

Original Research Article

THE EFFECT OF THE USE OF SCRUB, CONSUMPTION OF TRADITIONAL HERBAL AND EXCLUSIVE BREASTFEEDING WITH THE DEVELOPMENT OF UNDERAGE INFANTS FROM 12 MONTHS IN MADURA COMMUNITY, EAST JAVA

Nurul Kamariyah ^{1*}, Siti Nurjanah ¹

¹ Faculty of Nursing and Midwifery, Nahdlatul Ulama University, Surabaya

*Correspondence:

Nurul Kamariyah

Faculty of Nursing and Midwifery, Nahdlatul Ulama University, Surabaya SMEA Road 57, Surabaya City, East Java Province, Indonesia

Email: nurulkamariyah@unusa.ac.id

Article Info:

Received: December 2, 2020

Revised: June 9, 2021

Accepted: June 9, 2021

DOI:

<https://doi.org/10.36720/nhjk.v10i1.238>

Abstract

Background: The tradition that is still attached to the Madura community even though they have received higher education is to maintain the culture of their ancestors which is perceived to be true, restricted movement, use of body scrubs, drinking herbal medicine, and giving food to babies early. This will continue to be implemented by their children and grandchildren as long as the problem is believed to be the best tradition (Kamariyah, 2019).

Objectives: The purpose of this research was to analyze the effect of using scrubs, consumption of herbs, and exclusive breastfeeding with the development of infants less than 12 months in the Madura community of East Java.

Methods: This research used analytical research design. the population is postpartum mothers and infants under the age of 12 months in the Madura community, East Java, with population of 30 people, a sample of 26 respondents simple random sampling. The independent variables are the use of scrubs, consumption of herbal medicine, and exclusive breastfeeding, while the dependent variable is infant development. Data collection was done by means of interviews and observations, and the analysis of the data used was the Mann-Whitney test. The results of the Mann-Whitney statistical test with significance level 0.05.

Results: The result was $0.002 < \alpha 0.05$ so that H_0 was rejected, which means that there is an influence of the tradition of consuming herbal medicine with the breastfeeding, the result is $0.022 < 0.05$ so that H_0 is rejected, which means that there is an influence of the tradition of exclusive breastfeeding. with the development of infants aged less than 12 months in the Madurese community of East Java. Conclusion: Consumption of herbal medicine, use of scrubs and exclusive breastfeeding will increase the development of infants before the age of 12 months in the Madurese community of East Java.

Conclusion: Expected to apply the existing culture while still paying attention to the science that develops according to its era, for health workers to disseminate the knowledge obtained and change the mindset of the community.

Keywords: *Herbal, scrub, exclusive, development.*

INTRODUCTION

The unitary state of the Republic of Indonesia has many socio-cultural aspects. The Indonesian nation is a multi-religious, multi-cultural source that will serve as a potential for the prosperity of society, especially multi-traditions related to health, particularly reproductive health. The traditions inherent in an area will continue to be implemented by their children and grandchildren as long as the problem is believed to be the best tradition. One of the traditions inherent in society even though individuals exist in other areas is the Madurese tradition, such as community behavior during pregnancy, childbirth and during the postpartum period.

Most of the Madurese people who have high social status will increase their knowledge by taking higher education, one example is health education. As one example is the concept of the Madurese community having the belief that early marriage will be better than being an elderly nurse, so that many still marry at an early age or under the age of 20. There are still babies under 6 months of age who have been given additional food by their parents, whereas in theory, babies under six months of age should be exclusively breastfed without giving any food, either water or honey. Other behaviors carried out by the Madurese community cause a high incidence of illness or health problems for mothers and their babies, which are indicators of reproductive health problems.

