

KNOWLEDGE COMMUNITY HEALTH VOLUNTEER (CHV) OF INFANT AND YOUNG CHILD FEEDING (IYCF) IN DISASTER CONDITIONS

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Abstract

Indonesia is a country located on the Ring of Fire which causes high potential for natural disasters such as earthquakes, tsunamis and volcanic eruptions that require residents to evacuate if a disaster occurs. In places where refugees often establish public kitchens sometimes have not facilitated the provision of complementary feeding food for infants and toddlers so that the mother decides to provide instant food to her child. community health volunteer are expected to be able to handle this condition so as to reduce the incidence of mortality in vulnerable groups such as infants and toddlers. The aim of this study Obtain a description of community health volunteer knowledge about IYCF in disaster conditions in Yogyakarta. This research is a mix methods research, a qualitative approach to explore the pre-disaster IYCF readiness and a quantitative approach to describe community health volunteer knowledge about IYCF in disaster conditions. Sampling uses purposive sampling technique. Respondents in this research were 50 community health volunteer in Yogyakarta. The results of the study showed that from 50 community health volunteer, only 10 (20%) had participated in IYCF training. There were 56% of respondents having moderate level of knowledge and 16% of posyandu community health volunteer had a high level of knowledge about IYCF in disaster conditions. Not all community health volunteer have received training on IYCF in disaster conditions, and only a small proportion of community health volunteer have a high level of knowledge about IYCF in disaster conditions.

Keywords : eraly breastfeeding Inisiation, exclusive breastfeeding, copmplementaryfeeding, IYCF, disaster

1. INTRODUCTION

Region Indonesia is the world's largest archipelago. Which is also located in the region between Asia and Australia and the Indian Ocean and the Pacific has 17,508 islands. Though tucked away natural resources and beauty of the islands are amazing, the Indonesian people need to realize that the archipelago has 129 active volcanoes, or known by the ring of fire, and is located at the confluence of three active tectonic plates of the world. Indo-Australian Plate, Eurasian, and Pacific. Ring of fire and is in the confluence of three tectonic plates could potentially put this island nation against the threat of natural disasters. On the other hand, the position of Indonesia is located in the tropics and hydrological conditions trigger other natural disasters, such as tornados, extreme rainfall, flooding, landslides, and droughts [1].

When a disaster occurs frequently force people to stay dipengungsian. Place of refuge many problems arise one infant feeding children fund, many mothers with depression which resulted in decreased milk production so as decide to formula feeding if less precise way it's presented will cause new problems such as diarrhea in children. Besides the common kitchen

which was established sometimes not facilitate the provision of complementary feeding infant and toddler so she decided to give instant food to her son [2].

When floods Kelantan Malaysia in 2014 women and infants are most of the people at risk of adverse effects of disasters, four major concerns during floods this: first, the negative impact of floods on the nutritional status of infants and their health; second, open space and lack of privacy for mothers to breastfeed comfortably in temporary shelters for flood victims; Third, the contribution formula, pacifiers, and bottles of milk are not controlled often received from many sources to promote formula feeding; and lastly, a misunderstanding related to the production and quality of breastfeeding that may be affected. The vulnerability of women and their babies in a natural disaster enhance the benefits of promoting the rights of breastfeeding women. Women have a right to be supported that enable them to breastfeed. This can be achieved through monitoring the distribution formula, the provision of water, electricity and medical care for breastfeeding mothers and their babies. Team rescue mission involving a variety of institutions consisting of local government, including ministries of health and nutrition, private or non-governmental and volunteer individuals have the potential to improve the unsatisfactory conditions of women and infants affected by floods and other natural disasters potential [3].

Learning from the experience of the Indonesian government adopt the recommendations World Health Organization and Unicef on the recommendation to not donate formula products for infants and children in emergency situations ataau disaster. To meet the nutritional needs of infants and toddlers when the government announced a disaster IYCF program in emergency situations. IYCF precise and on target age and time is of key importance in emergency situations and can save lives. This will protect the child's nutritional needs, growth and development and is also beneficial for mothers. Preparation for disaster situations is also important in order to prepare a proper response and in accordance with the recommendations [4].

Yogyakarta Special Region is one area in Indonesia are prone to disasters, because Sleman who has the most active volcanoes in Indonesia. An eruption of Mount Merapi in 2010 accompanied by aftershocks in the form of cold lava floods in four districts in Yogyakarta and Central Java Province, held from 25 October to early December 2010 which resulted in the deaths of 353 people because of a hot cloud, more than 350,000 people evacuated from disaster-prone areas. To reduce the risk of morbidity and mortality in infants and children in refugee settings CHV role IYCF is needed. The role of IYCF CHV in evacuation is expected to be able to prepare complementary feeding menus according to WHO and UNICEF recommendations in public kitchen evacuation so that babies and toddlers still get good nutrition [4] [5].

