

**Burn injuries among children admitted at Mwananyamala and Temeke regional Hospitals Dar es Salaam Tanzania: Causes risk factors and Predictors of outcome. Kara, Kamlesh. (2021)**

Background:

Paediatric burn injuries remain to be a substantial epidemiological problem around the world. It does not only increase the morbidity but also a mortality. There is scarcity of data on management outcome of burn injuries in children and the associated risk factors.

Objective:

The aim of this study was to determine causes, risk factors and predictors of outcome of burn injuries among children admitted at Mwananyamala and Temeke regional hospitals in Dar es Salaam, Tanzania. Methodology:

This was a hospital based cross-sectional analytical study conducted among children with burn injuries admitted at Mwananyamala and Temeke Regional Referral hospitals between March to May 2021. Structured questionnaires and patient files were used for data collection. Data analysis was done with help of SPSS 23.0. Results: A total of 112 children with burn injuries whose caretakers granted informed consent were enrolled in the study, 90% of whom were aged less than five years of age. Male gender accounted for 67 (59.8%) and those living at home with parents were 91(81.3%). Scald injury including hot water, tea, and porridge accounted for 101 (90.2%). Risk factors to burn injuries were young mothers/guardians <30 years (60.7%), lower level of education 65.2%, overcrowding 69.6%, use of charcoal for cooking 92% and children aged less than five years and more than one year who accounted for 86% of study children. Children who recovered uneventfully were 47(42%), 45(40%) were referred to higher hospital for advanced care and 9(8.0%) died. Older age of children [AOR=8.41; 95%CI: (1.13-62.58), p=0.037] and severe burns [7.39(1.63-33.41), p=0.009] were the two predictors of longer hospital stay and mortality for children with burn injuries.

Conclusions:

The study identified main cause of burn injuries to be hot liquid including hot water, tea, and porridge, followed by fire related burn injuries. Mothers/guardians <30 years of age, primary level education, overcrowding and use of charcoal for cooking were the most risk factors. The study also identified age between one and five years to be a major risk factor for burn injuries. Young age and the severity of the burns were the two independent predictors for prolonged hospital stay and mortality.

Recommendations:

Anticipatory guidance sessions during well child clinic visits on injury prevention and the importance of appropriate management including prehospital care prompt health care for the burned child, and well-timed hospital admission for further management to reduce burn complications.

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