

ASSISTANCE FOR DISASTER NUTRITION INTERVENTION THROUGH FOOD SUPPLY MANAGEMENT ACTIVITIES, NUTRITION COUNSELING AND EDUCATION

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Abstract

Indonesia's geographical conditions make Indonesia a region prone to disasters, one of which is an earthquake. Cianjur Regency is one of the areas affected by an earthquake at the end of 2022. Disasters also open up opportunities for new disasters to emerge on public health status. Food and nutrition are basic needs that are important to be concerned about and focus on in handling emergencies because they determine health status. The Bangkit Village Activity Program (KKB) aims to find solutions to post-earthquake disaster nutrition management problems. This program is carried out through several activities, namely Rapid Nutritional Survey, Food Supply Management, Counseling, and Nutrition Education. The target of this activity is disaster-affected communities, especially special groups, namely infants, toddlers, pregnant women, breastfeeding, and the elderly. The results of the activities show a positive impact with the availability of data describing the health status of the community, increasing knowledge through education, exploring health problems through counseling, and quality assurance and food safety. The sustainability of the program needs to be considered by all parties involved to improve the health status of disaster-affected communities in Nagrog Village, Cigrass Village, and Cugenang District.

Keywords: Disasters, Earthquakes, Health, Nutrition.

INTRODUCTION

Indonesia is an active earthquake zone region that is above 3 continental plates, namely Indo-Australia, Eurasia, and the Pacific, and is surrounded by the Pacific Ring of Fire (ring of fire). Infographic data from the National Disaster Management Agency (BNPB) shows that the total number of disasters in Indonesia throughout 2020 reached 2,952 disaster cases (BNPB, 2020). On November 21, 2022, the Cianjur earthquake occurred at 13:21:10 WIB. The epicenter of the earthquake occurred at coordinates 6.84 LS – 107.05 and a depth of 11 km with a magnitude of 5.6. As of November 28, 2022, at 07:00 WIB, there have been 297 aftershocks with the largest magnitude of M4.2 and the smallest M1.0 (Geological Agency of the Ministry of Energy and Mineral Resources, 2022).

This geographical condition makes Indonesia a region prone to disasters, one of which is an earthquake. Physically, disasters have an impact on damage to infrastructure and facilities including settlements, public facilities, and health facilities. In addition, disasters also open up

opportunities for new disasters from a health perspective, such as outbreaks of certain diseases and health problems. (Sulistiawati & Taufiqurrahman, 2020).

Disaster emergencies often become a critical point for worsening nutritional problems, both nutritional problems arising as a result of disasters or pre-existing ones. A decrease in nutritional status in a disaster emergency can occur, some of which are caused by limited health services and interruptions in food distribution channels. Populations that previously had poor nutritional status will be more vulnerable to experiencing a decline in nutritional status. Meanwhile, populations that previously had good nutritional status may experience a decline in nutritional status due to a disaster emergency. Therefore, disaster nutrition interventions are very important, both during the pre-disaster, emergency response, and post-disaster periods, especially for vulnerable groups such as toddlers, children, pregnant women, and breastfeeding mothers (Directorate of Community Nutrition, 2020).

Food and nutrition are basic needs that are important to be concerned about and focus on in handling emergencies. The need for food and nutrition needs to be managed properly to meet the needs of disaster victims/survivors. Disaster management to fulfill the nutritional status of disaster survivors needs to focus on the nutritional needs of vulnerable groups, including infants, toddlers, children, pregnant women, and the elderly. A disaster nutrition intervention aims to prevent nutritional problems from occurring as a result of a disaster, to ensure proper nutrition programs, and efforts to prevent and deal with nutritional problems. (Directorate of Community Nutrition, 2020).

From the results of the initial field visit conducted by the Team, it was found that one of the impacts of the earthquake was the damage to residents' houses which resulted in disruption of family food availability for the community in the Cigrass village area, Cugenang sub-district, Cianjur Regency. At the time of the visit, the public kitchen was not available, according to information from Mrs. Nanih (posyandu cadre) previously a public kitchen was provided, but as of 2 December 2022 the public kitchen was not available and the community carried out activities to provide food for their families in refugee camps or several shelters alternately.



Figure 1. Initial Conditions in the village of Cigrass, Cugenang sub-district, Cianjur Regency

All of the efforts made are challenges that must be faced to be able to carry out an appropriate and rapid assessment of the nutritional needs of affected groups. In addition, it is necessary to make efforts to manage disaster nutrition in an efficient and well-implemented way. Proper and fast nutrition management will keep health problems under control so that they do not cause lasting impacts.

