

# JOURNAL OF HEALTH COMMUNITY SERVICE



## Education as an Effort to Increase First Aid Knowledge on burns for Mothers

Niken Setyaningrum<sup>1\*</sup>, Dian Nur Adkhana Sari<sup>1</sup>

<sup>1</sup>STIKES Surya Global, Yogyakarta, Indonesia

### ARTICLE INFORMATION

Received: August 7, 2023

Revised: March 2025

Available online: May 2025

### KEYWORDS

burns, first aid, knowledge, health education

### CORRESPONDENCE

E-mail: nikensetyaningrum7@gmail.com

### A B S T R A C T

Cases of burns are a serious problem throughout the world. It is estimated that every year there are 180,000 deaths from burns. Emergency conditions for burns include fluid and electrolyte disturbances, pain in the burn area, shortness of breath when inhaling hot air, physical disturbances if there is a density, infection, impaired self-esteem due to scars and even death. One effort to increase knowledge is health education. This community service activity aims to increase knowledge and understanding of handling first aid in emergency burns. Activity methods include pretest, lectures with audiovisual media, leaflets and posttest. The results of knowledge show an increase in scores based on the results of the participant's posttest. Based on these activities, it can be concluded that health education with audiovisual media and leaflets can be used to increase mothers' knowledge and understanding of first aid for burns, it is hoped that participants will be able to apply and always share information with family members.

## INTRODUCTION

Burns are a major cause of morbidity and disability with a high burden for developing countries. The burn prevention program is an effort to reduce the incidence by increasing education and modifying the environment (Price et al., 2021). Burns are injuries that occur to the skin and body tissues due to heat and radiation. Burns have a detrimental effect both physically and psychologically on humans. (Damayanti & Setyorini, 2023). Cases of burns often occur in the extremity area with the most occurrences in households, especially in the kitchen. This incident can occur during cooking activities and also using electrical tools. Women are most vulnerable to burns because the main work in the family is exposed to fire and electricity (Arga et al., 2023; Nofiyanto & Nirmalasari, 2021). There are still many people who use traditional ingredients such as margarine, toothpaste, soy sauce and others to treat burns, even though this is not in accordance with the management of burns. (Mukhtar et al., 2022). Appropriate or not first aid measures in cases of burns are influenced by the level of knowledge of each individual. Properly providing first aid to individuals who experience burns is an important step in reducing the severity of trauma, pain, injury and complications after burns. (Siregar et al., 2023). Proper treatment of minor burns is key to preventing wound complications or worse effects (Arga et al., 2023). First aid in the prehospital phase is a very important role for the family. Based on the research conducted, education is one of the efforts to increase the level of individual knowledge and understanding (Tomayahu & Setyaningrum, 2023).

The role of the family is very important, especially a mother, possibly being the first person to deal with the incident before being taken to a health facility (N et al., 2023)(Siregar et al., 2023). Trayeman is one of the areas where research has been conducted on first aid education in cases of burns to some mothers. To continue the results of this research, community service was carried out with the theme of first aid education for burns to all mothers in the Trayeman, pleret, Bantul. When a preliminary study was conducted in the hamlet, there were still many mothers who used toothpaste and cooking oil to rub their burns. This is not in accordance with the management of burns.

## METHOD

This Community Service uses a method of increasing knowledge and understanding with pretest and posttest questionnaires. The service participants are mothers in the trayeman, Pleret, Bantul. The activity began with the participants doing a pretest, followed by delivering educational materials about first aid for burns and demonstrations of handling minor burns using the flowing water method for 20 minutes. After that it was followed by a question and answer session and interactive discussion. The activity ended by conducting a posttest on the participants.



Figure 1. Post Test Activity

## RESULT AND DISCUSSION

Community service participants were mothers who were in Trayeman hamlet, Bantul pleret with a total of 54 participants.

