



Knowledge, Attitudes, Confidence of Teenage Girls in Rural and Urban Areas toward the Exclusive Mother Breast Milk

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Abstract

Breast milk was the natural food that takes children at birth but risked as report in 2014 exclusive breastfeeding was only reaching 52% and focus of this study on teenage girls in high school. The study assess the differences in knowledge, attitudes, and confidence of teenage girl about exclusive breast milk in rural areas and urban areas. This type of study was a descriptive study with a sample of 336 teenage girls as respondents in Pulau Sebatik (rural) and on the island of Tarakan (urban). Knowledge, attitudes and confidence were measured by using a questionnaire that has been field tested in advance. Respondents answered questions and the data was processed by using SPSS. Result shows that subjects were generally aged 16-17 (75.6% and 69.0%), the highest birth order first child (26.2% and 36.9%) Average number of brother was three (25.0% and 23.2%) and least eleven (0.6% and 0.6%), majority parental education were elementary and high school (56.5% and 50.0%), and majority parents occupation was farmers (45, 2% and 26.8%). Knowledge teenage girls in rural areas and urban areas about exclusive breast milk show differences (53.0% and 61.9%) from 336 respondents. Knowledge about the benefits of exclusive breast milk, breastfeeding problems are still very poor both for them who live in rural or urban (a benefit show 10.0% and 26.7%, nipple confusion show 3.3% and 16.7% and mastitis show 13.3% and 13,3%).

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Attitudes of teenage girls in rural and urban areas towards exclusive breast milk show difference (52.8% and 57.1%). In rural areas teenage girls confidence about exclusive breast milk was better than teenage girls who live in urban areas (59.5% and 56.5%). In conclusion, there was a difference of knowledge (53.0% and 61.9%), attitudes (52.8% and 57.1%) and confidence (59.5% and 56.5%) of teenage girls in rural and urban areas. It was recommended that given health education to teenage girls about exclusive breast milk.

Keywords: Knowledge; Attitudes; Confidence; and exclusive breast milk.

1. Introduction

Breast milk was the first and main meals should be given the child after birth. Exclusive Breast milk was given from birth until the age of 6 months and continued breastfeeding until 24 months or more was the best way for a child's future. Babies who are exclusively breastfed from birth to six months of age to baby's needs, or at least eight times in a 24 hour period, helped strengthen the relationship with the child's mother inner and provide immunity against baby infection [1]. Children who are exclusively breastfed will have immunity and avoid illness, while children who are not exclusively breastfed during the first 6 months of morbidity and potentially get morbidity and mortality [2], particularly those associated with diarrhea and pneumonia [3,4]. Breast milk were beneficial for children and mothers as to avoid type 2 diabetes, breast cancer and stress after childbirth.[5,6].

Exclusive breast milk in babies age of 0-6 months in Indonesia in 2014 ⁷ amounted to only 52%, decrease compared to the year 2013, which amounted to 54.3%. In 2014 North Borneo as a new province from the result of the expansion of East Kalimantan, the achievements of exclusive breastfeeding reached 63.3% [7]. The study was carried out to improve the performance of exclusive breastfeeding are limited to the pregnant women and post childbirth [8] Strategies to promote breastfeeding as a healthy lifestyle should also be directed at the adolescent population, including increasing their knowledge about the benefits of breastfeeding. [9]. Pereira [9,10], says that the school can provide an opportunity for children to learn about a variety of health practices. The school curriculum can include health education as subjects (syllabus breastfeeding) included in the compulsory subjects in school.

Fujimori [11] said that lack of information about that breastfeeding in childhood and teenage will have an effect on breastfeeding at the time having children. So the situation of school offers an environment where teens can receive information related to positive health to improve breastfeeding knowledge and attitudes. [9,12]. Walsh, Moseley, & Jackson notes that knowledge of adolescents on the topic of breastfeeding can be further improved by involving them in class discussions, and provide health promotion interventions about infant feeding can significantly affect positively and sustainably in adolescent knowledge about breastfeeding. The purpose of this study was to assess differences in knowledge, attitudes, and confidence of teenage girls in rural and urban areas about exclusive breast milk.

