

Efforts to Increase Public Knowledge About First Aid in Burns in Tanjung Mulieng, Syamtalira Aron District

Syahabuddin, Ainil Yusra, Fitriani Agustina

Politeknas Kemenkes Aceh North Aceh Nursing Study Program, Jl Banda Aceh Medan KM 6
Buket Rata 24357, Aceh, Indonesia
Email: 74.ainil@gmail.com

Abstract

People's habits in providing first aid for burns still need to be reviewed. Wrong habits can worsen the patient's condition and prolong the wound healing process. Preventing the risk of infection and the occurrence of further complications which can increase the risk of death and disability. The aim of carrying out activities is to increase people's knowledge and skills in helping themselves and their families in cases of burns. The activity method is education, demonstration and simulation of first aid for burns. The target audience for this community service activity is the residents of Tanjong Mulieng Village, Syamtalira Aron District, North Aceh Regency, totaling 29 subjects. Evaluate the success of education using knowledge instruments that are measured before and after the activity is carried out and increase skills using a first aid checklist for burns. The results obtained were a good increase in knowledge of 76%, and participants were able to correctly demonstrate first aid steps for minor burns. Increasing the community's ability to help themselves and their families can be achieved by providing education and demonstrating first aid for burns.

Keywords: Burns, Demonstration, Education, First Aid

INTRODUCTION

Burns are an emergency condition that can cause complex problems, these problems not only have an impact on permanent appearance disorders but can also cause impaired bodily functions that can increase patient dependence, job loss and uncertainty about the future (Cesarani et al., 2020). Burns are one of the highest proportions of accidents in households at 44.7% and need to get first aid as well as complex treatment to prevent unwanted further effects (Rachmawati et al., 2021).

The incidence of burns in low-income/socioeconomic countries is very high, the number of deaths is almost 90% (Rachmawati, 2021). Women in the Southeast Asia region have a high incidence of burns, 27% of the global population dies and almost 70% of them are women (Kementrian Kesehatan Republik Indonesia, 2020). In Indonesia, the incidence of uka bakar was 1.3%, an increase of 0.5% compared to 2013 (0.7%). In Aceh Province, the incidence of burns is 0.9% and the majority are more common in women (1.4%) than men

(1.2%)(Balitbangkes Kementerian Kesehatan RI, 2018). Burn sufferers are more susceptible to occur in the age group of 25-34 years by 1.4%(Kementrian Kesehatan Republik Indonesia, 2020).

Problems experienced by burn sufferers are often caused by improper handling that causes adverse effects (Chadda et al., 2024). This is influenced by the behavior and level of knowledge about first aid burns (Siddiqui et al., 2018). The existence of inappropriate community habits provides first aid if someone experiences burns such as applying toothpaste, butter, soy sauce, oil and many more assumptions and beliefs of someone who has been believed in the community. These habits are inappropriate and can even increase the severity of the wound and can lead to further problems such as infection, swelling and some complications (Gould et al., 2020).

The cause of mortality and disability in burn cases can be caused by several factors, including the severity of burns, inadequate equipment, assistance systems and knowledge of improper handling of victims and inappropriate initial aid principles. Providing proper first aid to people with burns is a significant step to reduce the severity of injuries, soreness, and post-burn complications (Mishra et al., 2019).

The problem experienced by burn sufferers, is the long healing process of burns (Oryan et al., 2017). The wound healing process can be divided into three phases, namely the inflammatory, proliferative, and maturation phases (Li et al., 2022). First, the inflammatory phase that lasts from the occurrence of the wound to 3-4 days (Sorg et al., 2017). In this phase there are vascular changes and cellular proliferation (Ramos-Medina et al., 2024). The injured area undergoes platelet aggregation and secretes serotonin, as well as epithelialization begins (Periayah et al., 2017). Second, the proliferative phase that lasts from the end of the inflammatory phase to the 21st day Third, the maturation phase, occurs from the 21st to 1-2 years where the collagen maturation process occurs, a decrease in cellular and vascular activity. The final form of this phase is in the form of scar tissue that is pale, thin, limp without pain or itching, this phase is also called the epithelialization phase. In this phase, proper treatment is needed to accelerate the wound healing process and epithelial formation (Landén et al., 2016).

Knowledge of the management of burn emergency patients plays an important role in determining the success of help so that efforts are needed to increase knowledge and demonstration of correct first aid in the treatment of burns (Ahuja et al., 2016).

Health education is one of the activities to provide educational concepts that are applied how to spread messages and instill confidence in the community to understand and be able to carry out an order related to health that aims to change unhealthy individual and community behavior into healthy. Knowledge can provide reinforcement to individuals in every decision making and in behavior, this will increase community participation to perform first aid in burns (Dorris, 2024).

