Meeting Nutrient Needs of Postnatal Women in "Tarak" Tradition

(Study on Mountain Community in Trenggalek Regency)

*Astutik Pudjirahaju¹, AAG Anom Aswin², Dwie Soelistyorini³

1, 2,3Lecturers of Nutrition Department, State Health Polytechnic of Malang, Republik of Indonesia Corresponding Author:*Astutik Pudjirahaju

Abstract: Trenggalek is one of the regencies in East Java Indonesia that still encounter various maternal and child health problems, including very low exclusive breastfeeding practices (48,06%). Moreover, this regency has not yet reached the 2015 MDGs standard on exclusive breastfeeding (80%). Tarak tradition, a traditional diet to avoid longer puerperal period of up to 40 days, is practiced by mountain communities in Trenggalek and aimed at caring for postnatal women. Abstinence of food source of protein, such as chicken, beef, eggs, fish, and tempe (fermented soybean) and consumption of mainly staple food such as white rice and boiled vegetables are characteristics of Tarak practice. This study was aimed at analyzing the provision of energy and nutrient needs of postnatal in Tarak tradition and to enhance the technical personnel role on lactation management in exclusive breastfeeding practices in mountain communities of Trenggalek Regency. This study applied qualitative design with phenomenological approach as the involving women in mountain communities of Trenggalek who undergo three consecutive phases, namely third trimester, postnatal, and breastfeed for 6 months. To obtain a profound description of the provision of the energy and nutrients of postnatal women in Tarak tradition and enhancing the technical personnel role on lactation management, in-depth interviews, obsevation, 24-hour Food Recall, and counseling on lactation management based on the modified 40 hour WHO/Unicef breastfeeding counseling module were administered. The data were then analyzed using Miles & Huberman model. The study took 10 months from March to December 2016. The results showed that the respondents in mountain area of Bendungan sub-district Trenggalek committed to practice Tarak tradition (food abstinence) during pregnancy and postnatal. The belief of eating pineapple that would cause miscarriage was the most common practice of it. The other practices are dietary restrictions of banana and tape (fermented cassava). Enhancing the technical personnel role on lactation management brought a significant effect on the raise of exclusive breastfeeding practices. Therefore, women in third trimester pregnancy and postnatal are recommended meeting the energy and nutrition needs in order to be able to breastfeed the baby exclusively for 6 months.

Keywords: Tarak tradition, Lactation Management

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The immediate cause of the undernutrition problem is the food intake which is mainly affected by family and environment food habits. The local custom also shaped one's perspective, assessment, and meaning of food. According Suhardjo (1989), the food habits are closely related to environment, level of life, experience, as well as education. Not all food habits in the community

I. Introduction

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positively support the importance of having adequate energy and nutrients needs. Some food taboos in the community are against the principle of having nutritious food for health. The food taboo is associated with emotion and, hence, most food taboos are embraced by women and children under the mother's care (Suhardjo, 1989). These dietary restrictions are usually committed by children under mother's care, pregnant women, and breastfeeding mothers. The study of Swasono and Soselisa (1991) in Bandaneira showed that soon after delivery the mother would undergo food abstinence and physical treatment led by a traditional birth attendant.

A postnatal woman is soioculturally directed to undergo certain treatments led by a traditional birth attendant or someone who is believed to have experience of postnatal care. The treatments of postnatal usually cover drinking herbal medicine and abstinence for certain foods called Tarak. The provisions or taboos for the postnatal woman usually last for 40 days. A postnatal woman under this treatment usually consumes staple food like white rice and boiled vegetables. Food intakes such as chicken, meat, fish, eggs, tempe (fermented soybean), and salt are prohibited. In fact those foods contain essential nutrients such as proteins, fats, vitamins, and minerals needed for body's metabolic processes and recovery of reproductive organs, as well as for milk production. This condition has been identified as one of the cause of health problems for mothers and babies. The insufficient supply of energy and nutrients during the postpartum will directly affect the amount and composition of breast milk.