2. Method of study

The study was carried on in two different areas. The first location was held on the island of Tarakan with status

as urban areas, consists of four sub district with an area of 250,80 km², a population of 226, 470 inhabitants, health facilities comprising three hospitals (one belonging to the provincial government, one private and one Navy's RI) and high school facilities on 19 units. The study sample in Tarakan was taken from teenage girls in SMA Muhammadiyah and SMK Health Kaltara Tarakan by 168 respondents. The second location was held on the island of Sebatik with a total area of 433,84 km² but divided territory, the north belongs to Malaysia (187,23 km²) and south belongs to Indonesia (246.61 km²), the rural status of five sub-district government with the number of people were 35 thousand life, health facilities consist of five health centers, six additional health centers and three mobile health clinics and education facilities consist of 6 units of high school facilities. Samples in study on the island of Sebatik were 168 respondents from SMAN 1 at Sebatik Induk Sub District and SMAN 1 at the Sebatik Tengah Sub District. This type of study was a descriptive study with a sample of 336 teenage girls in Pulau Sebatik (rural) and on the island of Tarakan (urban) and the study was begins March 4 to April 30, 2016. Knowledge, attitudes and confidence were measured by using a questionnaire that has been field tested first. Respondents answered questions on their own and the data was processed by using SPSS.

3. Results

This study was based on the characteristics of responders consist of : age, birth, number of siblings, parents' education and occupation of parents of respondents. First by age can be seen by the results of study from the 168 respondents show 127 respondents (75,6%) were in the village (75.6%) and the 116 (69,0%) respondents were between the ages of 16 - 17 Years. The second was based on the birth of the family members, grouped according to the first until eight child.

The result of the grouping in the village from 168 respondents, the first were 44 children (26.2%) the second child were 40 (23.8%), the third children were 35 children (20.8%) and the eighth child was only 1 (0.6%), while in urban areas, with the same number of respondents (168 respondents) was starting from the first to the eleventh child. The first child were 62 (36.9%) the second were 40 (32.8%), the third were 27 (16.1%), eighth were 4 (2.4%) and there was 1 (0.6%) of respondents from the eleventh in family.

Fourth based on the number of siblings in the family in the village of most of the three brothers were 42 (25.0%), four brothers were 37 (22.0%) two brothers were 28 (16.7%), the only child was only 4 (2.4%), the ten brothers was 1 (0.6%) and the eleven brothers was 1 (0.6%).

While most three brothers in the city were 39 (23.2%), two brothers were 36 (21.4%) Four Brothers were 30 (20.8%) one brother were only 4 (2.4%), the only child were 14 (8, 3%), the nine brothers only was 1 (0.6%) and eleven brothers was only 1 (0.6%).

Fifth, based on the education of parents of respondents in rural areas, it was found to be the majority parent education was primary school education (SD) 95 (56.5%) and only 3 (1.8%) of respondents parents educated to degree. While in urban areas, the majority of parents education were senior high school 84 (50.0%), degree were 15 (8.9%) and there are already Master postgraduate were 5 (3.0%). Sixth was based on occupation parents of respondents in rural areas the study found that the majority of parents occupation were 76 farmers (45.2%) and

entrepreneurs were 49 (29.2%) While in urban areas show that majority of respondents parents occupation was farmers with 45 people (26.8%), but farmers here are vegetable farmers and fish farmers and entrepreneurs were 44 (26.2%).

