



THE EFFECT OF AUDIO-VISUAL BASIC LIFE SUPPORT CHOKING EDUCATION IN TODDLERS ON PARENTS' KNOWLEDGE IN HANDLING CHOKING IN PAUD/TK BANGSA PLUS

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| ABSTRACT | Keywords |
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| <p>An emergency condition is a life-threatening condition, in choking conditions a narrowing of the respiratory tract can occur which can be life-threatening. For choking incidents to be minimized, of course, one of the supporting factors is knowledge and skills. Inadequate parental knowledge in handling choking results in inaccuracies in handling. This study used a pre-experimental design technique with a one-group pre-test-post-test design approach. Data collection used a questionnaire and data analysis using the Wilcoxon test. The results showed that the majority of respondents had a sufficient level of knowledge about handling choking toddlers before being given audio-visual education, namely 46 people (92%) and 4 (8%) respondents had good knowledge, and no some are less knowledgeable. After the intervention was carried out, the result was that all respondents had a good level of knowledge after being given education, namely 50 people (100%). The results of bivariate analysis using the Wilcoxon test obtained a p-value of 0.000. In conclusion, there is an effect of basic life support choking audio-visual education on toddlers' knowledge on parental knowledge in handling choking toddlers in Kindergarten Bangsa Plus of the nation plus. The researcher concluded that this study gave significant results and had an impact on the knowledge and skills of parents, both fathers, and mothers, who are equally responsible for keeping children safe</p> | <p>Educate, audio visual, Knowledge, Basic Life Support Chocking</p> |

INTRODUCTION

Emergency conditions are life-threatening conditions and one needs to get help as soon as possible to avoid disability and death, so it depends on the speed, skills, and knowledge provided by helpers. (Tandiayuk., 2022). One of the emergency conditions that are prone to occur, especially in children under five, is choking. Choking is a blockage of the respiratory tract or respiratory disorders due to food or foreign objects which can cause internal obstruction in total and partial airways. (Sulistiyana, 2019).

Narrowing of the respiratory tract is a fatal thing that can cause damage to the oxygenation and ventilation of the body's systems. If oxygen cannot enter the body, then what happens is the body lacks oxygen, especially in the brain tissue, if this condition lasts for 4 minutes, then the brain tissue that is not supplied with oxygen is damaged, if this event continues it will result in brain damage, even death for the individual (American Academy of Pediatrics, 2013).

The initial signs of choking are choking, vomiting, wheezing, and coughing, and if objects cover the entire respiratory tract, it is indicated that the child loses consciousness and dies due to lack of oxygen. The severity of choking can be seen from the location, the type of object that is entered, and the extent of the narrowing in the respiratory tract. The extent of the narrowing of the respiratory tract is supported by the size of the object that enters it, and the size and consistency of food or objects that can result in a fatal condition (Kusmiyati, 2019). Choking can cause asphyxia, which is a condition where oxygen intake is stopped due to obstructions in the form of foreign bodies in the airway. This situation is the number one cause of fatal injuries in children less than one-year-old (Sulistiyana, 2019)

According to the World Health Organization (WHO) in 2018 around 17,537 cases of choking most often occurred in children under 3 years old, amounting to 59.5% due to food, 31.4% choked on foreign bodies, and 9.1% had unknown causes, while according to the American Academy of Pediatrics (AAP) 2010, it was explained that choking is a major cause of morbidity and death among children. The prevalence of choking in children aged less than 1 year is (30.5%) and choking in children aged 3 years and under is (77.1%) 710 cases of choking occur in children under 4 years of age with an incidence percentage of 11.6% occurring in children ages 1 year to 2 years and 29.4% occur in children aged 2 to 4 years (American Academy of Pediatrics, 2018). The American Academy of Pediatrics (2010) also explains that the main cause of morbidity and mortality in children under 3 years is choking. Food, drink, balloons, and coins scattered on the floor are the most frequent causes of choking and even cause death (Siahaan, 2018).