According to Soetjiningsih (1994), breastfeeding mothers are vulnerable to undernutrition problem since they are undergoing recovery, menstruation, and breastfeeding as well as replenishing their body needs. At the time of breastfeeding mothers lose both nutrients micro and macro, such as iron and calcium. Muchtadi (2002) also points out that the volume of breast milk is influenced by emotions, such as stress or anxiety (in the first weeks), and the mother's nutritional state. Breast milk production from undernutrition mothers often decreases in number and eventually stops. Mothers and their babies are the most aggrieved party of having nutrition problems for postnatal and infant growth caused by the taboos and antenatal care practiced by the mountain communities in Trenggalek.

The program of enhancing exclusive breastfeeding (PP-ASI) is highly prioritized because of its wide impact on nutrition and health status of children under five. This priority program also deals with global agreements such as the 1990 Innocenti (Italy) declaration on the protection, promotion and support of breastfeeding, as well as the achievement of exclusive breastfeeding of 80% in 2000. The WHO Diarrhea Prevention Program has long acknowledged the need to promote exclusive breastfeeding practices in the first 6 months of infant life. In addition continued breast-feeding supported with the provision of supplementary foods until 2 years old or older will reduce morbidity and mortality from diarrhea. For more than a decade, the International Code of Substitute Marketing of Breast Milk has been established and has been recognized with much effort to protect breastfeeding activities from the influence of commercial product promotions.

Exclusive Breastfeeding represents a natural baby feeding method. However, women are often uninformed or even misinformed about its benefits, how to breastfeed properly, and what to do when encountering breastfeeding problem. Breastfeeding is an art that needs to be re-examined since its success does not require special tools and expensive costs. All it takes are patience, time, breastfeeding knowledge, and support from family especially husband. The long experience of breastfeeding suggests that the major barrier to breastfeeding is the needs of proper breastfeeding knowledge and exclusive breastfeeding. Breast milk and breastfeeding are usually considered to be a naturally born thing that does not need learning. In fact breast milk especially exclusive breastfeeding is of great importance to learn. On the other hand, the technology development that leads the growth of dairy industry, accompanied by intensive illumination of infant formula and sometimes misleading

advertisements, as well as increased participation of women in the workplace and modern lifestyle, greatly affect breastfeeding and its pattern in urban areas.

Exclusive breastfeeding in Indonesia only reached 38% in 2013, while formula feeding greatly increased 3 times from 10.3% to 32.5%. Trenggalek Health Office reported that exclusive breastfeeding achievement was only 48.06% in 2012 which was far below the average of East Java at 61.52% in 2011 to 64.08% in 2012. It was even further from the 2015 MDGs standard on Exclusive Breastfeeding of 75%. Exclusive breastfeeding is one of 10 types of Global Evidence interventions in which if implemented with 90% coverage, it can reduce stunting by 15% (Lancet, 2013 in Izwardy, D., 2015). Although mothers have already initiated breastfeeding, they start to provide supplementary feeding several weeks after delivery.

All healthcare givers of postnatal mothers and children play an important role in promoting breastfeeding practices although in reality due to lack of training some of them have not yet taken their part effectively (Ministry of Health RI, 2007). A study by Astutik, P., et al. (2015) demonstrated that modified 40 Hours WHO/Unicef Counseling Module in Lactation Management significantly improved the practice of exclusive breastfeeding in Malang city.

Considering its significant importance, an in-depth study on the provision of energy and nutrition needs of postnatal women in Tarak tradition and enhancing the role of technical personnel on lactation management in exclusive breastfeeding practices in mountain communities in Trenggalek East Java was urgently required. All healthcare personnel responsible for providing care of the mother and baby need to improve the skills of supporting and promoting breastfeeding practices.

General Purpose of Research

To analyze the provision of energy and nutrient needs in "Tarak" tradition in mountain communities of Trenggalek Regency.

Specific Purposes of Research

- 1. To identify the food taboos practiced by postnatal women in Tarak tradition.
- 2. To analyze the provision of energy and nutrient needs of postnatal women in Tarak tradition through intervention on balanced nutrition counseling for postnatal and Supplementary Food (PMT).
- 3. To analyze the level of adequacy of energy consumption and maternal nutrition in Tarak tradition.

II. Research Methods

Design

The *first phase* of the research used qualitative design with phenomenological approach involving postnatal women in mountain communities in Trenggalek as subjects to obtain description of the provision of energy and nutrient needs of postnatal women in Tarak tradition and enhancing the technical personnel role on lactation management by in-depth interview, observation, and Food Recall 24 hours, and administering lactation management activities based on 40 hours WHO / UNICEF breastfeeding counseling module. The study was conducted in Trenggalek Regency, East Java for 10 months from March to December 2016.

