Analysis Factors Related to Behaviour among Madurese Mothers with Exclusive Breastfeeding

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ABSTRACT

Introduction: The rate of exclusive breastfeeding in Indonesia is still low. Internal and external factors mother can cause a low rate of exclusive breastfeeding. This also happens because of the belief and traditional factors that can inhibit exclusive breastfeeding for babies. This study aimed to analyze the correlation of psychological factors, family support, and socio-culture with the behaviour of Madurese ethnic mothers in exclusive breastfeeding.

Methods: This study used descriptive-analytical with a cross-sectional approach. The research sample collected 100 respondents with nonprobability sampling method is purposive sampling.

Results: There was a moderate correlation between family support (p=0.000; r=0.373) and socio-culture (p=0.000; r=0.396) with the behaviour of Madurese ethnic mothers in exclusive breastfeeding. The analysis showed no relation between psychological factors and the behaviour of Madurese ethnic mothers in exclusive breastfeeding (p=0.071; r=0.181).

Conclusion: The Behaviour of Madurese ethnic mothers in exclusive breastfeeding in The Sidotopo Wetan Community Health Center, Surabaya, was related to family support and socio-culture. So, the research can be used as this information to optimize factors that increase exclusive breastfeeding behaviour.

INTRODUCTION

World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) recommend exclusive breastfeeding for six months, breastfeeding within the first hour after delivery, breastfeeding whenever the baby wants, and not using bottles or pacifiers (WHO, 2020). Improvement efforts to breastfeeding require intervention and support to change maternal behaviour related to exclusive breastfeeding. Sometimes, several obstacles factor of exclusive breastfeeding can occur such as some mothers often complain of insufficient milk production, fear of not being able to meet the needs of their babies, the influence of local traditions and beliefs, and the lack of support provided by the family. Currently, many mothers do not give exclusive breastfeeding, as evidenced by the
provision of formula milk and solid foods such as porridge or bananas to their babies aged 0-6 months. This is thought to be caused by many factors that influence the success of exclusive breastfeeding, both internal and external factors from the mother. Internal factors such as age, maternal nutritional status, knowledge, attitudes, and psychological factors. While external factors such as support from family, social culture, health workers, health facilities, and social media (Safitri & Puspitasari, 2018).

Indonesia has a variety of cultures that can influence the behaviour of mothers in providing exclusive breastfeeding (Budiati & Setyowati, 2019). The Madurese ethnicity is one of the distinctive ethnic groups, and this cultural identity is considered the community’s identity. Based on research conducted by Widyasari et al., (2012), there is a habit and culture to provide additional food to infants aged less than six months and give certain foods, such as providing honey and coconut after a few hours the baby is born. The low coverage of exclusive breastfeeding is due to the high culture of the community to provide early feeding to their babies before the age of 6 months (Dinkes Kabupaten Pamekasan, 2016).

The rate of exclusive breastfeeding in Indonesia is still relatively low. The proportion of exclusive breastfeeding patterns for infants aged 0-5 months in Indonesia is 37.3% (Kemenkes RI., 2018). Exclusive breastfeeding coverage based on data from districts/cities, it is known that exclusive breastfeeding in East Java in 2019 was 78.3% (Dinkes Jatim, 2019), this figure almost met the national target of 80%. This rate almost met the national target of 80% because most mothers understand the importance of exclusive breastfeeding. However, according to data from the Community Health Center, it is known that the coverage of infants who received exclusive breastfeeding in the city of Surabaya in 2018 was only 71.62% (Dinkes Surabaya, 2018). According to data from The Sidotopo Wetan Community Health Center, the coverage of exclusive breastfeeding in 2020 is 40.7%. On the other hand, this rate is still below the WHO and city recommendations of 50%.

Precede-Proceed Model is a theory developed by Lawrence Green that analyzes human behaviour from the level of health. The health of a person or society is influenced by two main factors, namely behavioural causes (behaviour causes) and environmental (non-behaviour causes) (Nursalam, 2020). This study aims to determine whether psychological, socio-cultural, and family support factors are related to the behaviour of Madurese mothers in exclusive breastfeeding. Efforts to increase breastfeeding require intervention and support to change maternal behaviour related to exclusive breastfeeding. However, several problems hinder exclusive breastfeeding; namely, some mothers often complain of insufficient milk production, fear of not being able to meet their babies’ needs, the influence of tradition and belief, and the lack of support provided by the family. The third factor is the most important thing that can affect the success of mothers in offering exclusive breastfeeding.
test on the psychological factor variable questionnaire being declared valid because it had $r_{count} > r_{table} \ 5\% (0.514)$, the family support questionnaire was declared valid because it had $r_{count} > r_{table} (0.514)$, the socio-cultural variable questionnaire was declared valid because it had $r_{count} > r_{table} (0.514)$, and the socio-cultural variable questionnaire was declared valid because it had $r_{count} > r_{table} (0.514)$. The reliability test on the research questionnaire was tested using the SPSS Cronbach’s Alpha statistical test with Cronbach’s alpha value $>0.60$. The results of the reliability test on the psychological factors questionnaire (0.880), family support questionnaire (0.947), socio-cultural (0.820), and exclusive breastfeeding behaviour (0.843).