The incidence of choking in Indonesia from data obtained at RSUD dr. Harjono Ponorogo, East Java, there were 157 cases of choking in 2015, and in the following year there were 112 cases (Novitasari, 2016), this also happened in Denpasar, Bali on March 26, 2016, the cause of babies choking was when drinking milk (Hartono, 2016). Choking data was also presented from the Soedjati Soemardiardjo Purwodadi General Hospital for the 2016 – April 2018 period, there were 4 cases of toddlers experiencing choking (choking) being treated (Rahmawati and Suryani, 2018). The infant mortality rate in Indonesia is 34 per 1,000 live births, which means that as many as 157,000 babies die per year or 430 babies die every day. The cause of infant death by 10% is breastfeeding problems (Ministry of Health RI, 2009) (Mulyani, 2022).

For choking incidents to be minimized, of course, one of the supporting factors is knowledge and skills. Parents' knowledge about handling choking needs to be improved, knowing the dangers of choking that can cause death. Knowledge of proper emergency management of a choking child consists of three techniques, namely chest thrust, Heimlich maneuver, and back blow. At the age of one to five years and adults, all techniques can be used according to the skills of the helper (Siahaan, 2018). However, for babies aged 1 month to 1 year, the techniques that can be used are chest thrusts and back blows. The Heimlich maneuver is very dangerous for babies because their internal organs are still vulnerable to pressure or friction from outside the body (Nuraidah, 2022)

One of the efforts to make information understandable and to have an impact on changing attitudes is to provide education. Education is a good and effective way of approaching families to provide or convey health information to change attitudes by increasing family knowledge and skills to be able to help people who are experiencing problems with airway obstruction due to choking (Putri et al, 2022). Providing education has various methods including the lecture method, group discussion method, panel method, forum panel method, role-playing method, symposium method, and demonstration method (Putri et al, 2022).

Demonstrations can be carried out directly or using media, such as videos and films (Putri et al, 2022). Video is a type of audio-visual-based learning media that stimulates the functioning of the senses of hearing and sense of sight (Putri et al, 2022). Increased knowledge of using audiovisual with video more effectively. Audio-visual media is more interesting and not monotonous. (Putri et al, 2022).

Based on preliminary studies on parents who have children aged 1-6 years in

PAUD/TK Bangsa Plus, Sooko Mojokerto District, their children have experienced choking due to food that is large or not cut into small pieces, choking while drinking breast milk and formula milk. Handling was carried out by 10 parents, namely, as many as 7 people said by patting the child's shoulder and 3 other people giving lots of water. Apart from this method, parents did not know how to treat a choking child properly.

Handling that is done properly will give good results and produce a survival rate that can reach 95%. 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 fast and appropriate handling (Dwi Wahyuni et al, 2019). From the results of this preliminary study, it can be illustrated that parents do not know what to do when their child is choking, therefore it is necessary to carry out useful education to increase knowledge and skills so that parents can deal with the problem of airway obstruction due to choking independently which can minimize the incidence of disability or even death. Based on these results, the researcher is interested in researching the incident.

METHOD

This research uses quantitative methods. The design used was pre-experimental with a one-group pre-test post-test approach. Pre-Experimental was carried out to determine the level of knowledge then it will be reassessed after being given treatment. This is used to assess initial knowledge to see any changes after treatment (Husna & Suryana, 2017). In the early stages, the researcher conducted interviews regarding the experience of handling choking children and an

assessment of the level of knowledge of the respondents (pretest) in the group using a questionnaire sheet. In the second stage, the researcher gave treatment, namely the provision of education with audiovisual media or videos containing the theory of basic life support choking. In the third stage, the researcher conducted an assessment of the level of knowledge with the same questionnaire (posttest).

This research was conducted at Bangsa Plus TK/PAUD in September-November 2022. The population in this study were all parents or guardians of students at Bangsa Plus TK/PAUD, totaling 50 people. The sample in this study were parents whose children attended Kindergarten Bangsa Plus . Samples were obtained using the total sampling technique. sampling technique in this study used the entire population because the total population was less than 100.

The variables in this study, namely the independent variable or independent variable, were audio-visual basic life support choking education, and the dependent or dependent variable was the level of parental knowledge about handling a choking child, where the level of knowledge according to Arikunto, 2013 it is classified as Good, namely with a percentage of 76% -100%, Enough Knowledge with a percentage of 56% -75% and Knowledge lacking with a percentage of <55%.

The instrument uses a questionnaire from Panji 2019 which has been tested for validity and reliability. The data collected was then processed and analyzed using an ordinal scale statistical test on the knowledge level variable. In this study, statistical tests were used with the Wilcoxon Signed Rank Test to determine the comparison between the conditions before and after the treatment.

