The Community Health Volunteers description in Exclusive Breastfeeding Promotion and Improved Knowledge Through Training Based on The Concept of "Insufficient Milk Supply"

A. Kartikasari 1, M. Dwi Anggraeni 1, L. Latifah 1, N. Setiawati 1
1 Maternity Nursing Lab, Faculty of Health Sciences, Jenderal Soedirman University, Indonesia
Email: aprilia_k19@yahoo.co.id

ABSTRACT. Exclusive breastfeeding achievements in Indonesia have not met SDGs targets. The role of community health volunteers is very important to promote exclusive breastfeeding, especially in rural areas, but there's knowledge about exclusive breastfeeding is lack. This study was describe the community health volunteer's knowledge about exclusive breastfeeding and the influence of training programs based on the concept of "Insufficient Milk Supply" to increase volunteers' knowledge in the Baturaden Subdistrict, Central of Java, Indonesia. This study was use one group pretest and post test design techniques, with a total sample of 38 respondents. Univariate analysis to determine the characteristics of respondents, while the bivariate analysis in this study was use Wilcoxon test. The majority age category of respondents aged 41 to 50 years (55.3%), the majority of level of education was elementary and high school respondents (28.9% respectively), the majority had jobs as housewives (81.6%), and the majority had 2 children (55.3%). The cadre's description of Exclusive breastfeeding showed that 78.9% of respondents stated that knowledge in the category was enough, 97.4% of respondents said they needed information about exclusive breastfeeding, 100% of respondents said they had the responsibility to promote exclusive breastfeeding, 63.2% of respondents stated that the exclusive breastfeeding promotion was the responsibility of the whole community, and 81.6% of respondents said the biggest obstacle to promoting exclusive breastfeeding was a lack of knowledge. The results of data analysis using Wilcoxon showed the influence of the intervention on the improvement of respondents' knowledge scores, which can be seen through an increase in the mean post test score and p value=0.000. The implementation of training programs based on the concept of "Insufficient Milk Supply" was effective to increase knowledge in community health volunteers in the Baturaden District.

1. Introduction

Infant Mortality Rate (IMR) is one indicator of the quality of health of a nation. Three quarters of child deaths occur when the child is less than one year old. IMR in Indonesia is 35/1000 live births in 2015. This number is still quite far from the Millennium Development Goals (MDGs) where the target of infant mortality is only 23/1000 live births in 2015. Meanwhile in Banyumas Regency there are 279 babies died in the year 2014. One of the areas where babies die before the first birthday of life is in the working area of Baturaden 1 Primary Health Center.

IMR describes the level of public health problems related to the factors that cause infant mortality, the level of antenatal care, the nutritional status of pregnant women, the success rate of the Maternal and Child Health program and Family Planning, as well as environmental and socio-economic conditions. If the IMR in a region is high, it indicates that the health status in the region is
low. The main causes of infant mortality are diarrhea, asphyxia, pneumonia, respiratory tract infections, low birth weight, and congenital abnormalities.

Most infant deaths can be prevented in an easy and inexpensive way that is through exclusive breastfeeding. World Health Organization [1] recommends that all mothers give exclusive breastfeeding to up to 6 months old babies, especially infants in developing countries. Exclusive breastfeeding is the mother only gives milk to the baby until the baby is 6 months old. The government has made efforts to reduce the IMR through the launching of exclusive breastfeeding programs since 2005. One of the government's extension is through health public health volunteers in the community.

The role of health volunteers is very significant in helping health workers make efforts to prevent infant mortality and improve health through the promotion of exclusive breastfeeding by providing information and teaching management of exclusive breastfeeding. Health public health volunteers also know how to effectively approach local communities so that they have the ability to communicate in accordance with community conditions. For this reason, health volunteers must have sufficient knowledge and skills in increasing exclusive breastfeeding to mothers.

Community health volunteers have the role of actively communicating with Primary health center under the coordination of the District Health Office. But the they have lack of knowledge about Exclusive Breastfeeding. So that the increase in public health volunteers’s knowledge that can be done through various interventions is needed.