### Procedure

The research procedure was started by asked permission at the research location. Next is to test research ethics and test the validity and reliability of the questionnaire to be used. The researcher coordinated with The Sidotopo Wetan Community Health Center to collect data telephone numbers of health worker integrated services post in The Sidotopo Health Center Working Area. After getting the phone number, the researcher contacted the health worker integrated services post to collect data on the number of Madurese mothers who have children aged 6-12 months and make schedules to meet with respondents. In selecting the sample, the researcher was assisted by cadres to find respondents who fit the research criteria. At the time of data collection, the researcher will explain the purpose of the research respondents is asked to sign an informed consent first. The data was collected by means of the respondents being asked to fill in the answer on the questionnaire by the perceived conditions. The researcher and health worker integrated services post assisted filling out the questionnaire to understand the questions. At one time, filling out the questionnaire took 5-10 minutes. The research data collection methods were telephone as many as five respondents and by the door to door as many

| Characteristics | Criteria | n | % |
|-----------------|----------|---|---|
| Maternal Age    | 12 - 16 years | 1 | 1 |
|                 | 17 - 25 years | 33 | 33 |
|                 | 26 - 35 years | 54 | 54 |
|                 | 36 - 45 years | 12 | 12 |
| Profession      | Teacher   | 5 | 5 |
|                 | Housewife | 89 | 89 |
|                 | Private Employees | 3 | 3 |
|                 | Nurse     | 1 | 1 |
|                 | Entrepreneur | 2 | 2 |
| Education       | Elementary School | 31 | 31 |
|                 | Junior High School | 20 | 20 |
|                 | Senior High School | 34 | 34 |
|                 | Diploma/Bachelor | 15 | 15 |
| Infant Age      | 6 Months  | 13 | 13 |
|                 | 7 Months  | 7  | 7 |
|                 | 8 Months  | 14 | 14 |
|                 | 9 Months  | 16 | 16 |
|                 | 10 Months | 13 | 13 |
|                 | 11 Months | 18 | 18 |
|                 | 12 Months | 19 | 19 |
| Parity          | Primipara | 32 | 32 |
|                 | Multipara | 68 | 68 |
as 95 respondents. After collecting data from 100 respondents, the researcher re-examined the completed questionnaires and analyzed the data through the SPSS system (Statistical Package for the social sciences).

**Data Analysis**

After the data was obtained, it was then coded with data processing software. After data coding was obtained from the questionnaire, the next scores were analyzed univariate and bivariate. Univariate analysis is used to analyze each variable by calculating the frequency distribution and proportions and discovering the respondent's identity, classification of psychological factors, family support, socio-culture, and exclusive breastfeeding behaviour. Bivariate analysis was conducted to measure the level of correlation between two variables on an ordinal scale. Bivariate analysis in this study was spearman correlation with a significance value of p ≤ 0.05 or p ≤ 5%.

**Ethical Clearance**

This research has received approval from the nursing ethics commission (KEPK), faculty of nursing, Universitas Airlangga, on March 31, 2021, with ethical certificate number 2199-KEPK.

Researchers guarantee the confidentiality of information and data obtained from participants. This is done by storing data that the researcher can only access. The researcher will maintain the confidentiality of the information provided by the sample by not giving the results to others. Data processing is carried out by the researchers themselves without the help of others. The only institution that has the right of publication with the researcher’s permission is the Faculty of Nursing, Universitas Airlangga. The researcher stores the respondent's information data for approximately four months until the completion of this research.

