567 Features of Burn Injuries in Youth: A Single Center Experience

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Introduction: Youth is categorized as combination of adolescence and young adulthood. Young people are prone to injuries, because this period involves essential changes in many aspects of life within a complicated physiological and mental developmental age. Our aim was to investigate the features of burn injuries in youth.

Methods: Subjects were 622 adolescents (10-18yrs, n=313) and young adults (19-24yrs, n=309) who were treated at our burn-center from 2010 to 2021. Data collected for each case were age, sex, social-security status, occupation, marital status, scene of injury, burn extent, burn cause, history of injury, affected major body sites, and need for inpatient-care (median±SD,mean±SD)(p<.05).

Results: Median age was 18yrs±4,76. Male to female ratio was 0,66:1 with female predominance especially among young adults (0,48:1)(p<.05). Most subjects were in civil social-security-system (n=612, 98,4%); most were students (n=475, 76,4%); a total of 103 subjects were in labourforce(16,5%); 44 were unemployed(7,1%). Most young people were single (n=600, 96,4%); 4 subjects in adolescent group and 18 subjects in young adult group were married(0,64% and %2,9 respectively); 15 of married cases were female(68,2%)(p< .05). Injuries occurred mostly at home (n=411, 66,1%). Mean total body surface area (TBSA) burned was 3,21 % \pm 7,5(min:0,2 max:75). The most commonly affected body site was the hand (n=165, 26,5%). Leading burn cause was scalds (n=433, 69,6%). Female subjects mostly suffered from scalds with mean TBSA burned of 2,0%±2,21 (min:0,2 max:18)(n=297, 79,2%). However, vast majority of flame burn victims were male (n=41, 82,0%) (mean TBSA burned: 12,8%±21,35, min:0,2 max: 75) and almost all severe electrical injuries happened to male subjects (n=13, 86,7%)(mean TBSA burned:14,2±14,81, min:0,2 max:40) (p[<].05). All cases were preventable accidents; the unique instance for 'substance-abuse related burns' was butane-lighterliquid burns in 9 cases(1,4%). Inpatient-care was needed for 52(8,2%) victims. Mean TBSA burned for inpatients was 13,5%±19,6(min:1, max:75). All subjects survived.

Conclusions: Our results suggest that young female subjects are prone to burn injuries, but severe injuries happen to male and there are many other aspects that should be considered. Combined evaluation of adolescents and young adults may provide purposive data for burn repositories.

568 Virtualization of In-school, Teacher-Directed Prevention Programs for Children

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Introduction: While remote/virtual teaching has been used for many years, Covid-19 increased the need for quality educational programs in virtual format. BPN has two in-school, school-based programs, *Flicks Fire and Burn Safety* for grades 1-5 and *The Great Escape* for grades 6-8. These teacher-directed programs cover essential topics such as home fire safety, stop drop and roll, youth fire misuse, and home fire escape. They have, historically, been deployed as hard copy curriculum, student workbooks, and associated educational videos, which were physically mailed directly to classrooms within the BPN's 24-county service area. When Covid-19 became the new reality, the need to pivot to a different type of program delivery became apparent.

Methods: BPN recruited professional educators from targeted grade levels, representing varying geographic locations and socioeconomic backgrounds to recreate these programs in a format that will work in a remote learning environment. This team researched various e-learning platforms to determine what would work best for our content and is commonly used across all school districts. We determined that Google Classroom combined with Bitmoji would best serve our needs. We recreated a set of age-appropriate lessons for each grade level from 1-8. Each grade has information that ties each lesson to the appropriate academic standard for education. We employed multiple content formats based on best practices, including videos, audio tracks, text-based articles, and more. Lastly, we virtualized activities by turning them into on-screen interactive games, puzzles, quizzes, worksheets, etc.

Results: Our result is a virtual program for grades 1-8 conducive to both classroom and remote learning environments. It is linked directly to academic standards for education for each grade level and includes engaging, interactive content in various forms. This format not only gives us the ability to update and add new content quickly it also gives us the ability to expand geographic distribution seamlessly.

Conclusions: By utilizing platforms preferred by professional educators and integrating fire safety and burn prevention lessons into existing mandated educational standards, we can more effectively and cost-efficiently expand quality educational programming to children ages 6 - 14.