The data that supports the above problems are the results of Dian's research at the Wonokromo Surabaya family in 2018 with the results that most (72%) of the incidence of marriage at an early age. And the results of Santi's research in 2019 in the Wonokromo district were also conveyed that most of the mothers giving birth have given additional food to their babies before the age of 6 months. Other data also supports the results of Kamariyah research in 2018, with the results of most of the mothers giving birth to put stagen strictly after giving birth even though they have high education.

The factors that influence the traditions of the Madurese community are still strong against the existing traditions because there are internal factors that exist within them which are very strong in maintaining the traditions of their ancestors which, with such fanatical conditions, will happen if something is not done that will happen to them. There are external factors, one of which is because of the association with in-laws so that you have to follow what your in-laws say. In addition, the main factor of the nation, between eastern and western people has an influence on the national character factor. Another factor is the nation's contact with others or the factor of one's contact with other people or the motivating factor of one's partner to carry out behavior or traditions like in general Madurese society.

A solution that can be given to solve the problem of community traditions that have behavior that is not in accordance with the behavior of a healthy life is that they have to bring up new discoveries, socialized basic scientific conflicts by society, events or concrete examples, contact with other cultures, socialization of science that was found. The solutions offered can change the people's mindset.

METHODS

Study Design

research design used in this study is correlational.

Setting

This research was conducted in the Madurese community in East Java from March until July 2020.

Research Subject

The population in this study were all mothers who had babies aged less than 12 months in the Madurese community in East Java, with a large population of 30 people. The sample is 26 people using the binominal proportions formula. The sampling technique used is non-probability sampling method. The

sample selection method is purposive sampling technique.

Instruments

The independent variable is the use of scrubs, consumption of herbal medicine, and exclusive breastfeeding, while the dependent variable is the development of the baby. Validity test using the product Moment formula, the value obtained is 0.046 so that it is declared valid while the reliability measurement based on Cronbach's Alpha is $p > 0.05$ or $0.6309 > 0.05$ is declared reliable.

Data Analysis

RESULTS

Crosstabulation of the Tradition of the Use of Scrubs with Exclusive Breastfeeding in Women Post-Partum

Table 1. Crosstabulation of the tradition of the use of scrubs with exclusive breastfeeding in women post-partum in Madurese community in East Java from March until July 2020.

Breastfeeding Traditions	Use of scrubs						Amount Σ		p-value
	Often		Sometimes		Less		N	%	
	N	%	N	%	N	%			
Exklusiv breasfeeding	7	100.00	0	0.00	0	0.00	7	100.00	0.000
Not eksklusiv breasfeeding	8	42.11	9	47.37	2	10.51	19	100.00	
Amount	15	57.70	9	34.62	2	7.69	26	100.00	

Sources: Primary Data of Questionnaire, 2020.

Based on the table 1, the results of the Mann-Whitney statistical test obtained $\rho = 0.000 < \alpha = 0.05$ so that H_0 is rejected, which means that there is an influence between the tradition of using scrubs and exclusive breastfeeding for post-partum women in the Madurese community in East Java.

Crosstabulation of the Tradition of the Consumption of Herbs with the Provision of Exclusive Breastfeeding in Women Post-Partum

Based on the table 2, it found that the results of the Mann-Whitney statistical test, obtained $\rho = 0.002 < \alpha = 0.05$ so that H_0

Analysis of the data used is the Mann-Whitney test. The degree of confidence is 95%, then the error rate is 5%.

Ethical Consideration

Ethical clearance in this study with informed consent, data is also presented with due regard to anonymity and confidentiality (Nursalam, 2018). This research has obtained permission from the Institute for Research and Community Service of Nahdlatul Ulama University, Surabaya with no. 1.153/UNUSA/Adm-LPPM/V/2020

is rejected, which means that there is an effect of the tradition of consuming herbal medicine by exclusive breastfeeding to post-partum women in the Madurese Community in East Java.