2. Materials and methods
This study was use one group pretest and post test design techniques, with a total sample of 38 respondents consist of Baturaden sub-district community health volunteers. Univariate analysis to determine the characteristics of respondents, while the bivariate analysis in this study was use Wilcoxon test.

3. Results and Discussions
The results of this study show a description of the characteristics of respondents based on age, education, employment, parity, knowledge of Exclusive Breastfeeding, information needs about exclusive breastfeeding, responsibility for promoting exclusive breastfeeding, and barriers to promoting exclusive breastfeeding.

| Characteristics | Frequences | Percentase (%) |
|-----------------|------------|----------------|
| **Age**         |            |                |
| 20-30           | 2          | 5,3            |
| 31-40           | 8          | 26,3           |
| 41-50           | 21         | 55,3           |
| >50             | 7          | 18,4           |
| **Employment**  |            |                |
| Housewife       | 31         | 81,6           |
| Midwife         | 5          | 13,2           |
| Civil servants  | 1          | 2,6            |
| Entrepreneur    | 1          | 2,6            |
| **Education**   |            |                |
| Elementary      | 11         | 28,9           |
| Junior high School | 8     | 21,1           |
| High School     | 11         | 28,9           |
| Collage         | 8          | 21,1           |
| **Parity**      |            |                |
| 1               | 7          | 18,4           |
| 2               | 21         | 55,3           |
| 3               | 9          | 23,7           |
| >4              | 1          | 2,6            |

Source: Primary data
The majority age category of respondents aged 41 to 50 years (55.3%), the majority of level of education was elementary and high school respondents (28.9% respectively), the majority had jobs as housewives (81.6%), and the majority had 2 children (55.3%).

The results of this study are in accordance with Nurayu's study [2] which states that the average age of posyandu public health volunteers is in the age range of 25-60 years. This age characteristic is included in the middle adult category to the final adult. In this category a person will be more mature both physically, psychologically and behavior. The more age, the maturity level of a person will be more mature in thinking and working. In terms of public trust, someone who is more mature will be more trusted than someone who is not mature enough [3].

The results showed that most had high school education (44.1%). This result is also comparable with Nurayu's research (2012) which states that 68.1% of Posyandu public health volunteers have advanced education. The level of education can determine whether or not someone is easy to absorb and understand the knowledge they get, in general, the higher a person's education the better the knowledge they have (Hanifah, 2010).

The results showed that the majority had jobs as housewives (85.3%). This result is in line with the research of Kusumawardani (2017) which states that the majority (63%) of Posyandu public health volunteers work as housewives. Housewives are considered to have more free time compared to mothers who have a working status, so that public health volunteers with the status of housewives are expected to be able to socialize more and benefit the community. According to the research of Sihombing et al (2015) the public health volunteers were instrumental in inviting mothers of children to come to the posyandu, in yasinan activities, and in the gathering of mothers. This makes motivated mothers present to participate in activities in the community.

The results of this study show majority of respondent had 2 children (55.3%). The results of this study explain that the majority of public health volunteers followed the government's program in Indonesia, namely family planning, with the slogan "enough children". Family Planning is an effort to increase awareness and participation of the community through maturing the age of marriage, birth control, fostering family resilience, improving family welfare to create a small, happy and prosperous family (UU No. 10 of 1992).

Table 2 The Description of public health volunteers's knowledge about Exclusive Breastfeeding and the role of public health volunteers in the promotion of Exclusive Breastfeeding

| Questions                                                                 | Answer's Frequency | Percentage (%) |
|---------------------------------------------------------------------------|--------------------|----------------|
| How is your knowledge about exclusive breastfeeding?                       | Moderate           | 30             | 78.9          |
|                                                                           | Less               | 8              | 21.1          |
| Do you need information regarding Exclusive ASI?                           | Yes                | 37             | 97.4          |
|                                                                           | No                 | 1              | 2.6           |
| Do you feel you have a responsibility to promote exclusive breastfeeding?  | Yes                | 38             | 100           |
|                                                                           | No                 | 0              |               |
| According to you who has an important role to promote exclusive breastfeeding? | Public health volunteers | 7 | 18.4 | |
|                                                                           | Health workers     | 7              | 18.4          |
|                                                                           | All the community members | 24 | 63.2 | |