Population, Sample and Research Informants

The subjects of the study were postnatal women from P0 to P40 and who breastfed the baby up to 6-month-old. The administration was conducted by visiting every postnatal woman from P0 to P3 carrying out Tarak tradition, traditional birth attendants, midwifes and community leaders. In this case, postnatal mothers taken as subjects carried out the whole series of activities in the Tarak

tradition practiced by the mountain community in the form of dietary restrictions considered to cause the extended postpartum period up to for 40 days.

To gain more valid data, this study searched deeper from informants consisting of community leaders, traditional birth attendant, pre and postnatal information center cadress, and midwives. This population was taken into the sample of the study using the Stanley formula, et al. (1997).

Research Phases

- 1. The identification of dietary habits in Tarak tradition was collected through a group discussion consisting of community elders, midwives, pre and postnatal information center cadress, and postnatal family through in-depth interviews.
- 2. The primary data collection was taken through in-depth interviews, observations and 24 hours Food Recall. In-depth interviews were aimed to obtain data on maternal nutritional need provision during Tarak practice and dietary restrictions. For more connived data, this study conducted interviews to 4 informants. The Observations was administered through the use of check list to get dietary data (food pattern) and activity of care during the Tarak practice. To obtain data on diet (number, type and frequency) of post natal women (P0 to P40), 24 hours Food Recall was carried out three times on different days.
- 3. The enhancement of exclusive breastfeeding practice

The enhancement of Exclusive Breastfeeding practices was measured by clinical practice forms and checklists, including:

- a. Breastfeeding observation, the history of breastfeeding
- b. Listening and learning skills
- c. Confidence and support skills
- d. Counseling skills
- e. Assessing and improving services

Data Analysis

The data, obtained from interviews and observation, were analyzed inductively using Miles and Huberman model (Sugiyono, 2008). The qualitative data were taken interactively and continuously until saturated and then treated through data reduction, data display and data conclusion.

In data reduction phase, the researcher summarized, selected the main points, focused on important things, and looked for the theme and pattern. The data were then displayed to find the pattern and determine the data based on the relationship between patterns. The next phase was conclusion drawing or verification. Certain categories were set up based on its importance and finally to draw conclusions.

Ethical Issue

This research has passed the "Etical Clereance" from Medical Research Ethics Commission of State Health Politecnic of Malang, register number: 217/KEPK-POLKESMA/2016.

III. Result And Discussion

A. Food Availability in Bendungan Sub-district of Trenggalek Regency

The research result indicated that people of Bendungan sub-district in Trenggalek East Java, as most answers of Indonesian people provide, were not convinced to have been full before consuming rice as their proper meals. In addition, they consumed a wide range of side dishes to complete rice with no careful consideration of the nutrients. When being questioned on what food they have had as main meals, immediate answers of most involved informen were rice. The

perception of what is called as whether or not main menu is obviously social construction. People perceive that they have already had their meals when they have consumed rice. Moreover, Foster & Anderson (2006) suggested that people generally perceive that food quantity is important and it will become a not-easy-to-change habit or even unchangeable as particular food is perceived to have deep meaning.

The consumption of side dishes with animal protein by pregnant and post-delivery women is relatively low in Bendungan sub-district of Kabupaten regency. People prefer both less expensive and more accesible food such as tempe and tofu. They even consume only a few sea food. Moreover, the availability of few sea food is fairly limited in Bendungan sub-district as it is relatively mountainous area throughout Trenggalek regency. The limited availability of few sea food at the fishmonger's raise its price considerably. Thus, people tend to purchase affordable side dishes. This is particulally true as Schutkowski (2006) suggested that logistic availability depends on geographical condition, climate, seasonal cycle and soil condition.

Moreover, logistic availability provided by environment or the ones obtained from sellers and those displayed by greengrocer's depict the people's pola makan. In fact, pregnant and postnatal women purchase any affordable food provided and displayed in those particular agents. These phenomena—dieting based on logistic availability—were analysed

Through culinary triangle method with structuralism concept (Livi-Strauss in Koentjaraningrat, 1987) as illustrated in image 1.