Crosstabulation of the Traditions of Early Complementary Feeding with the Development of the Baby

Based on the table 3, it found that The results of the Mann-Whitney statistical test, obtained $\rho = 0.022 < \alpha = 0.05$ so that H_0 rejected, which means that there is an effect of the tradition of early complementary feeding with the development of infants aged less than

12 months in the Madurese community of East Java.

Table 2. Crosstabulation of the tradition of the consumption of herbs with the provision of exclusive breastfeeding in women post-partum in Madurese community in East Java from March until July 2020.

Breastfeeding Traditions	Consumption of Herbs						Amount		p-value
	Often		Sometimes		Not		Σ		
	N	%	N	%	N	%	N	%	
Exclusive breastfeeding	0	0.00	3	42.86	4	57.14	7	100.00	0.002
Not exclusive breastfeeding	5	26.32	4	21.05	10	52.63	19	100.00	
Amount	5	19.23	7	26.92	14	53.84	26	100.00	

Sources: Primary Data of Questionnaire, 2020.

Table 3. Crosstabulation of the traditions of early complementary feeding with the development of the baby in Madurese community in East Java from March until July 2020.

Breastfeeding Traditions	Baby Development						Amount		p-value
	Normal		Suspect		Untestable		Σ		
	N	%	N	%	N	%	N	%	
Exclusive breastfeeding	6	85.71	1	14.29	0	00.00	7	100.00	0.022
Not exclusive breastfeeding	5	26.32	14	73.68	0	00.00	19	100.00	
Amount	11	42.31	15	57.69	0	00.00	26	100.00	

Sources: Primary Data of Questionnaire, 2020.

DISCUSSION

Effect of Traditional Use of Body Scrub with granting of exclusive breastfeeding

The results of the Mann-Whitney statistical test of exclusive breastfeeding with child development with a significance value of $\alpha = 0.05$ obtained the calculation result of $\rho = 0.000$, meaning that H_0 rejected, so there is an influence between the tradition of using scrubs and exclusive breastfeeding in post partum partum women in the Madura community East Java. The use of scrubs during childbirth will increase the perception of post partum women to breastfeed exclusively. Strong perceptions will affect the increase in receptors of Thyroithropin Releasing Hormone (TRH). TRH works through lactotropic cell membrane receptors which will activate phospholipase C and increase prolactin gene transcription, thereby increasing the release of the hormone prolactin. Vaso Active Peptide (VIP) works

through a mechanism, namely; stimulates the release of oxytocin through the hypothalamus and affects the inhibition of dopamine in adenylate cyclase so that there is an increase in the release of prolactin which will affect the production of breast milk more smoothly so that breastfeeding women will breastfeed exclusively.

This is because babies receive exclusive breastfeeding which contains taurine, Decosa Hexanoic acid (DHA), *arachidonic acid* (AA), immunoglobulin A (Ig A), immunoglobulin G (Ig G), lactoferin, lysozim, Enzyme, carbohydrates, proteins, vitamins, and others. - Other to meet baby's needs. In addition, there is no *bounding attachment* between mother and baby during the breastfeeding process, which is to provide opportunities for mothers to get closer to the baby through bodily stimulation provided by the mother to the baby. This is in accordance with what was taken from the thesis (Nurul, 2012) that exclusive breastfeeding will

increase the receptors of Thyrothropin Releasing Hormone (TRH). TRH works through lactotropic cell membrane receptors which will activate phospholipase C and increase prolactin gene transcription, thereby increasing the release of the hormone prolactin. *Vaso Active Peptide* (VIP) works through a mechanism, namely; stimulates the release of oxytocin through the hypothalamus and affects the inhibition of dopamine in adenylate cyclase resulting in increased prolactin release. *Angiotensin II* (Ag II) is a prolactin releasing factor and is delivered by the hypothalamus to the anterior pituitary to bind to prolactin receptors, thereby increasing prolactin release. Breastfeeding will be more effective if the mother has a long time to breastfeed, because there is a process of interaction during the breastfeeding process that allows the mother to provide stimulus to the baby through hugs, eye contact, communication between mother and baby, the mother's efforts to calm the baby when crying and the baby's efforts. look for the mother's nipple, so that there is bounding attachment. This is in accordance with the theory of Fitria (2012), bounding attachment can be obtained from breastfeeding, this gives the mother the opportunity to provide a stimulus to the baby by touching the baby, inserting the nipple in the baby's mouth, creating eye contact, interacting with the baby so that hormone levels prolactin will increase.