The results of the initial survey in Tanjong Mulieng Village, Syamtalira Aron District, obtained data on the number of people who still have the wrong habit of providing first aid in case of burns. A few years ago there were 3 members of the community who suffered burns, were not handled properly and were taken to the hospital too late, resulting in infection and eventually death. Many people do not understand how to properly take first aid measures in burn cases (Mishra, 2019). There has never been a briefing from the health team that provides direct education to the public about first aid measures in burn cases (Mitchell et al., 2023). The

public is eager for a health team to provide them with knowledge about first aid measures in burns (Burns et al., 2024).

Increasing public knowledge about first aid in burns has an important role. The public is the first to face burn cases so proper initial treatment is very useful to prevent infection and further complications. Therefore, there is a need for efforts to increase public knowledge about first aid in burns so that people can understand and be skilled in handling burn cases quickly, precisely and correctly before being taken to the hospital.

METHOD

This community service was carried out in Gampong Tanjung Mulieng meunasah, Syamtalira Aron District, North Aceh Regency, carried out for two days. The method in this activity is counseling and demonstration / first aid training in the event of burns on oneself and family. The preparatory stage carried out is the identification of the characteristics of the partner/target area, coordination with cross-sectors and target audiences, licensing management and preparation of service media. Implementation according to the planned method and time. Evaluation is carried out by distributing pretest - posttest questionnaires and oral evaluations.

RESULTS AND DISCUSSION

The pretest results were compared with the posttest results after a demonstration of burn treatment on the second day. The results obtained after the posttest can be concluded in general there is an increase in knowledge and skills.

**Table 1 Distribution of Characteristics of Wound Care Education Participants in
Tanjong Mulieng Village**

Participant Characteristics	Sum	Percentage
Gender		
Man	4	14%
Woman	25	86%
Education Level		
SD	1	3%
JUNIOR	8	28%
SMA	14	48%
Bachelor	6	21%
Work		
ASN	1	3,4%
Farming	4	14%
Trade	5	17,2%
Laborer	5	17,2%
IRT	14	48,2%

Family members who have had burns

1	Ever	12	41%
2	Never	17	59%

Have you ever gotten information about First Aid on Burns

1	Ever	10	34%
2	Never	19	66%

Sources of information obtained about First Aid in Burns

1	Book/Magazine/Newspaper	1	10%
2	Health workers	5	50%
3	Internet/Television	0	0
4	Radio	0	0
5	Other resources	4	40%

The table above explains that the distribution of participants who participated in the community service to increase public knowledge about first aid in burns the majority of participants were women totaling 25 people (86%). The education level of the majority of participants was the high school level amounting to 14 people (48%). The majority of employees as housewives (IRT) are 14 people (48%). The distribution of family members who have experienced burns is the majority who have never experienced burns in 19 families (66%).

Table 2 Frequency Distribution of Pre-test and post-test knowledge of participants in efforts to increase public knowledge about P3K burns

Knowledge	Pre Test	(%)	Post Test	(%)
Good	6	21	22	76
Keep	15	52	7	24
Less	8	28	0	0
Sum	29	100	25	100

The table above shows significant knowledge about minor burn treatment in participants who participated in counseling and demonstration of minor burn treatment in Tanjong Mulieng village, namely those who had knowledge after attending counseling and demonstration for two days, namely those with good knowledge became 22 people (76%), those with moderate knowledge amounted to 7 people (24%), while those with less knowledge did not exist.



Figure 1. Burn First Aid Education



Figure 2. Demonstration of burns first aid



Figure 3 Documentation Demonstration



Figure 4. Group photo of participants

Based on the data on the characteristics of respondents obtained during community service in Tanjong Mulieng village, Syamtalira Aron District, it showed that the majority of participants who participated in first aid activities in minor burns were followed by women, although there were also several male participants. Participants who participated in the activity until the second day amounted to 29 people, consisting of 4 men and 25 women. This shows that fathers are also eager to listen to knowledge that is considered new and beneficial for their health. Most of the participants consisted of mothers because those most at risk for burns were 11 women. Furthermore, according to WHO in the Decree of the Ministry of Health of the Republic of Indonesia (2019) also states that women in the Southeast Asian region have the highest incidence of burns, 27% of the overall global figure died and almost 70% of them are 12 women.

Of the overall participants, they had the dominant level of knowledge was high school education, which amounted to 14 people or 48% and undergraduate education amounted to 6 people. While the type of work is dominated by housewives. This shows that in general, Tanjong Mulieng village mothers are at the upper secondary education level with the more dominant type of work being as housewives, which is 14 people or 48%.

Based on the analysis of the dominant level of education at the high school level and added with 6 scholars, the community service activity on first aid for burns is very feasible because it will be easily accepted by the participants who take part in this activity. Higher education will

facilitate the receipt of information. The higher a person's level of education, the easier it will be to receive information¹³. This is proven by the posttest results which show that there are significant changes after counseling and simulated first aid in minor burns. At the time of the pretest, a good level of knowledge was found to be 21%, but after counseling and simulation, the level of good knowledge became 76%.

CONCLUSION

Education and demonstrations of first aid in burns have an effect on improving people's knowledge and skills in providing first aid before taking family members to health services. These educational activities and demonstrations also change the behavior or habits of the community in providing first aid to family members who have suffered burns.

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