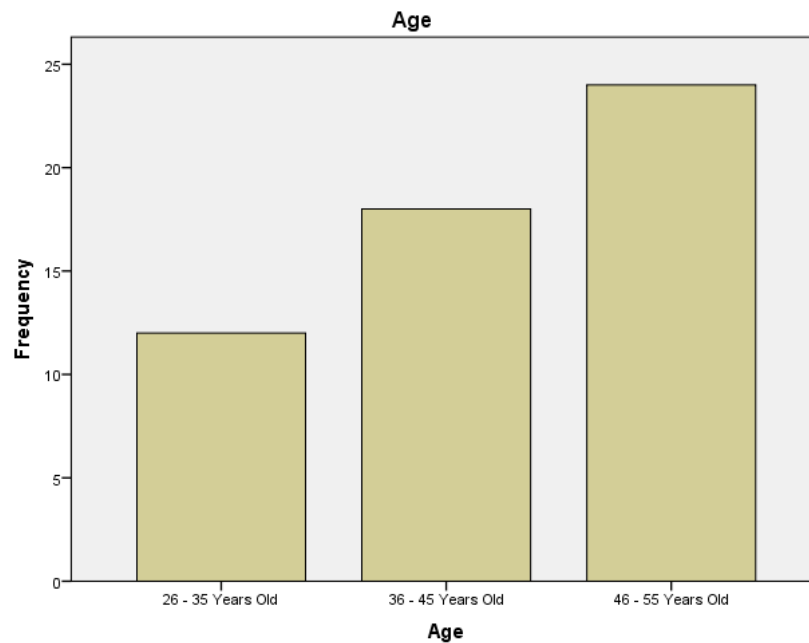


Figure 2. Age Distribution Range

Community service participants were mothers who were in Trayeman, pleret, Bantul with a total of 54 participants.

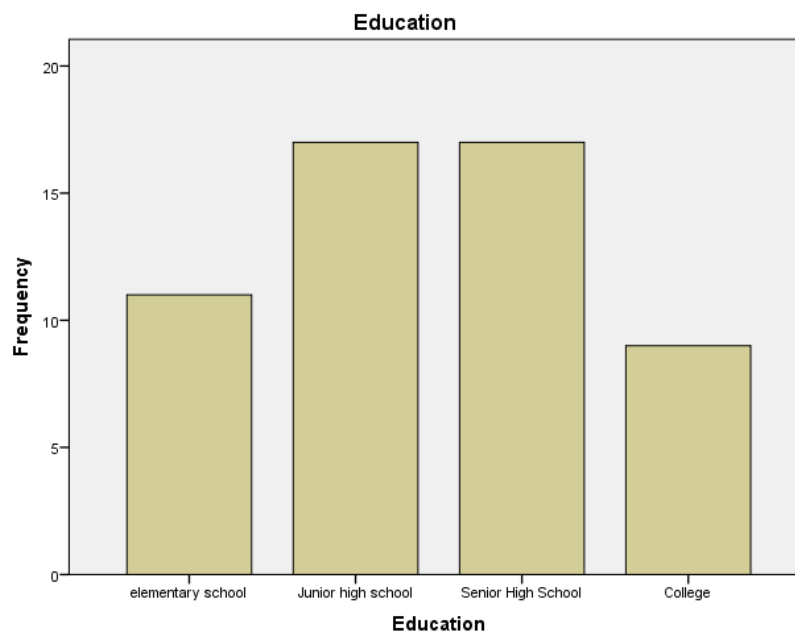


Figure 3. Education Distribution Range

Based on the results of the level of education categorized into 4 groups, namely elementary school, junior high school, senior high school and college. The majority of participants were at the junior high school and high school education levels, namely 17 participants each (31.5%).

