Effectiveness of “CERDEVID” Method on Community Ability doing Traffic Accident Evacuation Using Home Made Strecher

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ABSTRACT

Accidents were the leading cause of death among young people aged 15-29 y.o. One of the causes of disability and death in accident victims was the wrong evacuation procedure. Therefore it was necessary to conduct health education on how to do right evacuation procedure using home made stretcher for lay person using CERDEVID method. Aim of this research was to know the effectiveness of CERDEVID method to the community ability doing evacuation using homemade stretcher. The design was used pre experimental design, one-group pre-post test design approach, and Cluster Sampling technique with 42 respondents. The result was found that almost all respondents (95.2%) were not able to evacuate the traffic accident victims using simple stretcher and only a small part (4.8%) of the respondents were quite capable before trained. After trained, number of capable respondent was significantly increased (90.5%), and a small percentage of the respondents obtained a fairly capable (9.5%). p value 0.000 <0.05 was obtained by using wilcoxon test. It can be concluded that this CERDEVID method can be used for learning to build and develop, because this method contains three aspects of cognitive, affective and psychomotor ability which was a learning that can be kept in mind. This method was very effective to the learning so it was suggest to do this method on another training.

Keywords:
CERDEVID
Evacuation
Lay person

I. INTRODUCTION

According to the World Health Organization (WHO) states that traffic accidents in Indonesia are considered to be the third largest killer under coronary heart disease and tuberculosis. Most of the deaths from traffic accidents come from users of two-and three-wheeled vehicles (WHO Regional Southeast Asia, 2013).

From the road safety status at WHO Regional Southeast Asia in 2013 traffic data of 33,815 people were killed in the South East Asia Regional (SEAR) in 2010, with an average of 18.5 deaths per 100,000 population. The average deaths due to traffic accidents are higher in low-income countries with 19.5 deaths per 100,000 population than in poor countries with 12.7 deaths due to traffic accidents per 100,000 population. Half of the total deaths due to traffic accidents come from vulnerable road users, with details, 33% of deaths from users of two and three wheeled vehicles, 12% pedestrians, and 4% of cyclists (WHO Regional Southeast Asia, 2013). WHO data in 2011 mentioned, as many as 67% of traffic accident victims are at the productive age of 22-50 years, and there are about 400,000 victims under the age of 25 years who died on the highway with an average mortality rate of 1,000 children and adolescents everyday. In East Java, the accident rate is also quite high. According to the Central Bureau of Statistics (BPS) of East Java in 2013, there were 18,346 deaths, 3,378 deaths, 2,432 people, and 24,083 people (East Java In Figures, 2015). The number of
traffic accidents in Jombang reached 2,547 incidents with 3 deaths, 413 serious injuries and 2,131 minor injuries (Health Profile of Jombang, 2009).

Researchers chose the location of research that is in Dusun Kupang Tebel Village Bareng District Jombang District with the reason 1. Location of the road there winding, 2. No signs installed to warn road users, 3. Condition of the narrow road. 4. According to the head hamlets in the area within a month often occur 2-3 times accidents that cause minor or severe injuries and 5. There has never been a health education, especially about simple evacuation procedures. This is evident from the results of a preliminary study conducted by researchers on November 14, 2017 about the ability of simple evacuation. Of the 10 ordinary people who asked the question 100% can not perform simple evacuation procedures correctly. Efforts that are usually done by local people to help the victims of the accident is to take the victim to the roadside / house residents who are on the roadside then by the local community of the victim rushed to the nearest health center or hospital, regardless of the correct techniques in carrying victims and the impact if there is a mistake in carrying the victim due to ignorance of the community who intend to help was there the possibility of mistakes in the rearing could exacerbate the injury of the victim of the accident.

Causes of death and disability in traffic accident victims are mostly caused by mistakes in first aid to accident victims. The first aids referred to here include 1. Evacuation error, 2. Resuscitation error and 3. Mistakes in splinting. The evacuation error is the most common in the first aid of pre hospital in the public. Most people have not understood the importance of first-aid pre-hospitalization to be done to prevent more severe injuries or even life-threatening injuries, especially evacuation procedures. The wrong evacuation procedure can increase and aggravate the injury suffered by accident victims, it can also be one cause of death in the accident victims. For example, a broken bone victim, the wrong way of rapture can cause a broken bone to rupture the blood vessels and cause severe bleeding. Also on the victim of a neck injury, the wrong way of rapture can cause the nerves of the dilerher to be squeezed and may cause respiratory arrest or respiratory failure.

From the elaboration of the above problems, it is necessary to minimize the incidence of casualty victims by making the accident preparedness unit at the village level, which is in accordance with the Decree of the Minister of Health 564 / Menkes / SK / VIII / 2006 on guidelines for Implementation of Desa Siaga Development. The above efforts can be done by empowering the surrounding community through a Community Based Activity Unit (UKBM) program so that they can perform first aid methods for accident victims especially the correct evacuation method. The program can be implemented with the implementation of health education, especially about the simple way of evacuation for ordinary people in order to minimize the incidence of injuries and deaths from traffic accidents. One of them is to conduct health education using CERDEVID method. CERDEVID method is a learning method that combines from several methods, namely lecture method by using audio-visual media (video) and demonstration methods. The lecture method using the audio-visual (video) and demonstration methods actually have their own advantages and disadvantages respectively. But incorporating may be an effective method of providing learning to improve and develop audiences' skills or skills (community).

Therefore here the researchers wanted to examine the effectiveness of the CERDEVID method to the community's ability to evacuate traffic accident victims using a simple stretcher in Jombang District.