The Director General of Research and Technology Higher Education (Ditjen Diklitrik) launched the Kampung Cekattan (Fast, Responsive, Collaborative, and Together Sustainable) program on Tuesday, December 13, 2022. The program is a non-profit service involving universities. contributed to overcoming the Cianjur earthquake. Universities help the community to accelerate the development of economic ecosystems in earthquake-prone areas. Universities can assist in all phases of disaster management during a crisis, from recovery to rehabilitation to reconstruction. One of the programs launched was Kampung Cekattan which consisted of community self-help activities (KKM) and village revitalization activities (KKB). The Bangkit Desa Operation (KKB) is an implementation of the Merdeka Learning Campus Merdeka Operation (MBKM) which encourages village/regional development.

Based on the consideration of the review of the situation at the disaster location in Cianjur, the location of the intervention was determined, namely in the village of Cigrass. In general, in that area, there are still many people living with a higher number of victims. Based on the general description obtained, there needs to be special attention related to the management of food supply and the organization of meals considering that there are many victims whose food and nutritional needs must be met. Apart from that, with the large number of victims who are in shelters with less-than-ideal conditions, it is necessary to assist in the form of nutrition counseling and nutrition education for vulnerable groups as an effort to improve nutritional problems from the impact of the disaster. The purpose of this activity is to deal with the impact of the earthquake disaster in the Cianjur Region, it is proposed to provide disaster nutrition assistance through activities such as food supply management, counseling, and nutrition education.

IMPLEMENTATION AND METHOD

The implementation of KKB activities for the Implementation of Disaster Nutrition Intervention Assistance through Food Supply Management Activities, Counseling, and Nutrition Education, is carried out in the following stages:

1. Initial Survey and Rapid Nutritional Survey

Surveys are carried out to ensure that the programs to be implemented are to the needs of the community. The survey was conducted on December 14, 2022, and was attended by the proposing team to ensure compatibility between the proposed program plans and community needs. The initial visit to the earthquake site also took time to conduct a Rapid Nutritional Survey at residents' shelters.



Figure 2. Stages of the Initial Survey and Implementation of the Rapid Nutritional Survey in Residents' Shelters.

2. Food Supply Management for the People of Nagrog Village, Cigrass Village

Food supply management to ensure safety and prevent food-borne disease transmission. This activity was carried out on December 14, 2022.





Figure 3. Food Supply Management

3. Implementation of Nutrition Counseling

Nutrition counseling is carried out for vulnerable groups, namely pregnant women and nursing mothers to help with pregnancy care and breastfeeding for babies. The method used in nutritional counseling is elective counseling, which is a counseling method that combines directive and non-directive methods, namely a flexible and multifaceted counseling approach that allows counselors to use the most effective methods available to meet the needs of each client. Counseling activities will be held on December 14 and 16 2022.



Figure 4. Counseling Activities

4. Implementation of Nutrition Education

Nutrition education will be held on December 18, 2022. Types of educational activities and targets are shown in the following table:

Table 1. Schedule of Activity Implementation

No	Activity	Target	Method	Tools and materials
1.	Education on the nutritional needs of pregnant women and how to eat properly and correctly so that nutritional needs are met and prevent the occurrence of anemia in pregnant women.	Pregnant mother	Lecture	Flipcharts/posters, booklets
2.	Education on balanced nutrition patterns and filling my plate	Mothers of toddlers, children, and the elderly	Lectures and games	Flipcharts/posters, videos, models
3.	Education on breastfeeding techniques and the benefits of breastfeeding	Breastfeeding mothers	Lectures and demonstrations	Flipcharts/posters, videos



Figure 5. Implementation of Nutrition Education

The partners involved in this disaster nutrition intervention assistance activity are BKP (Banee Kosim Peduli) which has a concern with community empowerment, especially the provision of facilities/facilities for sanitation, partner participation includes:

- An initial survey of community service locations in the Cigrass Village area of Cianjur Regency
- Coordination with local communities in disaster nutrition intervention facilitation activities
- Provision of shared kitchen facilities that can be used by all residents in carrying out cooking activities.