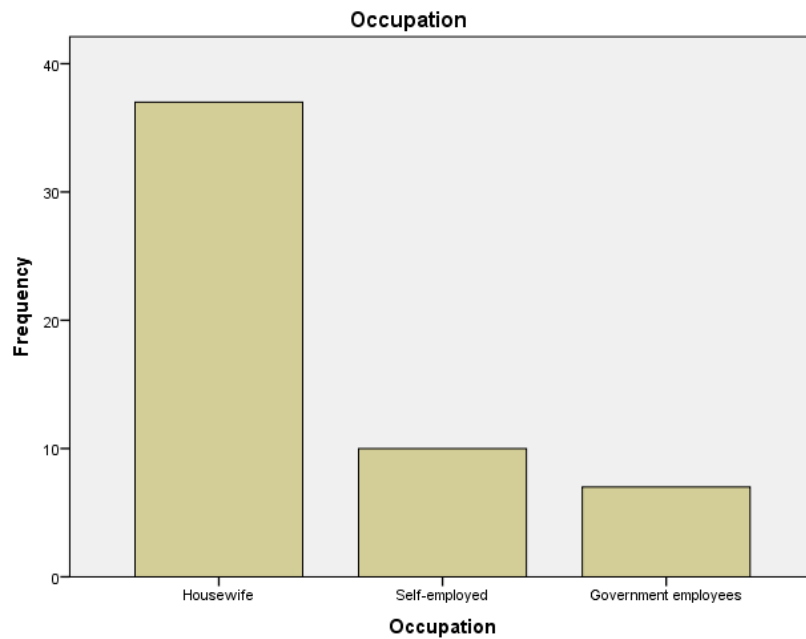
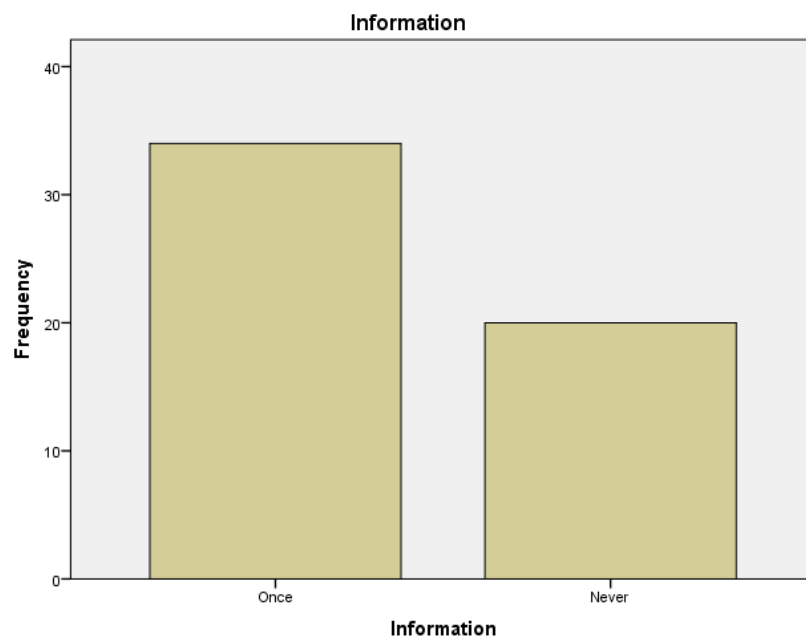


Figure 4. Occupation Distribution Range

The results of the distribution of the frequency of work of the majority of the participants were housewives with a total of 37 participants (68.5%).



Based on the information data obtained, the majority of participants' answers had never received education about handling first aid regarding burns, namely 34 participants (63%).