**RESULTS**

From 100 respondents, it was found that mothers who had children aged 6-12 months were mainly in the adult age range between 26 to 35 years. This study was conducted on Madurese mothers who have children aged 6-12 months at The Sidotopo Wetan Community Health Center who meet the inclusion and exclusion criteria. Based on data on demographic characteristics, The majority of the respondents are 26-35 years as many as 54 respondents (54%), occupations were housewives as many as 89 respondents (89%), educations are senior high school as many as 34 respondents (34%), infant aged are 12 months as many as 19 people (19 %), parity are multiparous as many as 68 people (68%) (Table 1).

Table 2 shows that the results of the statistical test spearman rho show p = 0.071 which means that there is no relationship between psychology and behavioural factors Madurese mothers in exclusive breastfeeding in The Sidotopo Wetan Community Health Center, In the analysis of the research variables, it was found that 82 respondents (82%) had a good psychological condition, 18 respondents (18%) had the bad psychological condition. Good psychological conditions in this study, such as not worry if the milk that comes out is not smooth, comfortable breastfeeding, not worrying if the breast milk given is not enough to fill the baby, feeling closer to the baby while breastfeeding, and not worrying about not being able to become a good parent for my child.

Table 3 shows that the statistical test result Spearman rho shows = 0.000 and the value of r = 0.373, which means there is a relationship between family support with maternal behaviour and Madurese in exclusive breastfeeding with enough correlation value. Most of all respondents (64%) had less family support, 32 respondents (32%) had good family support. Good family support conditions in this study, namely get information related to exclusive breastfeeding from the family, accompany the mother in consultation with health workers, provide information on how to prepare and give expressed breast milk to babies when the mother is working/when the mother is away, providing nutritious food for mothers, helping to care for babies during breastfeeding (0-6 months), helping with household chores, and listening to the mother's complaints during exclusive breastfeeding.

Table 4 shows that the statistical test result Spearman rho show p = 0.000 and the value of r = 0.396, which means there is a relationship between socio-cultural behaviour...
Madurese mothers in exclusive breastfeeding with enough correlation value. Most respondents (65%) had a socio-culture that was not supporting breastfeeding exclusively; 35 respondents (35%) had a socio-culture supporting breastfeeding exclusively. Socio-culture who do not support breastfeeding exclusively in this study, namely the existence of traditions and beliefs related to early feedings, such as giving bananas, porridge, honey, sweet water or coconut water for infants under six months of age, and providing additional breastfeeding food as soon as possible. So that the baby is not fussy, does not get hungry quickly and grows faster, removes yellow fluid or colostrum fluid or milk fluid that first comes out when a newborn is born, and there is still a view that colostrum fluid is a dirty liquid that must be discarded because it makes children sick.

**DISCUSSION**

In this study, it was found that there was a relationship between family support and the behaviour of Madurese mothers in exclusive breastfeeding at The Sidotopo Wetan Community Health Center. The families in this study were the husband, biological mother, mother-in-law, children, relatives, and the closest extended family. One form of family support in this study is to assist in material, physical assistance, and assistance to solve problems. Therefore, family is the closest support for mothers in helping exclusive breastfeeding.

Family support and presence are very important for breastfeeding mothers to increase self-confidence and provide strong motivation for breastfeeding mothers. This is in line with research conducted by Oyay et al. (2020), which revealed that family support would increase mother’s motivation in exclusive breastfeeding so that there is a relationship between family support and exclusive breastfeeding behaviour. This is also a fact in the field when data collection for respondents, mothers get more support. It is stated that most of the respondents receive instrumental support such as families

**Table 2.** The relationship between psychological factors and the behaviour of Madurese mothers in exclusive breastfeeding (n=100)

| Psychology | Exclusive Breastfeeding | Total | Spearman Rho Test |
|------------|-------------------------|-------|-------------------|
|            | Yes                     | No    |                   |
|            | % n                     | % n   |                   |
| Bad        | 18 0 18                 | 0     | 0.071 0.181       |
| Good       | 66 16 66 16             | 16    |                   |

**Table 3.** Relationships with family support Madurese mother’s behaviour in Exclusive breastfeeding (n=100)

| Family Support | Exclusive Breastfeeding | Total | Spearman Rho Test |
|----------------|-------------------------|-------|-------------------|
|                | Yes                     | No    |                   |
|                | % n                     | % n   |                   |
| Less           | 61 3 64                 | 3     | 0.000 0.373       |
| Good           | 23 13 36 13             | 13    |                   |

**Table 4.** Socio-cultural relationship with the behaviour of Madurese mothers in exclusive breastfeeding (n=100)

| Socio-Cultural | Exclusive Breastfeeding | Total | Spearman Rho Test |
|----------------|-------------------------|-------|-------------------|
|                | Yes                     | No    |                   |
|                | % n                     | % n   |                   |
| No             | 60 5 65 5              | 5     | 0.000 0.396       |
| Yes            | 24 11 35 11             | 11    |                   |
providing nutritious food for mothers, helping to care for babies during breastfeeding (0-6 months), families helping to take care of the housing ladder. Housework, as well as a family assisting mothers when they need something like getting baby diapers, fetching mommy’s drinks when mommy is nursing the baby.

