EDUCATION OF HEIMLICH MANEUVERS IN CHILDREN IN THE GRIEVING MARIA MONASTERY TPA IN OVERCOMING AIRWAY CLOCKIES

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Abstract

Choking is one of the causes of increased morbidity and mortality in children, especially at the age of 3 years or below. In Indonesia, it is stated that around 10% of the 430 cases of infant mortality are caused by choking while breastfeeding. Most people don't know what to do when their child chokes, including the babysitter at the TPA Maria Berdukacita Monastery. Caregivers of children have insufficient knowledge in preventing, and recognizing signs of choking and being able to perform first aid for a child who is choking. This condition can be treated by providing information and skills on the Heimlich maneuver technique which is simple, cheap, and applicable to be applied by caregivers in preventing, recognizing, and performing first aid for choking. By providing information and practice, caregivers' knowledge increases regarding the Heimlich maneuver technique in overcoming airway obstruction in children.

Keywords: Heimlich Maneuver, Parenting, Airway Obstruction

INTRODUCTION

Upper airway obstruction is a disorder that causes blockage of the upper respiratory tract. Airway obstruction or in cloud language known as choking is an emergency condition that must be treated quickly (Siregar & Pasaribu, 2022). Choking is one of the respiratory emergencies that can be life-threatening if left too long, the body can experience a lack of oxygen (hypoxia), and can lead to death (Suparti & Amelia, 2019).

Choking is one of the causes of increased morbidity and mortality in children, especially at the age of 3 years or below (Tandiayuk et al., 2021). According to WHO data in 2011, choking occurred around 17,537 cases, and the majority were experienced by children aged 12-36 months, and in 2013 there were as many as 34 children per day brought to the emergency department due to choking (Pendigrot et al., 2019). Meanwhile, in Indonesia, it is stated that around 10% of 430 cases of infant deaths are caused by choking during breastfeeding (Suartini &; Kusniawati, 2020). Choking can occur in children and infants and various types of objects that can cause children and babies to choke namely, food, drinks, fruit, candy, toys, and others

(Tandiayuk et al., 2021). In children, the cause of choking is not chewing food perfectly and eating too much at one time (Sipayung & Purba, 2021).

In addition, children also often put small solid objects into their mouths (Rillyani, Setiawati, Elliya, &; Wandini, 2019). The data stated that the cause of choking was (59.5%) related to food, (31.4%) of choking due to foreign objects, and 9.1% of unknown causes (Romadhoni, Wahyuni, Medicine, &; Lampung, 2021). Proper handling will give good results and result in a survival rate of up to 95%. Handling with full skill and knowledge is the most important thing. Knowledge-based treatment can also save the life of someone with acute medical problems. Information and education are needed, therefore, not only for safety and accident prevention but also for prompt and appropriate handling. However, half of adults do not know what to do so that the child does not choke, choking signs, and how to deal with choking children (Suparti & Amelia, 2019).

Most people do not know the actions taken when their children experience choking, when children choke, the community will take the victim to the nearest health service (Putri et al., 2021). Based on this, it is necessary to educate the public about first aid (management airway) for airway obstruction problems, to minimize the incidence of disability or even death. Education and training provided to caregivers aim to improve the knowledge and skills of caregivers to be able to help people who have airway obstruction problems due to choking. Education is one way to approach a good and effective family so that it can change community behavior.

Maria Berduka Cita Daycare Center (TPA) which is located at Jalan Ahmad Yani No. 45 Tenda Village, Langke Rembong District, Manggarai Regency, East Nusa Tenggara is a landfill that was newly established in 2020. The facilities provided at the landfill consist of a playroom and caregivers. In 2022, 5 caregivers take care of 15 children under five who are entrusted in the landfill. Based on the results of the observes conducted, it is known that caregivers do not know the handling of choking conditions in children, this can increase the risk of emergency due to choking in children who are deposited. Risk factors that can affect the increased likelihood of choking in children include additional food, available toys, and lack of caregivers. The above factors increase the possibility of choking risk in children, this is the background of the proposer team to educate caregivers so that caregivers are expected to be able to prevent, recognize choking signs, and be able to perform first aid on choking children.