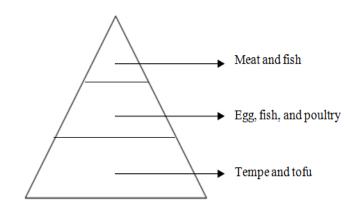


Image (1); Dieting of side dishes based on Food Availability

Image 1 indicated that dieting of women in the community towards side dishes was divided into three levels. First, tempe and tofu is a kind of side dishes consumed on daily basis as they are accessible and affordable. Second, fish, egg and chicken belong to frequently consumed food. Whereas, third, meat and sea food are food rarely consumed as they are expensive and unaffordable. Dieting in a particular community refers to dieting implemented by pregnant women and women of post-delivery in the community.

In medical terms, dieting with unbalanced menu is not strongly suggested. One portion of food should contain a wide range of nutrients. According to balanced nutrients code of practice (Pedoman Gizi Seimbang / PSG), daily food should contain sufficient nutrients with type and number specifically required by human body. Therefore, principle of food variety, physical activities, cleanliness, maintenance of normal weight should be taken into consider to avoid nutritious problems. (Ministery of Health the Republic of Indonesia).

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B. Food abstinence by pregnant women of Third trimester and postnatal women in Tarak Tradition

Food abstinence is a personal activity performed in a particular community in which the person in change do not consume or even avoid particular food due to their obedience to cultural attitude and familial implementation from generation to generation in a certain condition (Foster & Anderson, 2006). The food abstinence was well-known as "tarak" in the research area. However, food abstinence habitually implemented diminish as the time goes by as people's knowledge of health and food have improved significantly so that they can selectively sort out good food among medically inappropriate one.

Food abstinence was no longer popular among pregnant and post-term labour women in the area of research. Instead, Efforts to improve people's knowledge of nutrients has been taken by some medics through health eduaction specifically for pregnant and post-term labour women. This way, people have been well-informed about medically recommended food for pregnant and post-term labour women and eventually realized that food layoof was not a good habit in medical terms.

The research result indicated that pineapple, male flower of banana tree and fermented cassava were popularly believed tobe one of fruits should be laid off by pregnant and women of post-term labour in Bendungan sub-district Trenggalek regency as it was perceived to be able to cause miscarriage. Yet, on the other hand, parents obligate their pregnant and pre-labor daughters to consume various fruits perceived to be good for prospective infants.

Tarak or food abstinence is self-avoidance of particular food such as chicken meat based on personal or even communal preference (Marin, 2009). Tarak occurs in a community based on some factors such as influence of cullture (custom, tradition, ancestral prohibition) over daily habits saying that pregnant women especially those in postnatal period were perceived to produce unpleasant odour, suffer from long-term disgusting vaginal wetness, have impaired immunity and terrible mental and physical condition. Therefore, balanced nutrients is particularly needed during third trimester pregnancy and postnatal period. As a matter of fact, in medical terms, no specific food is forbidden unless those likely to cause allergy. Thus, laying off food or tarak during third trimester pregnancy and postnatal period especially over food with essential protein such as animal protein is a meaningless act and could cause danger. Parents' prohibition or Tarak during third trimester pregnancy and postnatal period was apparently a myth suggesting no longer consumption of a number of food such as fish, egg, chicken meat, and particular vegetables during third trimester pregnancy and postnatal period as they are perceived to harm health due to a lack of energy availability and nutrients. Hence, paramedics were encouraged to provide education through coaching and counselling so that during third trimester pregnancy and postnatal period women did not implement Tarak to prevent them from medical problems such as insufficient availability of energy and nutrientss.

B. Sample Characteristic of Third Trimester pregnant women and postnatal women

Table 2) Sample Distribution of Characteristic-based of Third Trimester pregnant women and postnatal women

Sample Characteristic of Third Trimester pregnant women	Number of Sample						
and postnatal women	n	%					
Age (Year)							
• 16 – 18	13	65,0					
• 19 – 29	7	35,0					
Level of Education							
SMP (Junior High School)	16	80 0					
SMA/SMK (Senior High / Vocational School	4	20 0					

Employment							
Unemployed	18	90,0					
Private Sector	2	10,0					
Level of Income							
• Poor	4	20,0					
Not Poor	16	80,0					
Number of Family Member (People)							
• 3-4	16	80,0					
• >4	4	20,0					

Table (2) indicated that at the level of education, most sample (80%) only reached the level of Junior High School (SMP). Most people of Bendungan sub-district in Trenggalek regency believe that female children should only go to junior level of education (SMP). They then will likely to be married. This way, most women (90%) are not professionally employed and only dealing with household chores. Whereas, around 80% of samples were in the category of not poor as samples were mostly married at young age (after graduating from junior high schools) to spouses of rich families.