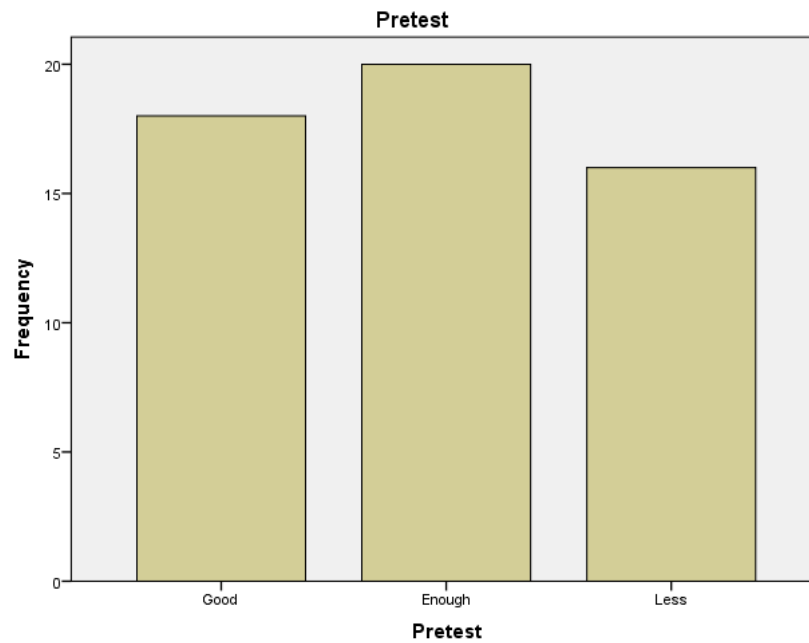


Figure 6. Pretest Distribution Range

The results of the pretest regarding the mother's knowledge and understanding of the material for handling first aid regarding burns, the majority were in the sufficient category with a score (56-74) of 20 participants (37%).

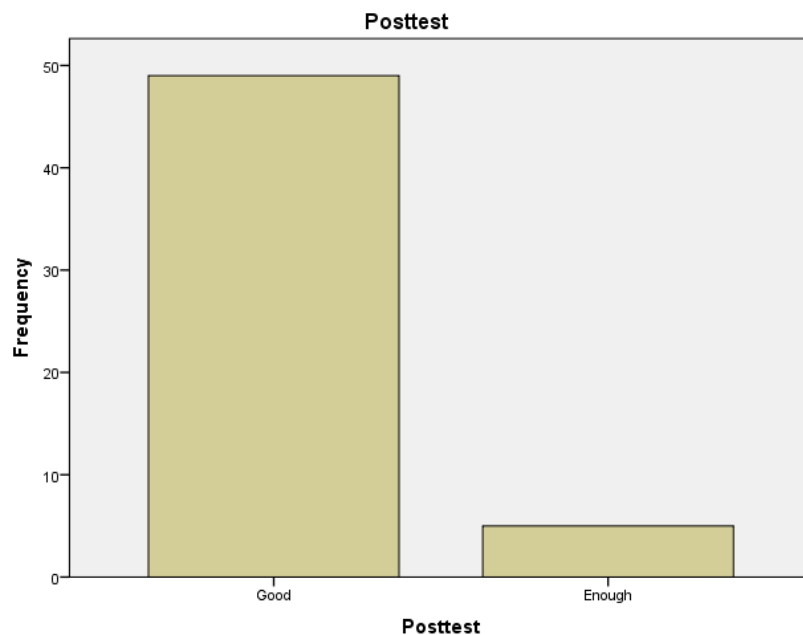


Figure 4. Posttest Distribution Range

The results of the pretest regarding the mother's knowledge and understanding of the material for handling first aid regarding burns, the majority were in the sufficient category with a score (56-74) of 20 participants (37%).

The results of the community service activities can be seen from the participants' knowledge and understanding of first aid for burns. Success in providing first aid measures for burns is influenced by experience and knowledge obtained from the right sources. The higher the knowledge, the higher the behavior and attitude of a person in solving a problem (Syahabuddin et al., 2021). Based on the recommendations for treating burns, it is by irrigating the wound with moderate temperature running water for 20 minutes. Optimal first aid can significantly reduce tissue damage, accelerating wound revitalization (Qtait et al., 2019). The role and knowledge of the community about emergency first aid for burns is the main factor that can determine the victim's safety. This is because the community is the first group that will deal directly with burn victims who need help before victims get help from medical personnel (Kustanti & Widyarani, 2023).

## CONCLUSION

The results of the assessment of the level of knowledge experienced an increase in scores from the moderate category to the good category. Several participants were able to re-demonstrate the handling of minor burns, and the interactive discussions were well attended by the participants. Demonstrations need to be carried out related to the management of moderate and severe degree burns.

## ACKNOWLEDGEMENTS

Acknowledgments to STIKES Surya Global Yogyakarta for providing financial support for the implementation of the community service program, as well as to the head of the Trayeman sub-village and all residents for their participation, so that these community service activities can be carried out properly and smoothly.