5. Evaluation Stage

At this stage the team evaluated the entire series of activities for community representatives, and in general, the community stated that they were helped and expressed their thanks, the community stated that they received benefits from the activities carried out by the KKB Team, namely increasing knowledge about how to choose, process and organize food menus for family, representatives of education and counseling participants, Mrs. Nanik stated that they know the latest health conditions and efforts to prevent disease by improving the food consumed both in quantity and type. The people of Kampung Nagrog hope that the health service program will continue because many residents have health complaints such as coughs, runny nose, dizziness, and headaches.

At the end of the series of activities, a handover was carried out to Mrs. Ai Maesaroh as the representative of the Nagrog village community, Cigrass Village, Cugenang District, by signing the Minutes of Handover.

The implementation of disaster nutrition intervention assistance activities involved 3 lecturers and 5 students. All received recognition from the University of Ibn Khaldun Bogor. Lecturers receive a community service award certificate, while students receive an SKPI (Certificate of Accompanying Diploma). The team consists of 3 lecturers with scientific backgrounds, in community nutrition, maternal reproductive health & MCH (Mother-Child Health), and health promotion together with 5 students consisting of 3 students from the public health study program and 2 students from the undergraduate study program nutrition. Team leader Tika Noor Parstia., S.KM., M.KM is in charge of leading and coordinating team assignments and formulating methods for implementing community service (KKM Assistance), Member 1 Fenti Dewi Pertiwi., S.Kep., Nurses., MKM in charge of coordinating Nutrition Counseling and Education, member 2 Andreanda Nasution., S.KM., M.Kes in charge of coordinating Food Supply Management activities and Students in charge of Assisting Engineering in the field related to administration and community assistance in training activities, counseling, and nutrition education.

The Community Self-Reliance activity entitled Disaster Nutrition Intervention Assistance Through Food Supply Management, Counseling, and Nutrition Education involved 5 students, consisting of 3 students from the Public Health Study Program, and 2 students from the Nutrition Science Study Program. Service activities last for 1 month from planning, community service processes/activities, and money on implementation to reporting on program implementation. Student independence activities are recognized as equivalent to 3 credits or the equivalent of 8160 hours, 136 hours, and 3.4 weeks.

RESULTS AND DISCUSSION

1. Functions and Benefits of Research Results and Community Service

Community service activities carried out in Nagrog village, Cigrass Village, Cugenang District, refer to two aspects, namely the Food Supply Management Simulation which aims to provide knowledge and skills so that they can manage food supply in Nagrog village, Cigulung Village, Cugenang Village so that they can help ensure safe food availability for the people of Cigrass Village and the fulfillment of the nutritional needs of the people in the Cigrass Village area; the second aspect is the Implementation of

Counseling, Nutrition Education for vulnerable groups, namely pregnant women and nursing mothers to help carry out pregnancy care and breastfeeding for infants to optimize the health status of vulnerable groups and prevent illness caused by inadequate nutrition in vulnerable communities.

2. Social Economic Impact

The impact of implementing this service will have an economic impact. Optimization of knowledge and skills as well as the availability of shared kitchens that can be used by residents affected by the earthquake are expected to be able to increase the community's nutritional intake in general to increase the resilience of immune function which will ultimately improve community health status and have an impact on increasing community productivity and reducing the risk of using funds for treatment. Based on testimonies and the results of interviews with the community, Mrs. Ai Maesaroh as a partner in this activity stated that the community was very happy and helped and expressed her highest gratitude to KEMENDIKBUDRISTEK DIKTI for the Bangkit Village Activity (KKB) program and also the KKB team from Ibn Khaldun University Bogor.

3. Contribution to Other Sectors

Improving the health status of the community through health promotion and prevention efforts carried out by the proposing team in the form of providing education and counseling is expected to be able to increase the knowledge and skills of the community in preparing a balanced family nutritional intake which is expected to be able to improve the quality of human resources, and improve their health status. In addition to making the community self-sufficient in managing and ensuring the logistics security of food aid provided during a disaster.

CONCLUSION

The implementation of community service activities for Disaster Nutrition Intervention Assistance Through Food Supply Management Activities, Counseling, and Nutrition Education did not experience significant obstacles. Even though in the rapid nutrition assessment not all of the community could be reached by the team, all plans could be implemented according to a predetermined schedule. The results of the counseling show that many residents complain of health problems such as coughs, and colds, and found data that some elderly people have hypertension. Community knowledge increases with balanced nutrition education. In addition, food supply management helps the community to ensure the quality and safety of the food available on site.

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