C. The Provision of Energy and Nutrient Needs of pregnant women of Third Trimester and postnatal women in "Tarak" tradition through Counseling Intervention on balanced nutrients and food supplement provision (PMT)

The quality as well as the quantity of food consumed by pregnant women of third trimester and postnatal women will likely influence the production of breast milk. Therefore, pregnant women of third trimester and postnatal women should obtain extra energy as much as 800 chalories used to produce sufficient breast milk to reach exclusive breast milk provision and for the mother act on regular basis, breast milk provision is vitally important as it becomes basic food for babies. With breast milk babies will likely grow perfectly as a healthy person, gentle and have high IQ as breast milk contains Decoction of Hexanoid Acid (DHA). Baby with breast milk will likely to possess higher IQ compared to those of instant milk.

During breast-feeeding, women with good nutrients, will produce breast milk around 800 ml consisting of 600 of chalories on average while women with less nutrients will tend to produce relatively low breast milk. However, nutrients will never influence the quality of breast milk but the volume. The energy addition for 3 (three) months postnatal period reach 500 chalories. This is basedon assumption that each 100 ml of breast milk will likely be able to provide energy 67–77 chalories. The energy conversion efficiency contained in food become breast milk energy as much as 80% ranging 76 – 94%. Thus, the amount of energy required to produce 100 ml of breast milk is about 85 Calories. The average production of breast milk per day is about 800 ml which equals to 600 calories. Whereas, the energy spent to produce breast milk as much as 800 ml or about 750 Calories. When lactation lasts more than 3 (three) months, the mother's weight will decrease as that long. It means that the amount of extra energy should be increased.

The additional energy is actually only 700 calories, while the remaining, about 200 calories, were taken from indogenous reserves in the form of a roll of fat during pregnancy. As the energy conversion efficiency shows up only 80 - 90%, the energy from food of 500 calories will only be the energy of breast milk as much as 400 - 450 Calories. To produce 850 ml of breast milk, the required energy is about 680 - 807 Calories (750 Calories on average). When 500 calories are added during diet, only 400-450 calories are converted, the indogenous energy reserves should be then mobilized on daily basis by 300-350 Calories which equals to 33-38 grams of fat. Thus, fat deposits during pregnancy will reach 4 kg or equals to 36.000 Calories and will run out after 105 - 121 days or 3-4 months. This will confirm that breastfeeding will enable mothers to obtain their normal weight

quickly. This will also counter people's perception that breastfeeding will make the mother's body hugely fat. During breastfeeding, mothers need extra protein above normal for 20 grams / day. This way, every 100 ml of breast milk contains 1.2 grams of protein. Thus, 830 ml of breast milk contains 10 grams of protein.

The conversion efficiency of food protein to breast milk protein is only 70%. The increase is shown not only for transformation into milk protein, but also for the synthesis of hormones which produce (prolactin), and which also release breast milk (oxytocin). In addition to energy and protein, pregnant women of third trimester and postnatal women are recommended to meet other additional nutrients.

D. Sufficiency level of energy and nutrient consumption of pregnant women of Third trimester and postnatal women in "Tarak" tradition

Based on PMT recovery guidelines for pregnant women, postnatal women, and breastfeeding, Chronic less energy (KEK) that the energy content provided is presumably 180-300 Calories and 17 grams of protein (Ministery of Health the Republic of Indonesia, 2012).

The research result indicated that the average level of energy and nutrient consumption including carbohydrate, protein, fat, Fe, and vitamin C after PMT intervention tended to increase, as shown in table 3. PMT Intervention of local food is what follows:

- Cereal Milk 36 Kelor Soybeans with Energy Composition of 177 Calories, 26g Carbohydrates, 15g Protein, and Fat 6g.
- Biscuits Tempe Kelor 30 g with energy composition of 154 Calories, Carbohydrates 18 g, Protein 4 g, and Fat 8 g.