This is in line with the research conducted by Oktalina et al., (2015) that there is a relationship between family support and exclusive breastfeeding behaviour. Family support contributes to the behaviour of mothers for exclusive breastfeeding as informational support, instrumental support, assessment support and emotional support. Conversely, mothers who have less family support are more likely to give exclusive breastfeeding to their babies.

The study found a relationship between socio-culture and the behaviour of Madurese mothers in exclusive breastfeeding at The Sidotopo Wetan Community Health Center. Based on the results of the study, there were still traditions and beliefs of the family and the environment around the mother to provide food from an early age such as bananas, porridge, honey, or coconut water for babies under the period of 6 months, besides that there is still a family tradition that considers giving food as early as possible so that baby is not fussy and not hungry. The traditions and beliefs of the family still exist today even though the mother has lived in the city of Surabaya for a long time because most of the mothers live with their families.

The majority of 68 respondents giving colostrum to baby and a total of 32 respondents still disposed of colostrum or milk that was first released when a newborn was born, but most of the mothers had not disposed of colostrum because they received directions from health workers in health services when the mother gave birth. This is supported by the respondent who said that the mother knew that colostrum was good for the child. Still, she could not give it on the first day of her child's birth because the mother’s parents threw away the mother's colostrum. After all it was considered a dirty liquid that could make the child sick. It can be concluded that mothers have low autonomy compared to their parents because of tradition, fatalistic attitudes and strong ethnocentric attitudes of their parents. As many as 81 respondents believed that the crying baby was only because the baby was hungry. It triggered the mother and family to give early feeding so that the baby was not fussy and did not get hungry quickly.

This is the same as research conducted by Setyaningsih & Farapti (2018) that there is a relationship between belief and tradition in the family related to mothers’ success in exclusive breastfeeding. This is in line with the research results conducted by Mubarokah & Muniroh (2020) to Madurese women in the Bangkalan Health Center Work Area, Madura, that the Madurese ethnic community has socio-cultural nutrition in infants who are still closely attached to the community. Culture will strongly influence society, resulting in attitude holistic (strong belief in the culture) and an attitude ethnocentric (attitude that considers the tradition to be the best). Madurese culture is still closely related to its cultural beliefs and traditions. It is proven that Madurese mother, who has lived in urban areas for a long time, still preserves her culture even though she no longer lives in her hometown.

**CONCLUSION**

Psychological factors are not related to the behaviour of Madurese mothers in exclusive breastfeeding at The Sidotopo Wetan Community Health Center. Good psychological factors in mothers do not necessarily increase exclusive breastfeeding behaviour. Multiparous mothers had more previous breastfeeding experience than primiparous mothers. In this study, some of the respondents were multiparous mothers, so that the psychological factors of mothers were mostly good because they had previous breastfeeding experience. Family support has a relationship with the behaviour of Madurese mothers in exclusive breastfeeding at The Sidotopo Wetan Community Health Center. Good support in the family is more likely to increase exclusive breastfeeding behaviour. Socio-culture has a relationship with the behaviour of Madurese mothers in exclusive breastfeeding at The Sidotopo Wetan Community Health Center. Family traditions and beliefs that are still attached can influence behaviour in exclusive breastfeeding.

Suggestions for next researchers: If they
want to do research related to the Madurese, it would be better to prepare a Madurese language questionnaire to understand it. Also, if the next researcher wants to see a picture related to the psychological factors of breastfeeding mothers, the respondent criteria should be devoted to primiparous mothers.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

ACKNOWLEDGMENT

The researcher would like to express gratitude for the support and assistance from the head of the Sidotopo Wetan Community Health Center, who had provided permission to the researchers to conduct a study. Furthermore, many thanks are also addressed to Integrated health Care Center cadres and all respondents who assisted in the data collection process in this study. Thanks are also addressed to Dean of the Faculty of Nursing Airlangga University, Deputy Dean 1 of the Faculty of Nursing Airlangga University, mentors, parents, siblings, and friends who have helped in this study.

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