Research implementation stage: the researcher collected data in September 2022,

previously the researcher asked permission from the TK/PAud Bangsa Plus for preliminary studies, then the researcher invited parents who were willing to attend either mother or father, and explained the purpose of the research and provided a parental consent sheet as evidence that they are willing to be research respondents. After the respondents agreed, the researcher distributed pretest questionnaires to all respondents with a total of 50 people by explaining how to fill them out. After the respondent fills in, the next step is to show a video containing material and a demonstration of basic life support choking on the LCD screen. The researcher explained and gave me the opportunity to the respondent if anyone wanted to ask a question. After the video was shown, the respondents filled out a re-questionnaire or posttest accompanied by the researcher. After the questionnaires were collected, they then carried out data analysis.

RESULTS

Table 1. Frequency Distribution of Respondents by Gender, Age, Education and Work in Kindergarten Bangsa Plus

| Karakteristik | Frekuensi | Persentase (%) |
|----------------------|-----------|----------------|
| Jenis Kelamin | | |
| Laki-laki | 17 | 34 |
| Perempuan | 33 | 66 |
| Total | 50 | 100 |
| Usia | | |
| 17-25 tahun | 2 | 4 |
| 26-35 tahun | 29 | 58 |
| 36-45 tahun | 17 | 34 |
| 46-55 tahun | 2 | 4 |
| Total | | 100 |
| 50 | | |
| Pendidikan | | |
| SD | 0 | 0 |
| SMP | 0 | 0 |
| SMA/SMK | 12 | 24 |
| Diploma | 5 | 10 |

| | | |
|------------------|----|-----|
| Perguruan Tinggi | 33 | 66 |
| Total | 50 | 100 |
| Pekerjaan | | |
| IRT | 4 | 8 |
| Karyawan | 26 | 52 |
| Swasta | 7 | 14 |
| Wirausaha | 13 | 26 |
| PNS | | |
| Total | 50 | 100 |

Based on table 1 it can be seen that the majority of respondents were female, namely, 33 people (66%), and men, namely 17 people (34%), most of the respondents were aged 26-35 years, namely 29 people (58%) and at least aged 17-25 years 2 people (4%) and 46-55 years 2 people (4%). In the education category, 33 respondents (66%) had higher education degrees and for the education category, 26 respondents (52%) were private employees.

Table 2. Level of knowledge before and after the intervention of parents in Bangsa Plus PAUD/TK Bangsa Plus

| Tingkat Pengetahuan | PreTest | | PostTest | |
|---------------------|---------|-----|----------|-----|
| | F | % | F | % |
| Baik | 4 | 8 | 50 | 100 |
| Cukup | 46 | 92 | 0 | 0 |
| Kurang | 0 | 0 | 0 | 0 |
| Total | 50 | 100 | 50 | 100 |

Based on table 2 it can be seen that most respondents have a sufficient level of knowledge about handling choking toddlers before being given audio education visual, namely 46 people (92%), respondents with good knowledge as many as 4 people (8%) and no one with less knowledge. After the intervention was carried out, the result was that all respondents had a good level of knowledge after being given education, namely 50 people (100%). So that there was an increase in respondents from sufficient knowledge to good knowledge

Table 3. The effect of audio education visual basic life support choking in toddlers on parents' knowledge in handling choking toddlers in the nation's paud/kindergarten plus

| Test statistics^a | |
|------------------------------------|---------------------|
| | PostTest – PreTest |
| Z | -6.782 ^b |
| Asymp. Sig. (2-tailed) | .000 |

Hypothesis *Wilcoxon Signed Rank Test Non-Parametric* in the table above are seen from the Sig value. (Significant) 0.000. So, if the *P value* <0.05 (*Ho* is rejected, *Ha* is accepted) it means that there is an effect of audio-visual basic life support choking education on toddlers' knowledge on parental knowledge in handling choking toddlers in Kindergarten Bangsa Plus