From this study the researchers found that the knowledge of teenage girls about exclusive breast milk can be seen in the following table:

Table 1: Knowledge of respondents about exclusive breast milk in rural and urban

Statement	Rural Areas (Yes)	Urban Areas (Yes)
Have you ever heard the term exclusively breast milk	46,7	73,3
The correct definition of exclusive breast milk	26,7	53,3
Is it true that the breast milk given to children aged 6 months enough for the needs of growth, without having to be given extra food but it was given in the right way	46,7	73,3
Are Children who are given formula are susceptible to diarrhea	46,7	66,7
Questions Benefits of exclusive breast milk	10,0	26,7
a. Preventing infections in infants		
b. Keeping Child Growth		
c. As a natural contraception		
d. Making the mother or child bonding		
e. Accelerating uterine involution		
f. Making children smarter		
g. Preventing diabetes		
h. Preventing breast cancer		
i. Natural maternal diet		
j. Reducing the incidence of dental caries		
<i>Note</i> : it was correct if answering 7 or more questions correctly		
Was the use of contraceptives such as birth control and syringe fil can reduce milk production	36,7	63,4
Did you know treating breast	40,0	53,3
Do you know features of adequate breast milk for children	13,6	36,7
Which do you think the features of sufficient breast milk in line	6,7	33,3
1. The child seems satisfied after feeding or sleeping		
2. The mother felt smooth milk flow to the babies		
3. Number urinate at least 6 times a day		

4. A baby suckling at least 10 times in 24 hours		
Note: <i>it was correct if the answer 3 or more questions correctly</i>		
Do you know if the breast milk began to decrease or stop production, it can be overcome with relaxation (massage)	30,0	36,7
Have you ever heard the term confused nipple (nipple confusion)	3,3	16,7
Definition nipple confusion	13,3	13,3
Have you ever heard the term mastitis	10,0	20,0
Definition mastitis	6,7	6,7
Do you know that in the Al-Quran (surah Al baqorah paragraph 233) had ordered the mother to breastfeed her child	60,0	63,3
Do you know about the rule of law in Islam that people should be breastfed	43,3	43,3

Table 1 illustrates that the knowledge of the teenage girls in rural and urban areas about exclusive breast milk was still lacking. The researchers gave 17 item question in the form of a questionnaire to measure knowledge, it was still very low, especially with regard to the benefits of exclusive breast milk when the teenage girls in rural areas show only 10% and in urban show 26% who know the benefits of exclusive breast milk.

In questions 8 and 9 related feature about adequate breastfeeding and mention the features, the average of teenage girls in rural show only 13,7 % and urban were 36.7% do not know the features so it was not able to answer correctly what the features of children who have received adequate breast milk from their mother, and the rest of respondents consist 6,7% teenage girls in rural and 33,3 % teenage girls in urban areas can answer correctly.

In table 1 shows that the knowledge of teenage girls in urban areas was better than in rural areas about the negative effects of using contraceptives such as birth control can decrease milk production (63.4% and 36.7%). Table 1 provides information on breastfeeding problems both teenage girls who were living in rural and urban do not know about nipple confusion (3.3% and 16.7%), and mastitis 10% and 20%).

Teenage girls both living in rural and(60%) urban (63.3%) can understand that breastfeeding recommendation was already mentioned in Al quran but the teenage girls in rural (43.3%) and urban areas (43.3%) were lack an understanding of Islamic law in regard to breastfeeding.

The results of this study showed differences in knowledge of teenage girls about exclusive breast milk in rural and urban areas 89 (53.0%) and 104 (61.9%) from 336 respondents. It can also be read by a normal distribution that knowledge teenage girl who were living in urban were 0,535 but it were still lower compared with a normal distribution with a P value (0.84).

Attitudes of respondents about exclusive breast milk can be read in Table 2 below

Table 2 : The attitudes of respondents about exclusive breast milk

Statement	Rural Areas (Percentage of Agreement %)	Urban Areas (Percentage of agreement %)
Breastfeeding were good for mothers and babies	93,3	100
It's okay when mothers breastfeed her child despite there are other women in the same room	66,7	76,7
It's okay for mothers breastfeed their children even though the other boys in the same room but it was not visible	36,7	26,7
It's okay for mothers breastfeed their children in public places	30,0	6,7
I would be comfortable (not shy) if I saw a woman breastfeeding her baby	50,0	30,0
Women should be encouraged to provide breast milk to their babies	76,7	90,0
I will motivate peers when having children in order to give exclusive breastfeeding to their babies	70,0	83,3
Our schools should motivate the teenagers when having children in order to give exclusive breast milk to their babies	66,7	80,0
Breastfeeding information and the benefits of breast milk should be included in school curriculum	50,0	13,3
Although the mother was busy taking care of the household or work does not deter mothers breastfeed her child	93,3	100
Although ASI was bit or the babies was, The mother still give her breast milk	60,0	56,7
Every mother should be exclusively breastfed to their babies until the age of 6 months	76,7	90,0
I will give exclusive breastfeeding if I have children though it can be the rejection of the husband, in-laws or parents	60,0	76,7
I will continue to provide exclusive breastfeeding although it may be the refusal of husbands, parents or in-laws	66,7	73,7

