Epidemiological features of minor-burns in an urban-region: Experience of our burn center

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Present study sought to investigate features of urban minor-burn cases which were treated at our burn-center located at the capital of our country.
We aimed to define the status of urban minor burns for creation of future preventive strategies.

Patients and Methods

Subjects: Minor-burn victims (n=3023) who lived in urban-region (study period: 2003-2016)

Groups: Two subgroups according to ages;

GroupI (Children): 18-year-old+younger (n=1354), **GroupII (Adults):** 19-year-old+older (n=1669)

Collection of Data:

- Age; sex; occupation status; social-security status; methods of home-heating; stories of the events
- Burn-causes; extents of burns; body-sites affected;
- Day-time intervals and seasons in which the injury occurred; time intervals between injuries and admissions (**TIIA**);
- Numbers of other medical-center admissions (**NMCA**) before our burn-center.

Results

Age	M/F	Occupation	Social security	Home-heating	Burn causes	TBSA (1° and 2° burns)	body sites
25,7±0,42 min:0,max:91	0,62/1	Preschool 37,8% (1142)	Insured 95,1%,(2875)	Centrally 94% (2842)	Scalds 75,1% (2180)	2,5±0,6% min:0,5max:30	Hands 31,1% (941)
		Students 6,6% (502)	Uninsured 4,8% (148)	Stove 5,9% (181)	Contact 12,6% (381)		Feet 16,5% (495)
		Workforce 26,1% (789)			Flame 4,5% (136)		Head-neck 15,1% (456)
		Housewives 11,8% (357)			Chemical 2,4% (73)		Genital 2,2% (67)
		retired-adults 7,7% (233)			Others 5,4% (163)		
Day-time intervals When injury occurred		seasons	TIIA (days)		NMCA before our burn-center		
06:01-12:00 28.7% (745)		Spring 26.6% (803)	0-1day 60.8% (1613)		0 49.4% (1273)		
12:01-18:00 33.8% (876)		Summer 29.1% (881)	2-7 days 32.3% (856)		1 39.2% (1009)		
18:01-00:00 35.3% (915)		Autumn 20.9% (632)	8-20days 5.5% (147)		2 or more 11.4% (293)		
00:01-06:00 2.3% (59)		Winter 23.4% (707)	21-days 1.4% (36)				

- The most common environment in which injury occurred was the home (81,5%,n=2463)
- Injuries occurred due to hot food/drinks, heating-devices, electrical-devices, automobile-devices, unsafe self-care, unsafe entertainment-activities, and addictions.

Comparison of Children and Adults

- All burn-causes were more frequent in **adults** except contact-burns (p<0.05).
- Higher rates of hand-burns were observed in **adults** (59,8%),
- Higher rates of head-burns(52,3%) and neck-burns(60,5%) were observed in **children** (p<0.05).
- Only 2% of injuries occurred between 00:00-06:00 hours, 76,3% of which were **adults**.
- Outdoor-burns were more frequent in **adults** (p<0.05).
- Rates of direct admissions to our burn-center were higher in **adults** (p<0.05).
- However, higher numbers of **children** have been admitted on the day of injury (p<0.05).

Discussion and Conclusion

Our data revealed that Urban life style includes characteristic features for minor-burns. Epidemiological features of minor-burns in urban-regions differ for adults and children. This kind of data are useful in establishment of preventive strategies for minor burn injuries which cause significant loss of urban-workforce and quality of life