Jaggery: An avoidable cause of severe, deadly pediatric burns

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Abstract

Background

Jaggery is the non-industrial refinement of sugar cane into a sugar product. Sugar cane cultivation, harvest and refinement are central aspects of rural Indian life.

Methods

We present a retrospective review of pediatric burns at a single institution in Southern India, drawing special attention to scald burns incurred when young children fall into the cauldron of boiling jaggery. Descriptive statistics comparing children burned by jaggery and children burned by other mechanisms were performed. Multivariable logistic regression including burn size and mechanism of burn (jaggery and non-jaggery) was performed to determine the increased risk of death when burned by jaggery.

Results

Children burned by jaggery immersions are older, more likely male, and have larger burns. They have longer hospital stays, more operations, and are more likely to die. When controlling for age, gender, size of burn, and mechanism, jaggery exposure was associated with a higher mortality.

Discussion

Jaggery burns are deadly, devastating burns which could be prevented.

While jaggery and sugar cane production can lead to economic independence for rural Indian villages, the cost it exacts from burns and death to the youngest and most vulnerable children must be addressed and prevented.

Keywords

Jaggery; Prevention; Education; Economic development; Philanthropy

Figures and tables from this article:

Fig. 1. Picture of adult tending jaggery cauldron. Used with permission of Kamal’s Potpourri. www.kamal.com