Source: Primary data

The results showed that the majority (78.9%) of health public health volunteers stated that knowledge of exclusive breastfeeding was sufficient, the majority (97.4%) of public health volunteers stated that they needed information related to exclusive breastfeeding, all public health volunteers (100%) stated
that they felt responsible for promoting exclusive breastfeeding, and the majority (63.2%) of public health volunteers stated that the holders of an important role in the promotion of exclusive breastfeeding were the entire community.

The results showed that the majority (78.9%) of health public health volunteers stated that knowledge of exclusive breastfeeding was sufficient. Hal ini kemungkinan disebabkan karena kader kesehatan pernah memperoleh pendidikan kesehatan dari petugas kesehatan puskesmas terkait ASI Eksklusif. Health education in the community can be done through several methods such as lectures, peer group education, individual counseling, group counseling, as well as through the formation of ASI support groups. Health education in increasing the achievement of exclusive breastfeeding among the lower middle class community in various countries can be done on a per-person basis, needs-based, informal and recurrent health education and formal antenatal education (Dyson, et al., 2008).

This result can be supported by the study of Agbozo et al (2016) which states that community-based health promotion about optimal feeding for infants and toddlers effectively increases maternal knowledge and increases exclusive breastfeeding for infants 0-24 months. The results of the Kazaura study (2016) also state that maternal education has a relationship with the knowledge and practice of mothers in exclusively breastfeeding.

Although most health volunteers stated that they had sufficient knowledge, the majority of them also stated that they still needed information about Exclusive Breastfeeding. Health education is an important activity so that public health volunteers are willing and able to participate in carrying out posyandu activities or programs that exist in the puskesmas. Therefore cadre knowledge and skills must be adjusted to their duties in carrying out mentoring or counseling (Jumiyati, et al, 2014).

The results of this study also showed that all public health volunteers claimed responsibility for promoting exclusive ASI to the community. The results of the study also showed that the public health volunteers agreed that all communities had a role in promoting exclusive breastfeeding.

Table 3: The Results of bivariate analysis

| Skor   | Mean (Min-Max) | P  |
|--------|----------------|----|
| Pre-test | 3.1 (0-5)      | 0.000 |
| Post-test | 4.5 (2-5)     |     |

The results of data analysis using Wilcoxon showed the influence of the intervention on the improvement of respondents' knowledge scores, which can be seen through an increase in the mean post test score and p value of 0.000.

The results of the study show that the application of the module based on the concept of "Insufficient Milk Supply" is effective for increasing knowledge of public health volunteers and pregnant women in the Baturaden Subdistrict area. This can be seen from the increase in the average post-test score after respondents received health education from the module based on the concept of "Insufficient Milk Supply". The results of research conducted by Latifah et al. (2016) gave the results that the module based on the concept of "Insufficient Milk Supply" proved to be effective in increasing the mother's perception of breast milk production. In addition, the knowledge of working mothers about exclusive breastfeeding management also predicts the duration of exclusive breastfeeding for Anggraeni's working mothers (2015). A similar thing was conveyed in Jumiati et al (2014) study which stated that health education using modules can improve cadre knowledge, attitudes and behavior in an effort to increase exclusive breastfeeding.

4. Acknowledgements

Thanks to LPPM, Health Sciences Faculty, and Nursing Department of Soedirman University for supporting our research.

References

[1] Gatti, L 2008, Maternal perception of insufficient milk supply in breastfeeding, Journal of Nursing Scholarship (40)4: 355-363

[2] Agbozo, F., Colecrif, E., Ellahi, B, 2016, Impact of type of child growth intervention program on caregivers’ child feeding knowledge and practices: a comparative study in Ga West Municipality, Ghana, Food Science & Nutrition 2016; 4(4): 562–572.
[3] Anggraeni, M. D., Punthmatharith, B., & Petpichetchian, W, 2015, *A causal model of breastfeeding duration among working Muslim mothers in Central Java Province, Indonesia*. Dissertation. Prince of Songkla University. Thailand.