Table 2 shows that the attitude of the teenage girls in rural and urban areas about exclusive breast milk were considered enough. On the question about it was okay for mothers breastfeed their children even though the other boys in the same room but it was not visible , and it was okay for mothers breastfeed their children in public places (36.7%, 26.7% and 30.0%, 6.7%) should be greater of the agreed people because the breastfeeding mothers do not show her breasts to others at the time of breast-feeding her child. In the statement I would be comfortable (not shy) if I saw a woman breastfeeding her baby (50% and 30%). In Table 2, it appears that the percentage in rural areas was higher than in urban, researchers assume reasonable because the question for those

who live in rural areas are still considered taboo but those who live in urban areas was not taboo or sensitive. Teenage girls who live in rural and urban expect the breast milk study was added in the school curriculum (50% and 13.3%).

The results of this study showed difference in the attitude of teenage girls about exclusive breast milk in rural and urban areas from the 336 respondents, 92 (52.8%) and 96 (57.1%). In normal distribution of Respondents' attitudes about exclusive breast milk show difference between respondents who are living in rural areas (0.464) with respondents who were living in urban region (0.487), but both are still lower compared with a normal distribution with a P value (0.84).

Confidence of respondents to exclusive breast milk can be read in the following table:

Table 3: The respondents confidence about exclusive breast milk

Statement	Rural Areas (Percentage of confident %)	Urban Areas (Percentage of confident %)
Breastfeeding will make mothers feel closer to children	93,3	100
Breastfeeding was the most effective natural way of feeding a baby	96,7	100
Breastfeeding were convenient for mother and baby	86,7	86,7
Breastfeeding saves time for Mother	20,0	43,3
Breastfeeding makes the mother feel that she is a responsible mother to her child	93,3	96,7
Mothers who are coming out of the house and want to breastfeed her child should clean up her breasts with water	83,3	70,0
Breastfed babies are healthier than those fed with formula milk	93,3	100
Breastfeeding is the natural way rather than being given formula milk	93,3	96,7
Colostrum is the first milk that came out after the baby was born and it was stale milk because of the color yellow, so it should be discarded.	40,0	63,3
Newborns should be given honey or dates	33,3	30,0
Male Baby requires more milk than female baby	33,3	33,3
When the mother while breastfeeding and pregnant should stop giving breast milk to her child because the milk was not good or mixed with blood	40,0	40,0
Breastfeeding allows a mother to get more sleep	30,0	23,3

The results of this study showed difference in the confidence of teenage girls in rural and urban areas about exclusive breast milk. In rural areas, the confidence of teenage girls about exclusive breast milk were 100 (59.5%) from the 168 respondents better than confidence of teenage girls who live in urban teenage who

answered about exclusive breast milk was better reached 95 (56.5%) from the 168 respondents. In the normal distribution of respondents confidence about exclusive breast milk there was difference between respondents who living in rural areas (0.511) with respondents who living in urban areas (0.481), but both are still lower compared with a normal distribution with P value (0.84).

4. Discussions

Knowledge or correct information about an object was the most important thing to establish a correct concept of something so that the process of behavior change in a sequence can be formed optimally. This study found that knowledge of 168 respondents (teenage girls) about exclusive breast milk showed that the knowledge of teenage girls who live in rural areas reach 89 (53.0%) knew exclusive breast milk while in urban areas, the knowledge of teenage girls was better showed 104 (61.9%), though the knowledge of teenage girl in urban was better than rural but the differences was not too far away, it was due to that the teenage girls who live in rural areas have access to information through media such as TV, Internet and other information media. In line with Notoatmodjo (2005) who says that knowledge can be gained from the the personal experience and others, in relation to this case were teachers, family, friends and officials, including the media.