The Relationship between Traditional Herbal Consumption and Exclusionary Breastfeeding

The results of the statistical test *Mann-Whitney* tradisis exclusive breastfeeding with the understanding of religion with a significance value of $\alpha = 0.05$ obtained calculation results $\rho = 0.19$, which means that H_0 is accepted then there is the influence of the tradition of the consumption of herbal medicine with the provision of breastfeeding is exclusive in women post partum community Madura in East Java in January-

June 2020. Tradition consumption of herbal medicine when giving birth will 'm Enhancing the perception of post-partum women to do exclusive breastfeeding. A strong perception of the receptor increases of Thyrothropin Releasing Hormone (TRH). TRH works through lactotropic cell membrane receptors which will activate phospholipase C and increase prolactin gene transcription, thereby increasing the release of the hormone prolactin. *Vaso Active Peptide* (VIP) works through a mechanism, namely; stimulates the release of oxytocin through the hypothalamus and affects the inhibition of dopamine in adenylate cyclase so that there is an increase in the release of prolactin which will affect the production of breast milk more smoothly so that breastfeeding women will breastfeed exclusively

This is because the motivation to breastfeed someone who has a good understanding of religion will increase one's awareness of breastfeeding exclusively. A person who has a good understanding will raise awareness of his obligation to breastfeed. It is evident that there are still mothers who have a good religious understanding of breastfeeding, in fact they do not exclusively breastfeed. Exclusive breastfeeding is influenced by many factors, for example the motivation factor from him to give breastfeeding exclusively even though he is a working person. In general, people who work are lazy to pump their milk, especially if they work and interact with the community to provide services, so they don't have the opportunity to pump their milk. Therefore, exclusive breastfeeding is greatly influenced by motivation in itself. Self-motivation that is in the respondent will increase if it is supported by good religious knowledge. Good religious knowledge will always accompany a person's behavior to be careful in taking his main actions in exclusive breastfeeding. This is supported by the underlying argument, which is the Qur'anic letter Albaqoroh verse 233 which instructs mothers to breastfeed their children for two full years. Because, at this time children

still need breast milk. After that, a child begins to taste food and drink, while breast milk cannot be matched by other milk.

The Relationship between the Tradition of Exclusive Breastfeeding and the Development of Infants less than 12 Months

The results of the statistical test *Mann-Whitney* exclusive breastfeeding with higher levels of the hormone prolactin, the value of significance $\alpha = 0.05$ obtained calculation results $\rho = 0.000$, which means that H_0 is rejected means that there is the influence of the tradition of giving exclusive breastfeeding in early with the development of baby's age less than 12 months for the Madurese, East Java.

The tradition of giving food companion breastfeeding when infants aged less than 6 months will enhance the perception of post partum women to continue to provide although it is not compatible with the concept of scientific theory. The experience they received was that being around neighbors or other relatives who provided complementary foods from an early age resulted in their children being fat and having good development. Likewise, the experience that is felt is increasingly giving side dish for babies, the less they experience pain. The advantages of exclusive breastfeeding are that the baby experiences growth and development according to age, forms a strong bond, and minimizes the risk of the baby developing digestive, respiratory, and other diseases. This is because babies receive exclusive breastfeeding which contains taurine, decosahexanoic acid (DHA), arachidonic acid (AA), immunoglobulin A (Ig A), immunoglobulin G (Ig G), lactoferin, lysozyme, carbohydrates, protein, vitamins, and others. Other to meet baby's needs. In addition, there is no *bounding attachment* between mother and baby during the breastfeeding process, which is to provide opportunities for mothers to get closer to the baby through bodily stimulation provided by the mother to the

baby. This is in accordance with the theory put forward by Diah (2012), that the advantages of exclusive breastfeeding are that the baby experiences growth and development according to age, forms a strong bond, and minimizes the risk of the baby developing digestive, respiratory, and other diseases.