2.MATERIALS AND METHODS

This study is a mixed methods, qualitative approach to explore on IYCF preparation before disasters and quantitative approaches to describe the CHV knowledge about IYCF disaster conditions. Respondents or informants in this study is CHV s in Sleman Yogyakarta 50 respondents. Informants triangulation in this study is the nutrition section of the District Health

Office. Sampling using purposive sampling technique. This study took place in March to June 2019.

Data collection CHV knowledge about IYCF In disaster conditions using a questionnaire previously tested the validity of the content by 2 experts IYCF. Data analysis. used in the quantitative with descriptive. Collecting data on disaster preparedness IYCF before using in-depth interviews and focus group discussion (FGD). Analysis of the data used in this qualitative research is data collection, data reduction data presentation and conclusion.

3.RESULTS AND DISCUSSIONS

Results

This research was conducted in doing in Sleman with Posyandu CHV respondents as many as 50 people. These characteristics of the respondents were age and maternal education. Description of research respondent data can be seen in the following table:

variables	($\Sigma = 50$) Frequency (n)	Percentage (%)
Age Mothers		
20-35 Years	12	24
> 35 Years	38	76
Education		
Basic	2	4
secondary	43	86
High	5	10
Training IYCF		
No	40	80
Yes	10	20
Knowledge		
Low	14	28
moderate	28	56
High	8	16

Source: Primary Data 2019

From the results of research show that the majority of respondents are in the age > 35 years is equal to 76%, based on the education level of respondents most have secondary education, namely junior and high school with a percentage of 86%. Most respondents had not received training on IYCF organized by the health centers and the Department of Health. Respondents who have a high knowledge of the IYCF disaster conditions by 16%.

Preparation IYCF in emergencies is the IYCF implementation guidelines in an emergency or disaster, the disaster action plan of activities, there is socialization, training and coaching for the CHV of IYCF disaster conditions as well as preliminary data disaster area. In-depth interviews to Posyandu CHV s are getting training and who have been trained IYCF. Informants triangulation in this study is the nutrition section of district health offices coded K1. Here are the characteristics of informants

Informants code	Education	training IYCF
R1	secondary	Yes
R2	High	Yes
R3	secondary	Not
R4	secondary	Not
R5	Basic	Not

Results depth interviews conducted by the CHV s of the IYCF preparation before disaster is still lacking. IYCF implementation guidebook solely owned by CHV s who had attended training and are not socialized to other CHV s. But in the guidebook implementation of IYCF owned only contains about IYCF under normal conditions while guidelines in carrying IYCF disaster condition is only conveyed when training. *"....I had IYCF guide books, and I use myself, IYCF contents in normal conditions but yesterday was fitting training in disaster conditions tangent IYCF suppose should not donate formula without permission not allowed to use dot (Informant R1).*

In disaster-prone areas should be contained disaster action plan of activities, there is socialization, training and coaching for the CHV of IYCF disaster conditions as well as preliminary data disaster area, but it is not well coordinated. Results of interviews with district health offices nutrition section. *"... Actually existing disaster action plan activities and initial data disaster area but have not socialized at all CHV s in Posyandu. IYCF for CHV s training program of work that is the responsibility of the health center health center to socialize this program. However, the health center also has limitations that not all volunteers can be trained, just grab one every hamlet in CHV and for training right IYCF is also large fund long time to 48 hours or 6 days (Informant K1)*

CHV s do not understand about the action plan in anticipation of a disaster, there is socialization, training and coaching for the CHV of IYCF disaster conditions as well as preliminary data disaster area. *"I have not been training IYCF so I do not know about the planned activities of disaster anticipation, there is socialization, training and coaching for the CHV of IYCF disaster conditions as well as preliminary data disaster area. Because of the health centers do not all CHV s IYCF trained only every hamlet 1 CHV (The informant R3, R4, and R5)* "while according to the IYCF CHV s who had been trained by the health center said that the training materials IYCF only in normal conditions only, for IYCF in disaster condition only briefly mentioned. *"... When the IYCF training material presented at the health center only IYCF under normal conditions only, whereas for IYCF disaster conditions just saying that it should not use a pacifier, the baby should not be given formula without the supervision of medical personnel, so that we do not understand the depth of the IYCF disaster conditions. I also do not understand the disaster action plan, and initial data concerning the affected areas, which I understand only in the area slopes are prone to disasters Merapi volcano erupted (Informant R2).*

Discussions

Disasters are unpredictable and generally cannot be prevented from occurring. Nevertheless, pediatricians and others involved in the care and well-being of children can prepare for and mitigate their effects, encourage preparedness and resiliency among children and families and within communities, and ensure that children's needs, including those of children and youth with special health care needs, are not neglected in planning, response, and recovery efforts [6].