II. METHOD

In this research, the researcher uses pre-experimental design design with one-group approach pre-post test design, ie the research before the variable treatment is observed first before the intervention, then observed again after the intervention. In this research using sampling technique with Cluster Sampling. Cluster Sampling is grouping of samples by region or population location.
The inclusion criteria in this study are:

1. Living in Hamlet Kupang
2. Age 20-40 years.
3. Can read and write.

Data Was Collecting using method

1. Residents who are willing to be respondents and in accordance with the criteria required to sign a letter of willingness to be respondents.
2. To measure citizens' capacity about evacuation using simple stretcher.
4. Re-measuring citizens' ability to evacuate using simple stretches.
5. Data processing which includes editing, coding, scoring, tabulating, and data analysis.

III. RESULTS AND DISCUSSION

Table 1. Frequency distribution of effectiveness analysis of CERDEVID method on community ability to evacuate traffic accident victims using simple stretcher.

<table>
<thead>
<tr>
<th>KEMAMPUAN</th>
<th>PRE TEST</th>
<th>POST TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>MAMPU</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CUKUP MAMPU</td>
<td>2</td>
<td>4.8</td>
</tr>
<tr>
<td>TIDAK MAMPU</td>
<td>40</td>
<td>95.2</td>
</tr>
<tr>
<td>JUMLAH</td>
<td>42</td>
<td>100</td>
</tr>
</tbody>
</table>

UJI WILCOXON  p value 0,000 < α = 0.05

After the intervention in the form of learning the evacuation of traffic accident victims using simple stretcher with CERDEVID method or post test with frequency of meeting 1 times a day and done for 3 days with duration 100 minutes in each meeting most of respondents (90.5%) able to evacuate victims of traffic accidents use a simple stretcher. The result of statistical analysis test obtained p value = 0,000 (α = 0,05). Because p value <α then H1 is accepted or there is effect of learning effectiveness using CERDEVID method to society ability in doing evacuation of traffic accident victims using simple stretcher before and after given intervention.

The result using wilcoxon test is p value 0,000 <0,005 then H1 is accepted. Based on the wilcoxon test known that CERDEVID method is effective to increase the ability of the community to evacuate traffic accident victims using simple stretcher in Kupang Hamlet Tebel Village Bareng District Jombang District.

Just as Simpson (1956) points out that cognitive learning outcomes and affective learning outcomes will be the result of psychomotor learning when learners have shown certain behaviors or deeds in accordance with the meanings contained in the cognitive and affective domains with the discipline material. This is similar to the research that has been done by Hamda and Manihar (2013)
which discusses the effectiveness of demonstration methods on improving the ability of junior high school students in learning colloidal system, in the research it was found that the method of demonstration is very effective to improve students' interest in learning and is considered more memorable because students practice directly, rather than using other learning methods where students are only required to listen to them without practicing them. Similar research has also been conducted by Suryani, et al (2015) the influence of lecture methods with video on the ability to realize high school students. In this research got the result that there is influence of delivery of material using lecture method with this video seen from the student who can do realize as already taught.

From there it can be concluded that through a learning process will be able to produce knowledge as well as skills that can be judged from a particular deed or behavior. Plus for this method of learning CERDEVID also contains the three aspects of cognitive abilities, affective and psychomotor which is a learning that can be kept in mind in the long run. As well as a lecture that is thick with its cognitive aspect, then a video that attracts the affective aspect and the last demonstration that contains the psychomotor aspect. All three can complement each other in the learning process so that it can be effectively used simultaneously to build and develop the ability of learners, especially demonstrations that will be remembered in the long term because students do or experience themselves every process and steps when practicing the practice demostrasi. Plus this method is quite simple and interesting also for perseta learners that can attract learners learn. This method can also be used for learners from various backgrounds such as the general public with different levels of education as well as those of different ages and occupations. This method is very effectively used because the learning materials can be easily accepted by the students in various circles, as evidenced from this study that shows the results that initially mostly in the category of not able, after given the use of this method, the results are very different far to almost entirely able.

IV. CONCLUSION

1. The ability of the community to evacuate the victims of traffic accident using a simple stretcher before getting the learning process by CERDEVID method is 95.2% of respondents indicate the category can not afford.

2. The ability of the community to evacuate the victims of traffic accident using a simple stretcher after obtaining the learning process by CERDEVID method that is 90.5% of respondents indicate the able category.

3. Learning using the CERDEVID method is effective to increase the ability of ordinary people in conducting evacuation process of traffic accident victims using simple stretcher with signed awk test level of 0.000. So this method is good enough to be used safely in a bembelajaran process.

For future researchers should be able to develop in a broader scope and use methods and media, as well as more innovative and creative tools for learning in order to participate in educating the common people to help each other, especially in the field of emergency urgency such as evacuation of traffic accident victims. For the future, it is expected that this learning can be followed by regular training so that the learning that has been given can be sustainable and not just stop here. It is also expected that the village can develop and produce new programs related to health, especially emergency, such as BSE, landslide, tornado, fire, etc., which is considered to be a risky disaster occurring in Tebel Village as one of the efforts to succeed the government program that is a tough village. It is expected to teach and invite the surrounding community for empowerment in developing risk-related programs that exist around the Bareng area as known to many risks of landslides, putts and
crashes. Where this is in line with the government program that is healthy Indonesia which prioritizes preventive rather than curative. It is expected to conceptualize the learning to assess the risks occurring in the Tebel and surrounding areas to support the formation of relevant village programs on health and first aid. Developing teaching, community service and research related to first aid emergency, so it is hoped that students who become health workers are able to give concern for traffic accidents and able to perform better and better evacuation action, and also expected through all the students learning also can participate in the intellectualizing of the nation by sharing the knowledge they have on the community around them so it is useful for everyone.

V. REFERENCES