Thus, the intervention of PMT with energy of 331 calories/day and protein 19 grams/day for 30 days showed a significant effect (p < a > 0.05) on the level of energy and nutrient consumption, although the level of consumption of Fe and C vitamins is still in the category of Heavy rate deficit. This is due to "tarak" tradition implementation by pregnant women third trimester and postnatal women of the mountainous region Bendungan District - Trenggalek Regency which influenced dieting. For instance, unbalanced nutrition and the variety of food consumed is very low. In fact, Mineral Fe and vitamin C is a nutrient from vegetables and fruits. In dieting pregnant women of third trimester and postnatal women involved as samples rarely consume vegetables and fruits.

	Consumption Level of Energy and Nutrition								
Energy and	Pre PMT				Post PMT			p Value	
Nutrition	Consu	mpti	ion	%	Consu	ımpt	ion	%	p value
Energy (Calory)	1318	<u>±</u>	271	65	1892	±	281	93	0,001*
Carbohydrate (g)	199	<u>±</u>	54	69	270	±	26	93	0,035**
Protein (g)	65	±	22	108	71	±	26	118	0,041**
Fat (g)	31	±	13	44	62	±	18	90	0,027**
Fe (mg)	6	±	3	40	10	±	5	69	0.019**

0,017**

Table (3) Influence of PMT on Nutrition Energy and Nutrition Level of postnatal women

Vitamin C (mg)

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38

60

63

60

18

 $[\]frac{\text{C (mg)}}{\text{*)}}$ Significant at α =0,01

^{**)} Significant at α=0,05

PMT intervention is one of efforts to increase the level of energy and nutrient consumption for pregnant mother of third trimester and postnatal women especially KEK to fulfill the energy and nutrition needs. The increase of the level of energy and nutrient consumption from the high rate deficit category (<70% AKG) to normal category (90-119% AKG) is seemingly caused by several factors after some consideration in the selection of PMT intervention products so that the sample rate of PMT for 30 day is very high or consumed daily. This is one of the factors in increasing energy consumption and nutrition. The selection of PMT intervention products runs through consideration that the product is well known and has good taste so that the product becomes well accepted. Society welcome it well as it is practical, has a relatively long-term safe, and easy to serve. Another aspect to consider is the energy and nutritional composition of PMT intervention products such as Cereal Milk + Soybean Kelor and Biscuits + Tempe Kelor. Tempe kapang can produce fitase enzymes which are capable to decompose phytate. By the time phytic acid is decomposed, some minerals such as iron, calcium, magnesium, and zinc become more available to use by the body (Astawan, 2004). Furthermore, WHO (2007) reported that fermentation conducted for several days can reduce all phytate and improve bioavailability of Fe. Lean (2003) suggested that the digestibility of tempe works better as protein and fat are partially hydrolyzed. Various vitamins from the B-complex group increase, even synthesized by B12 unidentified in soybeans prior to fermentation.

Some scientific research has proved that Moringa leaf keeps a number of active compounds and the most complete nutrition compared to any plant (Mardiana, 2012). The results of Fuglie's research, L. J. (1999) in Krisnadi (2015) showed that Moringa leaves contain vitamin A, vitamin B, vitamin C, calcium, potassium, iron, and proteins in very high amounts and are easily digested and assimilated by the body. Furthermore, Nucahyati (2014) suggested that unless vitamin C, all nutrition of fresh moringa leaves will increase when consumed after being dried and mashed in the form of powder (flour).

PMT recovery interventions of pregnant women third trimester and postnatal women involved as samples, in addition to the energy and nutrition of their products, other factors affecting the level of consumption obedience should be considered. The results showed that pregnant mother of third trimester and postnatal women took PMT product every day for 30 days. The nature or quality of organoleptics, preferences, acceptability, and product variation are factors that also affect the level of consumption obedience.

As the result of the research conducted by V. Prihananto (2007) that the average level of obedience consumption of pregnant women through PMT product provision in the form of biscuits showed the highest level of obedience (94.0%), then followed by milk and vermicelli respectively 93, 5% and 92.5%.