Related efforts on meeting the basic needs of disaster conditions, at the global level is also already many guidelines can be a reference. Guidelines drawn up The Sphere Project (20 11), for example, detailing the principles of protection and minimum standards in four aspects, namely: 1). Clean water, sanitation and hygiene-related promotions, 2). Food security and nutrition, 3). Shelters or transitional shelter and non-food needs, and 4). Health services. In this document, it is mentioned that essential health services that need to be considered include: control of infectious

diseases, child health, sexual and reproductive health, injuries, mental health and non-communicable diseases [7].

Respondents in this study mostly had aged > 35 years. Increasingly underage person's level of maturity and strength to be more mature in thinking and working in terms of public confidence that more adults will have more confidence than those who have a high enough maturity. It is expected CHV s able to provide good counseling to mothers IYCF disaster conditions in refugee camps. Most respondents have secondary education (86%). The higher the person's level of education the more knowledge. Conversely the less education a person would hinder the development of a person's attitude towards new values introduced [8].

The results showed that only 20% of CHV s training IYCF, it is still lacking considering the CHV has an important role in providing support IYCF disaster conditions for infant and young children are a particularly subject to vulnerable groups in disaster. According to Gribble there are three components IYCF first disaster conditions supporting breastfeeding, Including supporting early initiation of breastfeeding, exclusive breastfeeding for the first 6 months of life, and continued breastfeeding until 2 years of age. Also it may include assisting mothers and caregivers to move from mixed feeding to exclusive breastfeeding, supporting relactation, and facilitating wet nursing. Second involves supporting nonbreastfed infants through breastfeeding or enabling access to human milk wherever possible and through the provision of support and resources for breastfeeding wherever formula feeding is not possible. Support and resources for feeding formula include access to infant formula; feeding, preparation, and washing imple-ments; fuel; safe water; education; and health monitoring and care. Third, involves supporting complementary feeding through ensuring that older infants and young children have access to Appropriate complementary foods. This includes making sure that com-plementary foods are of acceptable quality, varied, and Provided in an Appropriate amount and that caregivers are provided with the resources needed to hygienically prepare meals and with the support to response-sively feed. and health monitoring and care. Third, involves supporting complementary feeding through ensuring that older infants and young children have access to Appropriate complementary foods. This includes making sure that com-plementary foods are of acceptable quality, varied, and Provided in an Appropriate amount and that caregivers are provided with the resources needed to hygienically prepare meals and with the support to response-sively feed. and health monitoring and care. Third, involves supporting complementary feeding through ensuring that older infants and young children have access to Appropriate complementary foods. This includes making sure that com-plementary foods are of acceptable quality, varied, and Provided in an Appropriate amount and that caregivers are provided with the resources needed to hygienically prepare meals and with the support to response-sively feed [9] [10].

IYCF CHV knowledge about disaster conditions is still low, only 16% of CHV s who have a high knowledge of the IYCF disaster conditions. CHV has an important role in public health, as a CHV of the people closest to the people and can help educate people affected by the disaster. In many disaster conditions that arise relating to nursing mothers, infants and children under two years because of limited water and fuel for dining needs. Besides breastfeeding mothers temporarily unable to suckle her baby because of the stressful event or a baby who lost mother (infant orphan), so that the baby does not get the milk for survival. In addition, unavoidable is the number of donations of infant formula from another country [2] [11].

When a disaster occurs is still recommended for breastfeeding mothers and their children is not recommended to give the formula without the supervision of a health worker. Formula feeding

may increase the incidence of morbidity and mortality due to diarrhea in refugee camps in view of the availability of clean water and shelter to sterilize the bottle is very limited [12] [13].

In refugee sometimes complementary feeding has not been prepared in a common kitchen so that mothers who have children find it difficult to provide for his meal. In these conditions the role of a trained CHV of IYCF is needed. complementary feeding is made from local ingredients, making it easier to set them up. CHV s who have a good knowledge will help people in camps in preparing complementary feeding with local materials and according to WHO recommendations and UNICEF. This is expected to reduce mortality and morbidity due to diarrhea [14] [15].