Increasing exclusive breast milk outcomes not only through the pregnant and breastfeeding mothers. Teenage girls were a group that should be given an understanding early on about the benefits of exclusive breast milk in children, such as Children who are exclusively breastfed will have immunity and avoid illness, while children who are not exclusively breastfed during the first 6 months could potentially earn morbidity and mortality [2], especially associated with diarrhea and pneumonia [3,4]. In addition, breast milk was beneficial for children and mothers as to avoid type 2 diabetes, breast cancer and stress after childbirth.[5,6].

Knowledge was the result of human sensory or results to know a person against an object. At the time of sensing up producing such knowledge is strongly influenced by the intensity of attention and perception of the object. Most people's knowledge gained through the senses of hearing and sense of sight.. Knowledge of a person against an object or an intensity different levels. Increased knowledge of teenage girls against exclusive breast milk can be done through learning in school because of direct teaching, students are more aware of the positive benefits of breastfeeding, less embarrassed about seeing women breastfeeding in public, and more willing to promote breastfeeding as an infant feeding options [9,13]. Silva suggests that educational interventions on children have many positive results, such as raising awareness of the importance of breast milk.

Teenage girls who are still active as a student at the high school become the group that many of them married after school. So the understanding of breast milk benefits should be given to teenage girl because they does not consider the option of getting pregnant and not decided whether to breastfeed or provide additional food. Daniel [14] Fujimori [9,11] said that health education have effect to the knowledge of teenage girl about breast milk.. Walsh, Moseley, & Jackson Walsh, Moseley, and Jackson notes that knowledge of teenage girl on the topic of breastfeeding can be further improved by involving them in class discussions, and provide health promotion interventions about infant feeding can significantly affect positively and sustainably in knowledge teenage girl about breastfeeding.

Knowledge of a new object to be the attitude if the knowledge was accompanied by a willingness to act in accordance with the knowledge of the object. According to Notoatmodjo knowledge can influence a person's attitude, with a good knowledge of it will materialize good gesture too. Attitudes were evaluative statements to an object, person or event so that it reflects the person's feelings toward something by udiman & Riyanto. Formation of attitudes towards teenage girl about exclusively breastfed should be done early.

This study suggests that attitudes towards teenage girls about exclusive breast milk was reported positive results but there was a difference between teenage girl who live in urban with teenage girls who live in rural areas. From 168 respondents, the teenage girls who living in urban there reached 96 (57.1%) was supporting and 92 teenage girls who live in rural areas (54.8%) was supporting. Notoatmodjo explains that the whole attitude determination, knowledge, thoughts, confidence, and emotions play an important role. According to Azwar, the factors that may affect the formation of attitudes was a personal experience, the influence of others that are considered important, the influence of culture, education, religion and mass media of human attitude towards something must be established very early in life. as stated by Goulet, et al [9,15] says that attitudes toward breastfeeding are formed early in life and ultimately affect the practice of breastfeeding. Attitudes was developed during adolescence done throughout the lives of individuals who play an important role in the individual [9,16]. According to [9,11] , there are influence health education on attitude of primary school children about the benefits of breast milk. Human behavior established early as the days of elementary school. Fujimori [9,11] said that the effect of health education on attitude of primary school children about the benefits of breast milk. The school is a means to do iintervensi in the formation of attitudes towards the benefits of breast milk. Breinbauer & Maddaleno, [9,17]say that interventions to choose promoting healthy lifestyles should be an option that knowledge, confidence, and attitudes during adolescence will influence the behavior of a lifetime. While the confidence of teenage girls about breast milk was also positive. From the 168 respondents, 95 (56.5%) said they were confident and 73 (43.5%) said they were not confident from 13 item statement was given at the time of the interview using a questionnaire. Although the difference between convince and do not convince are not much different. Establishment of teenage girls convictions putrid preferably at the beginning of life as stated by Breinbauer & Maddaleno, [9,17] that interventions to choose promoting healthy lifestyles should be an option that knowledge, confidence, and attitudes during adolescence will influence the behavior of a lifetime.

