | 1     | 2       | 6.67           |
| HRD             | 0     | 3       | 20.0           |
| Optical clerk   | 1     | 3       | 6.67           |
| Laboratory staff| 0     | 1       | 6.67           |
| Availability of lactation rooms | | | |
| Getting         | 3     | 2       | 20.0           |
| There is no     | 12    | 13      | 80.0           |
| Type of Pump    |       |         |                |
| Manual          | 4     | 9       | 26.6           |
| Electric        | 11    | 6       | 73.4           |
| Duration of expressing breast pump | | | |
| <15 minutes     | 5     | 3       | 33.3           |
| 15–30 minutes   | 10    | 12      | 66.7           |

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**Table 2. Duration of exclusive breastfeeding.**

| Characteristics | Duration of exclusive breastfeeding |
|-----------------|-----------------------------------|
| Parity          | <6 months | >6 months |
| Primiparous     | 4         | 1         |
| Multiparous     | 2         | 0         |
| Type of labor   |           |           |
| Vaginal delivery| 5         | 3         |
| Cesarean Section| 4         | 3         |
| Type of job     |           |           |
| Lecture         | 2         | 2         |
| Nurse           | 2         | 1         |
| Bank employees  | 1         | 2         |
| HRD             | 1         | 1         |
| Optical clerk   | 0         | 2         |
| Laboratory staff| 1         | 1         |
| Availability of lactation rooms | | |
| Getting         | 2         | 2         |
| There is no     | 4         | 6         |
| Type of Pump    |           |           |
| Manual          | 2         | 3         |
| Electric        | 7         | 5         |
| Duration of expressing breast pump | | |
| <15 minutes     | 1         | 0         |
| 15–30 minutes   | 7         | 8         |

**Table 3. Linear regression of respondent characteristics to the duration of exclusive breastfeeding.**

| Characteristics | P Value |
|-----------------|---------|
| Parity          | 0.249   |
| Type of labor   | 0.138   |
| Type of job     | 0.089   |
| Availability of lactation rooms | 0.348 |
| Type of pump    | 0.159   |
| Duration of expressing breast pump | 0.252 |

All characteristics of respondents have P value > 0.05, which means that it has no significant effect on the duration of exclusive breastfeed-
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