According to [4]. The government is already preparing guidelines for the implementation of the handling of infant and young child feeding in emergencies or disasters, in the book already contains a full on action plans in anticipation of disaster, but apparently not well known to the public. This is consistent with the results of interviews with respondents R2 stating “...*When training IYCF in Puskesmas material presented only IYCF under normal conditions only, while for IYCF disaster conditions just saying that it should not use a pacifier, the baby should not be given formula without supervision of health workers, so that we do not understand the depth of the IYCF disaster conditions. I also do not understand the disaster action plan, and initial data concerning the affected areas.* (16)

In addition to preliminary data concerning the affected area has been issued by the National Disaster Management Agency, but has not been well communicated. Though preliminary data regarding the disaster area is very important in reducing the risk of disaster. people who are in the affected area are obliged to follow the training organized by the BNPB covering [1].

4. CONCLUSION

Results of research on IYCF preparation before disaster is still lacking. Most respondents do not know about the guidelines for the implementation of the IYCF handling in an emergency or disaster, not socialized disaster action plan of activities, and the initial data disaster area. IYCF knowledge level CHV s of disaster conditions is still low, only 16% of CHV s who have a high knowledge of the IYCF disaster conditions.

5. ACKNOWLEDGMENTS

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REFERENCES

- [1] Amri MR, Yulianti G, Yunus R, Wiguna S, Adi AW, Ichwana AN, et al. Risiko Bencana Indonesia. Jakarta: BNPB; 2016.
- [2] Depkes RI. Pedoman Pemberian Makan Bayi dan Anak Dalam Situasi Darurat. In: Indonesia DKR, editor. Jakarta2007. p. 1-26.
- [3] Sulaiman Z, Mohamad N, Ismail TAT, Johari N, Hussain NHNJAPjocn. Infant feeding concerns in times of natural disaster: lessons learned from the 2014 flood in Kelantan, Malaysia. 2016;25(3):625-30.
- [4] Kemenkes RI. Pedoman Pelaksanaan Penanganan Gizi Dalam Situasi Darurat. In: Indonesia KKR, editor. Jakarta2010.
- [5] BNPB. Rencana Strategis Badan Nasional Penanggulangan Bencana Tahun 2015-2019. In: BNPB, editor. Jakarta2015.

- [6] Council DPA, Pediatrics CoPEMJ. Ensuring the health of children in disasters. 2015;136(5):e1407-e17.
- [7] Greaney P, Pfiffner S, David Wilson DJS, United Kingdom: The Sphere Project. Humanitarian Charter and Minimum Standards in Humanitarian Response. 2011.
- [8] Nursalam SP, Sri U. Konsep dan penerapan metodologi penelitian ilmu keperawatan: pedoman skripsi: Tesis, dan Instrumen Penelitian Keperawatan. Jakarta: Penerbit Salemba Medika; 2011.
- [9] Gribble K. Supporting the Most Vulnerable Through Appropriate Infant and Young Child Feeding in Emergencies. *J Hum Lact.* 2018;34(1):40-6.
- [10] Prudhon C, Maclaine A, Hall A, Benelli P, Harrigan P, Frize JJBN. Research priorities for improving infant and young child feeding in humanitarian emergencies. 2016;2(1):27.
- [11] Theurich MA, Grote VJJoHL. Are commercial complementary food distributions to refugees and migrants in Europe conforming to international policies and guidelines on infant and young child feeding in emergencies? 2017;33(3):573-7.
- [12] WHO, Unicef. Buku Panduan Peserta Konseling Menyusui. Jakarta 2011.
- [13] Widayatun W, Fatoni ZJJKI. Permasalahan Kesehatan dalam Kondisi Bencana: Peran Petugas Kesehatan dan Partisipasi Masyarakat. 2016;8(1):37-52.
- [14] Widaryanti R. Pemberian Makan Bayi dan Anak. Yogyakarta: Deepublish; 2019.
- [15] Kemenkes RI. Materi Peserta Modul Konseling Pemberian Makan Bayi dan Anak. Jakarta: Direktorat Gizi Masyarakat; 2017.
- [16] Prudhon C, Benelli P, Maclaine A, Harrigan P, Frize J. Informing infant and young child feeding programming in humanitarian emergencies: An evidence map of reviews including low and middle income countries. *Matern Child Nutr.* 2018;14(1).