## REFERENCE

- Arga, N. A., Jufrizal, & Aklima. (2023a). Pengetahuan Masyarakat Tentang Penanganan Pertama Luka Bakar Di Kecamatan Syiah Kuala Kota Banda Aceh Knowlegde of the Community on the First Aid Burns in Syiah Kuala District, Banda Aceh. *Jim*, *VII*(2).
- Arga, N. A., Jufrizal, & Aklima. (2023b). *Sikap masyarakat tentang penanganan pertama luka bakar*. 5(1), 29–34. <https://doi.org/https://doi.org/10.32583/jgd.v5i1.1224>

- Damayanti, D., & Setyorini, D. (2023). Analisis Faktor Yang Mempengaruhi Kemampuan Pertolongan Pertama Luka Bakar Setelah Pemberian Edukasi. *Jurnal Keperawatan Priority*, 6(1), 65–71. <https://doi.org/10.34012/jukep.v6i1.3185>
- Kustanti, C., & Widyarani, L. (2023). Program Pelatihan Pertolongan Pertama Kegawatan Luka Bakar di Lingkungan Rumah Tangga. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM)*, 6(1), 212–218. <https://doi.org/10.33024/jkpm.v6i1.8101>
- Mukhtar, D. S., Ridwan, K. A., Qomariyah, Q., Marsiati, H., & Luthfiah, H. (2022). Edukasi tatalaksana awal pada luka bakar di Kecamatan Cempaka Baru, Jakarta Pusat (Education on early management of burns in Cempaka Baru Sub-District, Central Jakarta). *Buletin Pengabdian Bulletin of Community Services*, 2(3), 75–81. <https://doi.org/10.24815/bulpengmas.v2i3.27328>
- N, R. O., Oktavia, A. R., & Susanti, D. (2023). Upaya Peningkatan Pengetahuan Tentang Pertolongan Pertama Kejadian Luka Bakar Pada Anak. *Jurnal Pengabdian Mandiri*, 2(3), 969–978. <https://www.bajangjournal.com/index.php/JPM/article/view/5318>
- Nofiyanto, M., & Nirmalasari, N. (2021). Praktik Penanganan Pertama Luka Bakar Pada Ibu Rumah Tangga Di Wilayah Sleman Yogyakarta. *Media Ilmu Kesehatan*, 9(1), 1–10. <https://doi.org/10.30989/mik.v9i1.323>
- Price, K., Lee, K. C., Woolley, K. E., Falk, H., Peck, M., Lilford, R., & Moiemmen, N. (2021). Burn injury prevention in low-and middle-income countries: Scoping systematic review. *Burns and Trauma*, 9. <https://doi.org/10.1093/burnst/tkab037>
- Qtait, M., Alekel, K., & Asfour, A. (2019). First Aid: Level of Knowledge of Relatives in Emergencies in Burn. *International Journal of Biomedical and Clinical Sciences*, 4(1), 24–28. <http://www.aiscience.org/journal/ijbcshttp://creativecommons.org/licenses/by/4.0/>
- Siregar, N., Purba, W. S., Handayani, A., Kesdam, A., Bukit, I., & Pematangsiantar, B. (2023). Edukasi Kesehatan Tentang Penanganan Pertama Kegawatan Luka Bakar Pada Masyarakat Di Huta Iii Kabupaten Simalungun. *Community Development Journal : Jurnal Pengabdian Masyarakat*, 4(1), 249–252. <https://doi.org/https://doi.org/10.31004/cdj.v4i2.12202>
- Syahabuddin, Yusra, A., & Subki. (2021). Gambaran pengetahuan dan sikap ibu hamil tentang KEK. 6(1), 6. <https://doi.org/https://doi.org/10.37104/ithj.v6i1.141>
- Tomayahu, W., & Setyaningrum, N. (2023). *The Influence Of First Aid Education On Housewives ' Knowledge About Burn*. 2(1), 32–38. <https://jurnal.ruangide.org/JKMD/article/view/70>