The problem in this service activity is the lack or absence of caregiver knowledge in carrying out prevention, recognizing choking signs, and being able to perform first aid on choking children. The approach method carried out in this community service activity is to provide simple, inexpensive, and applicable information and skills to be applied by caregivers in preventing, recognizing, and performing first aid in choking. The information and skills provided to caregivers are carried out to improve the ability of caregivers to prevention, recognize, and performing first aid in choking according to the needs and actions that can be taken by laymen. This counseling activity uses various educational resources from the Ministry of health as well as various sourcebooks. These educational resources are animated videos of Heimlich Maneuver that use language that is easy for caregivers to understand. In addition, demonstrations of the Heimlich Maneuver are also carried out so that caregivers can practice with the correct procedures.

IMPLEMENTATION METHOD

This community service activity is intended for caregivers at the Maria Berdukacita Landfill, the methods used are lectures, discussions, simulations/demonstrations by facilitators, and re-demonstrations by participants. The information delivery media used is in the form of materials, modules, leaflets, and teaching aids. The props prepared are half-body mannequins to teach heart massage if the victim is unconscious, baby mannequins to teach choking handling techniques, and equipped with gauze and alcohol swabs used for protection when demonstrating artificial breathing. The implementation of community service activities is carried out in stages, including (1) health education through face-to-face/lectures and discussions preceded by pretests related to Heimlich maneuvers, (2) Back Blow and Heimlich Maneuver training (choking handling) and CPR (if the victim is unconscious), (3) demonstration by participants, and (4) evaluation.

RESULTS AND DISCUSSION

This Community Service activity was attended by 10 sisters (nuns) who served as nannies at the landfill of the Marian Grieving Monastery. This activity takes place from 08.00 - 14.00 at the landfill of the Marian Grieving Monastery. The content of the training begins with taking a pretest related to the Heimlich maneuver, then participants are given material with lecture and discussion methods as well as demonstrations of Heimlich maneuver techniques. The activity ended with demonstration and evaluation (posttest). This activity is seen in Figures 1-4.



Figure 1. Material Submission



Figure 2. Heimlich Manuver Technique Show



Figure 3. Re-demonstration



Figure 4. Evaluation

The results of this service activity show an increase in the knowledge of caregivers at the landfill of the Marian Grieving Monastery which can be seen in the table below.

Tabel 1 Peningkatan Pengetahuan Pengasuh Anak TPA di Biara Maria Berdukacita

Variabel	Intervensi	N	Mean	SD	P-value
Pengetahuan	Pre test	10	50,2	9,8	0,005
	Post Test	10	86	6,7	_

Based on the table above, it can be seen that there is an increase in knowledge about the Heimlich Maneuver as a technique used in dealing with choking children. Choking can occur in children and infants, and various types of objects can cause children and babies to choke namely, food, drinks, fruit, candy, toys, and others (Tandiayuk et al., 2021). In children, the cause of choking is not chewing food perfectly and eating too much at one time (Sipayung & Purba, 2021). Proper handling will give good results and result in a survival rate of up to 95%, where handling or action is closely related to one's knowledge. Knowledge or cognition is a domain that is very important in shaping actions in a person (Notoadmodjo, 2010). According to (Notoatmodjo, 2012) the tendency to act as individuals, in the form of a closed response to a certain object. This means that, with good knowledge, a person can act and behave better in responding to things from outside himself. Training activities on Heimlich maneuver techniques for caregivers at Maria Berdukacita Landfill had an impact on increasing participants' knowledge. So, it is hoped that the caregivers of children at the landfill can apply this technique when facing the incident of children who choke while in the Maria Berdukacita landfill.

CONCLUSION

Community service, and education of Heimlich maneuvering techniques in overcoming airway obstruction can increase the knowledge of caregivers at the Marian Grieving Landfill. It is hoped that this activity can be carried out regularly and with increasing knowledge, caregivers can apply this technique appropriately when facing the situation of children experiencing choking or blockage in the airway when deposited in the landfill.

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