5. Conclusion

There are difference about Knowledge, attitudes and confidence of teenage girls in rural and urban areas. The Knowledge of teenage girls in rural areas were 53.0% while knowledge of teenage girl in urban reached 61.9%. Confidence of teenage girls in rural areas were 52.8% while the confidence of teenage girls in urban areas reached 57.1%. Attitude of teenage girls in rural areas were 59,5 % while attitude of teenage girls in urban areas were 56.5%.

References

- [1]. website, date accessed 1\8\2016, URL: http://www.factsforlifeglobal.org/resources/Facts-for-Life-Book_Indonesian-Jan-2011_op.pdf.
- [2]. Lamberti LM, Fischer Walker CL, Noiman A, Victora C, Black RE. Breastfeeding and the risk for diarrhea morbidity and mortality. *BMC public health*. 2011 2014-04-03 2011;11(Suppl 3).
- [3]. Kramer MS, Kakuma R. The optimal duration of exclusive breastfeeding: a systematic review. *Advances in experimental medicine and biology*. 2004;554:63-77.
- [4]. Lamberti LM, Zakarija-Grkovic I, Fischer Walker CL, et al. Breastfeeding for reducing the risk of pneumonia morbidity and mortality in children under two: a systematic literature review and meta-analysis. *BMC public health*. 2013 2013-09-21 2013;13(Suppl 3).
- [5]. Nabulsi M, Hamadeh H, Tamim H, et al. A complex breastfeeding promotion and support intervention in a developing country: study protocol for a randomized clinical trial. *BMC public health*. 2014;14(1):36.
- [6]. Thu HN, Eriksson B, Khanh TT, et al. Breastfeeding practices in urban and rural Vietnam. *BMC public health*. 2012;12(1):964.
- [7]. <data-dan-informasi-2014-1.pdf>.
- [8]. Swanson V, Power K, Kaur B, Carter H, Shepherd K. The impact of knowledge and social influences on adolescents' breast-feeding beliefs and intentions. *Public health nutrition*. 2006;9(03):297-305.
- [9]. Zeller CL. Effects of a Breastfeeding Education Module on the Breastfeeding Knowledge and Attitudes of Middle School Students [D.N.P.]. Ann Arbor, Carlow University; 2014.
- [10]. Pereira M, Assis M, dos Reis M. [Health assistance model and nursing care given to women planning to breast feed]. *Revista brasileira de enfermagem*. 1998;52(3):423-436.
- [11]. Fujimori M, Morais TC, França EL, Toledo ORd, Honório-França AC. The attitudes of primary school children to breastfeeding and the effect of health education lectures. *Jornal de pediatria*. 2008;84(3):224-231.
- [12]. Walsh A, Moseley J, Jackson W. The effects of an infant-feeding classroom activity on the breast-feeding knowledge and intentions of adolescents. *The Journal of school nursing : the official publication of the National Association of School Nurses*. Jun 2008;24(3):164-169.
- [13]. Ellis DJ. Secondary school students' attitudes and beliefs about breastfeeding. *Journal of School Health*. 1983;53(10):600-604.
- [14]. Leffler D. U.S. high school age girls may be receptive to breastfeeding promotion. *Journal of human lactation : official journal of International Lactation Consultant Association*. Feb 2000;16(1):36-40.
- [15]. Goulet C, Lampron A, Marcil I, Ross L. Attitudes and subjective norms of male and female adolescents toward breastfeeding. *Journal of Human Lactation*. 2003;19(4):402-410.
- [16]. Kapil U, Manocha S. Knowledge and attitude towards breast feeding among adolescent girls. *The Indian Journal of Pediatrics*. 1990;57(3):401-404.
- [17]. Breinbauer C. Youth: Choices and change: Promoting healthy behaviors in adolescents. Vol 594: Pan American Health Org; 2005.