DISCUSSION

The results of the pretest questionnaire on the meaning of choking questions, the majority of respondents, namely 36 people (74%), on average, know that choking can cause respiratory problems so that children can experience a lack of oxygen which can result in immediate death. All respondents know that choking is not a hereditary disease and that some triggers cause it to occur. 36 respondents knew that shortness of breath was a sign and symptom of choking, but 31 respondents answered that holding their stomach was a choking response, this is certainly not by existing theory. The theory explains in Umar's research, 2022 that the signs of a child choking are coughing and holding the neck. According to Sulistiyana, 2019, the initial signs of choking are choking, vomiting, wheezing, and coughing, and if an object covers the entire respiratory tract, it is marked by the child losing consciousness and dying from lack of oxygen. The severity

of choking can be seen from the location, the type of object that is entered, and the extent of the narrowing in the respiratory tract. Kusmahati, 2022 also explained that when the victim chokes, usually the victim holds his neck as if he is choking and if the incident continues it will cause other symptoms, namely shortness of breath, wheezing, or cyanosis so it is necessary to get medical treatment as soon as possible (Kusmahati, 2022)

On the question of choking prevention, all Respondents know how to prevent choking, namely not giving hard foods such as grains, eating with children can help monitor and prevent the risk of choking, and choosing toys that are safe and age-appropriate. As many as 42 respondents answered that when choking occurs, it must be handled by a health worker so that it can be seen that respondents do not know that choking can be treated at home if they have adequate knowledge and skills. According to Sumarningsi, (2015), that is, most families providing choking assistance can treat choking first, then take them to health services if the treatment is not successful.

This does not rule out the possibility because the knowledge that the respondent has may come from prior knowledge, personal or other people's experiences, and several other factors that can shape one's knowledge over a long period and will last into old age. Experience is a source of knowledge, experience can also be a way to obtain the truth of knowledge. Therefore personal experience can also be used as an effort to gain knowledge (Ar-Rasly2016).shoulder and give them to drink water so that experience in handling a choking child before getting an education can affect their level of knowledge.

the foreigner. as many as 38 respondents answered incorrectly because they did not know the fact that in theory if the foreign object is visible, the helper may take the

object with a finger or a finger swab. This is per the theory according to Kristanty, 2009, namely, if the foreign object cannot come out and the baby becomes unconscious (the baby droops limply, has no movement, lips turn blue, and cannot cry or make a sound) the treatment is as follows: 1. Lay the baby down on a flat, hard surface. 2. Open the baby's airway (baby's mouth) and see if a foreign object is visible or not. If seen grab it using a swipe of your finger. If you don't see it, don't do a "blind finger swab", scratching the baby's mouth to look for the foreign object.

As many as 38 respondents (76%) did not know how to handle choking using chest thrust (chest compression), back blow, and Heimlich maneuver techniques.

The results of the research questionnaire on the frequency distribution of parental knowledge before education were carried out, the results obtained were 46 people (92%) had sufficient knowledge, a small proportion of respondents had good knowledge, namely 4 people (8%) and after education, the results showed that all respondents were 50 people (100%) well knowledgeable. This is under previous research conducted by Mulyani and Fitriana, 2020 which stated that there was an increase in the level of knowledge after being given video education to mothers on handling toddler choking.

Data analysis with Hypothesis *Wilcoxon Signed Rank Test Non-Parametric*, which is seen from the *Sig value*. (*Significant*) is 0.000. So, if *the P value* <0.05 (H_0 is rejected, H_a is accepted) it means that there is an effect of audio-visual basic life support choking education on toddlers' knowledge on parental knowledge in handling choking toddlers in preschool/kindergarten of the plus nation.

Machfoed (2005), said health education is a process of change, which aims to change individuals, groups, and communities towards positive things in a planned way through the learning process. These changes include knowledge, attitudes, and skills through the health education process. In essence, it can be in the form of emotions, knowledge, thoughts, desires, and concrete actions from individuals, groups, and society. Education about handling choking in toddlers is an important aspect in increasing the skills and knowledge of the community because handling choking will prevent deaths from choking (Mulyani and Fitriana, 2020).

CONCLUSIONS

The results of the post-test were higher than the pre-test indicating that there were differences in the level of knowledge of the respondents before and after being given audio-visual education. The results of this statistical test can be concluded that there is an effect of basic life support choking audio-visual education on toddlers' knowledge of parents in handling choking toddlers in the Kindergarten Bangsa Plus . The researcher concluded that this study gave significant results and had an impact on the knowledge and skills of parents, both fathers, and mothers, who are equally responsible for maintaining the safety of children when they experience choking.

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