

A collection of military medals and a pair of glasses are arranged on a light-colored surface. On the left, there is a blue and white checkered ribbon with several circular medals. Below it is a blue ribbon with a circular medal. Further down is a large, ornate silver star-shaped medal with a central emblem. To the right of these is a smaller, similar star-shaped medal. A pair of gold-rimmed glasses with thin temples is positioned horizontally across the middle. In the bottom left corner, there is a circular compass with a white face and black markings.

Review of admissions to Burn unit Yekati
12 hospital
sept 2001- August 2002

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Introduction

- ◆ Proper set up for treatment of burns
- ◆ Prevention is cheaper, ethically & professionally sound approach
- ◆ Objectives of the burn unit at Yekatiit 12 hospital
- ◆ Conduct & objective of the study



Materials & methods

- ◆ Retrospective study
- ◆ Reviewed the hospital records of 122 consecutive cases admitted to the burn unit at Yekatit 12 hospital between Sept. 2001 & Aug. 2002.
- ◆ Analyzed data include age, sex, address, location, circumstances & etiology of burns as well as pre-injury health status of victims.



Results

- ◆ The age ranges between 9 months & 73 years whereas
- ◆ The median age was 18 yrs
- ◆ Children under the age of 10 were 33 (27%).
- ◆ Hundred & five (86.1%) of the cases were at age 30 or younger.
- ◆ Burn injury is found to be less common 17 (14%) after the age of 30 in both sexes
(Table 1)

(Table 1): Age & sex distribution of cases admitted between Aug. 2 001 & Sept 2002

Age	Male	Female	Total (%)
0-10	18	15	33 (27.0)
11-20	18	22	40 (32.8)
21-30	14	18	32 (26.2)
31-40	5	4	9 (7.4)
41-50	1	2	3 (2.5)
+51	1	4	5 (4.1)
Total (%)	57 (46.7)	65 (53.3)	122 (100)

Table 2: Geographic distribution of cases admitted between Aug. 2 001 & Sept 2002

Address	no. (%)
Addis Abeba	89 (72.9)
Oromiya	23 (18.9)
Others	10 (8.2)
Total	122 (100)

Table 3: Distribution by location of injury of cases admitted between Aug. 2001 & Sept 2002

Location	n	(%)
Home	99	(81.1
Work	6	(4.9)
Other building	2	(1.6)
Hotel	2	(1.6)
Road	2	(1.6)
Conveyance	1	(0.8)
Total	112	(100)

Table 4: Distribution by circumstances of burns of cases admitted between Aug. 2001 & Sept 2002

Cicumstances	No (%)
Accidental	114 (93.6)
Work related	2 (1.6)
Self inflicted (suicidal)	2 (1.6)
Suspected assault	2 (1.6)
Suspected arson	2 (1.6)
Total	122 (100)

Table 5: Distribution by etiology of cases between Aug. 2001 & Sept. 2002

Ethiology	n \leq 12 yrs.	n >12 yrs.	Total (%)
Flame	17	70	87 (71.30)
Scald	16	4	20 (16.40)
Chemical	-	3	3 (2.45)
Electrical	-	6	6 (4.90)
Contact	-	2	2 (1.65)
Unrecorded	1	3	4 (3.30)
Total	34 (28%)	88 (72%)	122 (100)



Of the 87 flame burns 28 (32.2%) have their mechanism of injury documented in detail, 26 got flame burn while using kerosene stove whereas 2 got the burn from kerosene lump.
Improper use of the kerosene stove which lead to burn accidents were summarized as follows:

- ◆ Pouring kerosene into a lit stove 5/26
- ◆ Explosion that occurred because of a worn out wick which dips into the reservoir with the flame on 5/26
- ◆ Moving a lit stove from place to place.....2/26
- ◆ Spilled kerosene on & around the stove catches fire easily when the stove is ignited.....2/26
- ◆ Use of K-50* instead of ordinary kerosene.....8/26
- ◆ Erroneous use of petrol instead of kerosene2/26

- ◆ *(1:1 combination of kerosene & ethanol in volume)

Table 6: Distribution by preinjury health conditions of cases between Aug. 2001 & Sept. 2002

List of problems	no.	(%)
Epilepsy	7	(5.8)
Psychiatric dis.	2	(1.6)
Tuberclausis	1	(0.8)
Diabetis Melitus	1	(0.8)
Dumb & deaf	1	(0.8)
Total	12	(9.8)



Discussion

- ◆ Though the age range is wide, about 86 % fall in the age group 30 yrs. & younger in both sexes which includes children & young adults.
- ◆ There is an excess of adult females, females and children make about 80% of the cases.
- ◆ Majority of the cases in this series are from Addis Ababa therefore we believe our results will highlight the problem of burns at least in the urban Ethiopia.
- ◆ Home is found to be the commonest place people get burns similar to studies made in other developing countries (P. Kumar 2000, Abdulaziz 2000)



...Discussion

- ◆ Accidental (non intentional) burns comprise the highest proportion in our study.
- ◆ Suicidal burns are not so common in our series unlike the Indian, Zimbabwean and Brazilian reports- 21%, 22%, & 46.5% respectively.
- ◆ Similarly lower are work, homicide & arson related burns.



...Discussion

- ◆ Flame burn is the leading cause in both children & adults followed by scald which appeared to be relatively more common among children in our study.
- ◆ Studies done in Zimbabwe, Saudi Arabia & Israel showed scald to be the commonest cause of domestic burns even in adults however the Indian report (Bhaskara K.G. 2000) matches our findings.
- ◆ This is probably indicative of the differences in the cooking facilities and habits in different communities (G.I. Muguti 1994)

Discussion...

- ◆ Flame burns in relation to reckless use of kerosene stoves as detailed above will provide salient points to establish relevant recommendations as to the cautious use of kerosene stoves.
- ◆ Epilepsy was a predisposing factor in 5.8% of our cases similar findings in Zimbabwe (G.I. Muguti 1994).
- ◆ According to a population study in Ethiopia, the prevalence of epilepsy was 5.2 / 1000 putting it as the commonest neurological condition. (Teklehaimanot R.1993)





Conclusion & recommendations:

- ◆ The study design & limited number of cases,
Further elaborate study with larger sample size.
- ◆ WHO is getting burnt, WHERE, HOW & by WHAT.
- ◆ Cautious use of kerosene stove should be promoted.
- ◆ Epilepsy and other physical & mental handicaps should be addressed as predisposing factors & due awareness should be created among people with disabilities.
- ◆ Health education targeting those at risk will be an ideal intervention.

Thank you !

