

Prevention of Pediatric Burns

Amrutha J.S¹, Ravi Kumar Chittoria², Barath Kumar Singh. P³

How to cite this article:

Amrutha J.S, Ravi Kumar Chittoria, Barath Kumar Singh. P/Prevention of Pediatric Burns/Pediatr Edu Res. 2023;11(2): 49-51.

Abstract

This article discusses Indian burn prevention and first aid knowledge, attitudes, and practises. Rural and quasi-urban societies face preventative and first-aid issues. Poverty, over population, mysticism, and modernization coexist. This article on preventive measures should sensitise, educate, and foster communication between health care providers and the community. This could help provide clear and practical clinical guidelines for resource limited societies.

Keywords: Prevention; Pediatrics; Burns.

INTRODUCTION

This article discusses the knowledge, attitudes, and practises that exist among the Indian community with relation to the prevention of burns and the administration of first aid. Rural and quasi urban civilizations provide their own distinct set of obstacles in terms of disease prevention and first aid. There is a mix and coexistence of poverty, over population, mysticism, and modernization. With the help of this article, which provides recommendations for preventative measures, we expect that there will be more awareness, education, and understanding in both directions between members of the health care community and the community at large.¹ This could help in form the

formulation of therapeutic guidelines that are both clear and practical, making them suitable for the requirements of societies with little resources.

MATERIALS AND METHODS

This study was conducted in the Department of Plastic Surgery in a tertiary care institute. It is a review article based on 8 articles on pediatric burns after going through literature available in Scopus, PubMed, Google scholar & internet.

RESULTS

Based on the inclusion criteria 8 articles were studied to discuss Deep vein thrombosis under following headings:

1. Preventive Measures
2. Health Education
3. First Aid
4. Drawback
5. Social Media
6. Conclusion

Author's Affiliation: ^{1,2}Senior Resident, ²Professor, Department of Plastic Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry 605006, India.

Coresponding Author: Ravi Kumar Chittoria, Professor, Department of Plastic Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry 605006, India.

E-mail: drchittoria@yahoo.com

Received on: 13.03.2023

Accepted on: 15.04.2023

DISCUSSION

The data from the various open-source articles we have analysed and listed below for the prevention of pediatric burns. This article highlights that there are still several hazardous practices in the community, which can be addressed to reduce burn injuries.

Preventive Measures

The following recommendations for the prevention of pediatric burns are as follows.^{2,3}

1. Emphasizing the importance of cooking on an elevated platform.
2. Separate cooking areas from other living spaces.
3. Pouring bath water into cold water in a bucket before taking it to the bath area.
4. Supervising any fire related recreation.
5. Using LED or solar lamps instead of oil lamps.
6. Choosing cotton rather than silk or synthetic clothing for children are practical, realizable changes that could reduce the burn risk significantly.⁴
7. Health education at schools, Working place and community gatherings.
8. Applying cool running water to a burn and to stop drop and roll in case of a flame burn.
9. Precautious cooking if it was outside on a traditional wooden open fire.
10. Avoid using oil lamps on the floor.

Health Education

The major sources of first aid information were from school based health education, social and electronic media. These resources can be utilized to further disseminate knowledge on first aid and practical prevention technique. Studies show that a variety of factors such as socio-economic status, gender, age, social status, kind of disease, cost, availability, and access to services influence the decision to engage with a specific medical channel. Large-scale prevention campaigns and first-aid education via electronic and social media may result in positive change not only in awareness but also in application. Governments should seek local and international technical and financial assistance to explore affordable alternative energy resources.⁵

First Aid

Surface cooling with running tap water for 20

min is the current gold standard for first aid in burns. Documented benefits include eliminating noxious stimuli and wound progression, pain relief, decreasing oedema and infection there by aiding epithelialization and reducing scarring. Despite the fact that many of those polled would use running tap water, only 8-12 percent achieved the recommended time of 20-30 min of cool running water.⁶

Draw backs

Home remedies for first aid, that people in the community thought acceptable. Some were harmless, but a few could cause further damage, be extremely painful and detrimental to healing. Survey confirms that approximately 80% of people continue to cook over traditional open wood fires. The awareness of general public regarding the various first aid for preventing pediatric burns is very limited.⁷

Social Media

Awareness videos in social media platforms like facebook, Instagram, whatsapp, Telegram, Twitter helps in reach out all populations and helps to educate the younger generation for the fruitful tomorrow.^{7,8}

CONCLUSION

The Preventive measures mentioned in the article can be applied in any mass health education programs. The above mentioned measures are easy to adapt and helps in preventing the burns with adequate knowledge.

REFERENCES

1. Understanding burn injuries in children—A step toward prevention and prompt first aid Aureen D'cunha a, Grace Rebekah b, John Mathai a , Susan Jehangir a, Department of Paediatric Surgery, Christian Medical College, Vellore, TN 632004 India b Department of Biostatistics, Christian Medical College, Vellore, TN 632004 India published in burns journal of Elsevier in 2021.
2. Sanghavi P, Bhalla K, Das V. Fire-related deaths in India in 2001: a retrospective analysis of data. *Lancet* 2009;373:12828.
3. Chong HP, Quinn L, Cooksey R, Molony D, Jeeves A, Lodge M, et al. Mortality in pediatric burns at the Women's and Children's Hospital (WCH), Adelaide, South Australia: 1960- 2017. *Burns* 2020;46 (February (1))20712.
4. Gupta M, Gupta OK, Goil P. Paediatric burns in

- Jaipur, India: an epidemiological study. *Burns* 1992;18:637.
5. Light Timothy D, Latenser Barbara A, Heinle Jackie A, Stolpen Margaret S, Quinn Keely A, RavindranVinitha, et al. Demographics of pediatric burns in Vellore. *India J Burn Care Res* 2009;30(1):504.
 6. Kalekhan F, Kudva AK, Raghu SV, Rao S, Hegde SK, Simon P, et al. Traditionally used natural products in preventing ionizing radiation-induced dermatitis: first review on the clinical studies. *Anticancer Agents Med Chem* 2021.
 7. Bitter CC, Erickson TB. Management of burn injuries in the wilderness: lessons from low-resource settings. *Wilderness Environ Med* 2016;27(December (4))51925.
 8. A. D'cunha, et al., Understanding burn injuries in children—A step toward prevention and prompt first aid, *Burns* (2021).
-