Breastfeeding will be more effective if the mother has a long time to breastfeed, because there is an interaction process during the breastfeeding process that allows the mother to provide stimulus to the baby through hugs, eye contact, communication between mother and baby, the mother's efforts to calm the baby when crying and the baby's efforts to look for the mother's nipple, so that there is *bounding attachment*. This is in accordance with Fitriana (2012) theory, *bounding attachment* can be obtained from breastfeeding, this gives the mother the opportunity to provide a stimulus to the baby by touching the baby, inserting the nipple in the baby's mouth, creating eye contact, and interacting with the baby so that there is an increase in levels of the hormone prolactin which affects child development.

CONCLUSION

Based on the results of research and discussion the effect of the use of scrub, consumption of traditional herbal and exclusive breastfeeding with the development of under age infants from 12 months in madura community east java, it is concluded as follows:

1. There is a relationship between the tradition of the use of scrubs with the provision of exclusive breastfeeding in public Madura, East Java.
2. There is a relationship between the tradition of the consumption of herbs with the provision of exclusive breastfeeding on postpartum community women Madura, East Java.
3. There is a relationship between the tradition of breastfeeding and the development of babies aged less than 12 months in the Madurese community in East Java.

SUGGESTIONS

Health workers should conduct counseling in order to increase knowledge and change the mindset of the community.

ACKNOWLEDGMENT

We would like to express our gratitude to Institute for Research and Community Service of Nahdlatul Ulama University, Surabaya who always gave full support in conducting this research.

DECLARATION OF CONFLICTING INTEREST

None.

FUNDING

This research was funded by the Nahdlatul Ulama University, Surabaya.

AUTHOR CONTRIBUTION

Nurul Kamariyah: Compile and device review measuring tools, coordination and management of permits, coordination of the data collection, analysis data, and writing manuscript.

Siti Nurjanah: Coordinate all activities, data collection and analysis, compiling reports, writing manuscript.

ORCID

Nurul Kamariyah

None.

Siti Nurjanah

None.

REFERENCES

Adriana, D (2011). *Tumbuh Kembang dan Terapi Bermain pada Anak*. Jakarta : Salemba Medika

Arikunto, Suharsimi. (2010). *Prosedur Penelitian Suatu Pendekatan*. Jakarta : Rineka Cipta

Aziz, Alimul Hidayat. (2008). *Pengantar Ilmu Kesehatan Anak untuk Pendidikan Bidan*. Jakarta: Salemba Medika.

Diah, (2012). *Pengertian ASI Eksklusif dan Manfaat ASI Eksklusif*. Dalam www.jurnalbidan.com. Artikel diakses tanggal 18 Mei 2013

Dinkes Prov Jatim, (2012). *Profil Dinas Kesehatan Provinsi Jawa Timur 2012*. Jakarta, Dinas Kesehatan

Depkes RI, (2006). *Pedoman Pemberian MP-ASI Lokal*. Surabaya, Bakti Husada

Depkes RI, (2006). *Stimulasi Deteksi dan Intervensi Dini Tumbuh Kembang Anak*. Jakarta, Depkes RI

Fitria (2012). *Hubungan Bounding Attachment dengan Perkembangan Bayi*. Dalam www.fitmidwife.com, diakses tanggal 25 Juni 2013

Hendrik, Y., & Yuliana, Y. (2018). Hubungan antara Pengetahuan dan Sikap Ibu Nifas dengan Kejadian Pemberian Kolostrum. *Jurnal Kebidanan*, 6(2), 265339.