[4] Anggraeni, M.D., Setiyani, R., Kartikasari, A., Rahmawati, E, 2018, How do Modern Parents Deal with Cultural Beliefs on Breastfeeding? A Qualitative Study from Multiple Perspectives. *BJOM* 2018, (269)

[5] Dinas Kesehatan Provinsi Jawa Tengah, 2015, *Profil kesehatan provinsi Jawa Tengah*. Diambil dari http://dinkesjatengprov.go.id/v2015/dokumen/profil2015/Profil_2015_fix.pdf

[6] Dyson, L, McCormick, F.M,and Renfrew, MJ, 2008, Interventions for promoting the initiation of breastfeeding (Review). *The Cochrane Library*, Issue 2.

[7] Goyal. 2011, Breastfeeding Practices : Positioning, Attachment (Lact-on), and effective suckling - A hospital based study in Libya, *Journal of Family and Community Medicine*:74 – 79.

[8] Hanifah, M -, 2010, Hubungan Usia dan Tingkat Pendidikan dengan Pengetahuan Wanita Usia 20-50 tahun tentang Periks Payudara Sendiri (Sadari), *Skripsi*: Universitas Muhammadiyah Surakarta

[9] Iswarawanti, D.N, 2010, Kader posyandu: peranan dan tantangan pemberdayaannya dalam usaha peningkatan gizi anak di Indonesia, *Jurnal Manajemen Pelayanan Kesehatan* 13 (04): 169 – 173

[10] Jumiyati, Nugrahaeni, Margawati, 2014, Pengaruh Modul terhadap Peningkatan Pengetahuan Sikap dan Praktik Kader dalam Upaya Pemberian Asi Eksklusif, *Gizi Indonesia*, 37(1):19-28

[11] Kazaura, M, 2016, Exclusive breastfeeding practices in the Coast region, Tanzania, *Afri Health Sci. 2016;16(1): 44-50. http://dx.doi.org/10.4314/ahs.v16i1.6*

[12] Kementerian Kesehatan Republik Indonesia, 2016, Data dan informasi profil kesehatan Indonesia 2016. http://www.depkes.go.id/resources/download/pusdatin/lainlain/web.pdf. Diakses tanggal 5 September 2018.

[13] Kusumawardani, 2017, Hubungan Sikap Dan Motivasi Kerja Dengan Kinerja Kader Posyandu, *Skripsi*: Departemen Sains Komunikasi dan Pengembangan Masyarakat Fakultas Ekologi Manusia Institut Pertanian Bogor.

[14] Latifah, L., Susmarini, D., Kartikasari, A., 2016, Efektivitas Intervensi Berbasis Konsep “Insufficient Milk Supply” terhadap Perspesi Produksi Asi Ibu Primipara di Wilayah Perdesaan Kecamatan Sumbang, *Artikel Penelitian*: Lembaga Penelitian dan Pengabdian Kepada MasyarakatUniversitas Jenderal Soedirman.

[15] Nurayu, 2013, Hubungan Tingkat Pengetahuan, Pendidikan, Usia dan Lama Menjadi Kader Posyandu dengan Kualitas Laporan Bulanan Data Kegiatan Posyandu, *Skripsi*: Universitas Muhammadiyah Surakarta.

[16] Nursalam, 2016, *Pendidikan dalam Keperawatan*, Jakarta: Salemba Medika.

[17] Perinasia, 2015, *Bahan Bacaan Manajemen Laktasi*. Jakarta: Program Manajemen Laktasi Perkumpulan Peninatologi Indonesia.

[18] Roesli, U, 2008, *Inisiasi Menyusu Dini Plus ASI Eksklusif*. Jakarta : Arcan

[19] Sihombinget al, 2012, *Antenatal Care*, Artikel Ilmiah: http://respiratory.usu.ac.id/ Diakses tanggal 5 September 2018