IV. Conclusion

Conclusion

- Informant's (community) understanding about food abstinence during pregnancy and postnatal
 period in tarak tradition of mountainous region of Bendungan sub-district, Trenggalek among
 others: "pregnant women are not allowed to consume pineapples as it can cause miscarriage".

 Yet, on the other hand, parents suggest pregnant women to consume numbers of fruits as they are
 good for the fetus.
- Counseling on balanced nutrition and energy recovery PMT of 331 Calories/day and 19 gram/day
 protein for 30 days of pregnant women of third trimester and postnatal women in the "tarak"
 traditionof mountainous sub-district of Bendungan, Trenggalek district showed a significant
 influence upon weight gain and nutritional status (LILA indicator).

Suggestion

The energy and nutrient needs for third trimester pregnant women and postnatal women in mountainous sub-district of Bendungan, Trenggalek that embrace the "tarak" tradition must be properly fulfilled so that breastfeeding through an exclusive breastfeeding program for 6 (six) months run successfully.

Reference

- [1]. Anwar, F., dkk. 2004. Pemberian Biskuit yang Diperkaya Tepung Ikan dan Zat Besi-Folat dan Pengaruhnya terhadap Status Anemia Ibu Hamil. *The Indonesian Journal of Community Nutrition and Family Studies*. Volume 28 Nomor 2 Bulan Desember 2004 ISSN 0216-9363. Departemen Gizi Masyarakat dan Sumberdaya Keluarga Fakultas Pertanian Institut Pertanian Bogor.
- [2]. Astawan, M. 2004. Kandungan Gizi Aneka Bahan Makanan. Gramedia. Jakarta.
- [3]. Astutik, P., dkk. 2015. Modifikasi Konseling Menyusui Modul 40 Jam WHO/Unicef dalam Manajemen Laktasi terhadap Peningkatan Praktek ASI Eksklusif di Kota Malang. Riset Hibah Bersaing Politeknik Kesehatan Kemenkes Malang.
- [4]. Atmarita. 2004. Analisis Situasi Gizi dan Kesehatan Masyarakat. Widyakarya Nasional Pangan dan Gizi VIII. Jakarta: LIPI
- [5]. Departemen Kesehatan RI. 1998. Manajemen Laktasi. Jakarta.
- [6]. Departemen Kesehatan RI. 2001. Strategi Nasional Peningkatan Pemberian ASI (PP-ASI). Jakarta.
- [7]. Departemen Kesehatan RI. 2007. *Pelatihan Konseling Menyusui, Panduan Pelatih*. Direktorat Bina Gizi Masyarakat. Direktorat Jenderal Bina Kesehatan Masyarakat. Jakarta.
- [8]. Fasli Jalal dan S,M. Atmojo. 1998. *Gizi dan Kualitas Hidup. Agenda Perumusan Program Gizi Repelita VII untuk Mendukung Pengembangan Sumber Daya Manusia yang Berkualitas*. <u>Dalam</u> Widyakarya Nasional pangan dan Gizi VI. LIPI. Jakarta.
- [9]. Foster & Anderson. 2006 Antropologi Kesehatan. UI Press, Jakarta.
- [10]. Hidayanti, L. 2011. Penurunan Pemberian ASI Eksklusif sebagai Salah Satu Dampak Paparan Iklan Susu Formula. Tasikmalaya: Fakultas Kesehatan Masyarakat Universitas Siliwangi
- [11]. Institute of Medicine. 1990. Nutrition During Pregnancy. Washington, DC. National Academy Press.
- [12]. Juliani, S. 2009. Faktor-Faktor yang Berhubungan dengan Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Binjai Estate. Skripsi. Medan: Fakultas Kesehatan Masyarakat. Universitas Sumatera Utara.
- [13]. Juliastuti, R., 2011. *Hubungan Tingkat Pengetahuan, Status Pekerjaan Ibu, dan Pelaksanaan Inisiasi Menyusu Dini dengan Pemberian ASI Eksklusif.* Tesis. Surakarta: Universitas Sebelas Maret.
- [14]. Kementerian Kesehatan RI. 2012. Pedoman Penyelenggaraan Pemberian Makanan Tambahan Pemulihan bagi Ibu Hamil KEK dan Balita Gizi Kurang, Jakarta
- [15]. Krasovec, K. Parts 1. 1991. Prepregnancy Weight. Background Issues. Maternal Nutrition and Pregnancy Outcomes. Anthropometric Assessment. Pan American Health Organization.
- [16]. Krisnadi, A. D. 2013. Kelor: Super Nutrisi. Kelorina.com. Pusat Informasi dan Pengembangan Tanaman Kelor Indonesia.
- [17]. Lean, M. E. J. 2013. *Ilmu Pangan, Gizi, dan Kesehatan*. Diterjemahkan oleh Nilansari dan Fajriyah. Penerbit Pustaka Pelajar. Yogyakarta.
- [18]. Lestari, D. 2009. Faktor Ibu dalam Pemberian ASI Eksklusif. Universitas Indonesia
- [19]. Mardiana, L. 2012. Daun Ajaib Tumpas Penyakit. Penerbit Swadaya. Jakarta.
- [20]. Notoatmodjo. 2005. Promosi Kesehatan Teori dan Aplikasi. Jakarta: Rineka Cipta
- [21]. Novianti, R. 2009. Cara Dahsyat Memberikan ASI untuk Bayi Sehat dan Cerdas. Yogyakarta: Octopus.
- [22]. Peraturan Pemerintah (PP) Republik Indonesia nomor 33. 2012. Pemberian ASI Eksklusif.
- [23]. Prihananto, V. 2007. Pengaruh Pangan Fortifikasi Multi Gizi Mikro terhadap Status Gizi Ibu Hamil dan Berat Badan Bayi Lahir. (Disertasi). Bogor. Sekolah Pascasarjana,Institut Pertanian Bogor.
- [24]. Rahmah, L. 2010. Atribusi tentang Kegagalan Pemberian ASI pada Ibu Pekerja. Fakultas Psikologi Universitas Islam Sultan Agung.
- [25]. Roebijoso, J. 2012. Hubungan antara Status Pekerjaan, Pendidikan, Tingkat Pengetahuan Ibu, serta Dukungan Bidan terhadap Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Gribig. Universitas Brawijaya
- [26]. Roesli, U. 2000. Mengenal ASI Eksklusif. Jakarta: Trubus Agrundaya
- [27]. Steel, R.G.D. & J.H. Torrie. 1991. Prinsip dan Prosedur Statistika. Gramedia. Jakarta.
- [28]. Sulistinah. 2010. Pengaruh Faktor Sosial dan Ekonomi terhadap rendahnya Pemberian ASI Ekkslusif pada Bayi di kecamatan Peterongan Kabupaten Jombang. Jombang