Hidayati, T. H. T. (2012). Perempuan Madura antara tradisi dan industrialisasi. *KARSA: Journal of Social and Islamic Culture*, 16(2), 62–74.

Hubertin SP, (2004). *Konsep Penerapan ASI Eksklusif. Buku Saku Untuk Bidan*. Jakarta : EGC

Kamariyah, N. (2012). the influence of giving katu's leaf extract fraction toward prolactin level of breastfeeding mice and neuralgia cells of young mice. *Journal of Health Sciences*, 5(2).

Kamariyah, N. (2014). Kondisi psikologi mempengaruhi produksi asi ibu menyusui di Bps Aski Pakis Sido Kumpul Surabaya. *Journal of Health Sciences*, 7(1).

Kamariyah, N. (2019). Efektifitas Pemberdayaan Kader "Rapid" Terhadap Peningkatan Derajat Kesehatan Ibu Post Partum Dan Anak Di Kelurahan Wonokromo Surabaya. *Journal of Health Sciences*, 12(02), 115–124.

Kamariyah, N., Anggasari, Y., & Muflihah, S. (2014). *BUKU AJAR KEHAMILAN: UNTUK MAHASISWA DAN PRAKTISI KEPERAWATAN SERTA KEBIDANAN*. Salemba Medika.

Kamariyah, N., Yasi, A., & Siti, M. (2014).

- Buku Ajaran Kehamilan*. Jakarta.
- Krisnatuti, Diah (2004). *Menyiapkan Makanan Pendamping ASI*. Jakarta : Puspa Swara
- Kristiyanasari, Weni (2009). *ASI Menyusui dan SADARI*. Jogjakarta : Nuha Medika
- Laksono, Kodrat (2010). *Dahsyatnya ASI dan Laktasi*. Jakarta : Media Baca
- Kuswandi, I., & AZIZAH, L. F. (2018). Mitos Sangkal Dalam Tradisi Pertunangan Dini Di Madura. *Prosiding Semnas PPM 2018*, 1(1), 1451–1460.
- Muslihatun, Wafi Nur (2010). *Asuhan Neonatus, Bayi dan Balita cetakan Pertama*. Jogjakarta : Penerbit Fitramaya
- Marimbi, Hanum (2010). *Tumbuh Kembang Status Gizi dan Imunisasi Dasar pada Balita*. Jakarta : Nuha Medika
- Nanny, Vivian (2010). *Asuhan Neonatus Bayi dan Anak Balita*. Jakarta : Salemba Medika
- Nursalam. (2008). *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan*. Jakarta: Salemba Medika.
- Prasetyono, DS (2009). *Buku Pintar ASI Eksklusif*. Jogjakarta :DIVA Press (Anggota IKAPI)
- Purnamasari, Ariavita ed (2006). *Kamus Perkembangan Bayi dan Balita*. Jakarta : ESENSI
- Riksani, Ria (2011). *Keajaiban ASI*. Jakarta Timur : Dunia Sehat
- Setyaningsih, F. T. E., & Farapti, F. (2019). Hubungan Kepercayaan dan Tradisi Keluarga pada Ibu Menyusui dengan Pemberian ASI Eksklusif di Kelurahan Sidotopo, Semampir, Jawa Timur. *Jurnal Biometrika Dan Kependudukan*, 7(2), 160. <https://doi.org/10.20473/jbk.v7i2.2018.160-167>

Cite this article as: Kamariyah, N. & Nurjanah, S. (2021). The effect of the use of scrub, consumption of Traditional herbal and exclusive breastfeeding with the development of underage infants from 12 months in Madura community, East Java. *Nurse and Health: Jurnal Keperawatan*, 10 (1), 154-161. <https://doi.org/10.36720/nhjk.v10i1.238>