- [29]. Suyatno. 2000. Pengaruh Pemberian Makanan Pendamping ASI (MP ASI) Tradisional terhadap kejadian ISPA, Diare, dan Status Gizi Bayi pada 4 bulan Pertama. UGM.
- [30]. Wildan, M. et al. 2015. Benefits of Yoga in Increasing Lactating Mother's Breast Milk Production. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*. Volume 4, Issue 4 Ver. III (Jul. Aug. 2015), PP 14-18
- [31]. World Health Organization. 2003. Pemberian Makanan Tambahan untuk Anak. Jakarta: EGC.
- [32]. _______. 2007. Vitamin and Mineral Requirements in Human Nutrition. AITBS India. Bangkok.
- [33]. Yuliarti, N. 2010. Keajaiban ASI Makanan Terbaik untuk Kesehatan, Kecerdasan, dan Kelincahan Si Kecil. Yogyakarta: Andi
- [34]. Yuliarti, D. 2008. *Hubungan Pengetahuan dan Sikap Ibu dengan Pemberian ASI Eksklusif.* Tesis. Surakarta: Universitas Sebelas Maret.
- [35]. Zakiyah. 2012. Faktor-Faktor yang Berhubungan dengan Pemberian ASI Eksklusif di Kelurahan Semanan Kecamatan Kalideres Jakarta Barat. Depok: Fakultas Kesehatan Masyarakat Universitas Indonesia.

Astutik Pudjirahaju. "Meeting Energy and Nutrient Needs of Postnatal Women in "Tarak" Tradition and Enhancing the Technical Personnel Role on Lactation Management in Exclusive Breastfeeding Practices (Study on Mountain Community in Trenggalek Regency)." IOSR Journal of Nursing and Health Science (IOSR-JNHS), vol. 6, no. 4, 2017, pp. 18–28.