



THE AGA KHAN UNIVERSITY

eCommons@AKU

Department of Anaesthesia

Medical College, Pakistan

January 2016

# 794 Evaluating disability in adult burn injury patients treated at a tertiary-care burn unit in Karachi, Pakistan: a longitudinal study using who disability assessment schedule II

Nukhba Zia

*Johns Hopkins International Injury Research Unit*

Asim Durrani

*Burns Unit, Patel Hospital, Karachi, Pakistan*

Safia Awan

*Aga Khan University, safia.awan@aku.edu*

Madiha Hashmi Madiha Hashmi

*Aga Khan University, madiha.hashmi@aku.edu*

Mazhar Nizam

*Burns Unit, Patel Hospital, Karachi, Pakistan*

*See next page for additional authors*

Follow this and additional works at: [https://ecommons.aku.edu/pakistan\\_fhs\\_mc\\_anaesth](https://ecommons.aku.edu/pakistan_fhs_mc_anaesth)



Part of the [Community Health Commons](#), and the [Emergency Medicine Commons](#)

## Recommended Citation

Zia, N., Durrani, A., Awan, S., Madiha Hashmi, M., Nizam, M., Latif, A. (2016). 794 Evaluating disability in adult burn injury patients treated at a tertiary-care burn unit in Karachi, Pakistan: a longitudinal study using who disability assessment schedule II. *BMJ*, 22(2), 284-284.

**Available at:** [https://ecommons.aku.edu/pakistan\\_fhs\\_mc\\_anaesth/122](https://ecommons.aku.edu/pakistan_fhs_mc_anaesth/122)

---

**Authors**

Nukhba Zia, Asim Durrani, Safia Awan, Madiha Hashmi Madiha Hashmi, Mazhar Nizam, and Asad Latif

**Background** Emergency Medical Services (EMS) provide effective and coordinated care to people in need due to a medical emergency, in both hospital and pre-hospital settings. A proper and opportune care is associated with less mortality and disability. In Mexico, no information is available about the association of the opportunity of EMS response and its results in terms of health outcomes.

**Methods** Information from all patients with Road Traffic Injuries (RTI) was collected through an epidemiological surveillance system between 2012–2014 in two general hospitals located in two Mexican cities. A multinomial logistic regression model explored the association between health consequences (0 = received care in hospital emergency rooms <24 hrs, 1 = was hospitalised, 2 = was permanently disabled and 3 = died) with opportunity of EMS (quantified in terms of time since the injury occurred until they received EMS care) adjusting by different covariables of interest: sex, age, Injury Severity Score, received pre-hospital care (PHC), type of road user, use of safety devices, alcohol consumption 6 hrs previous to the event.

**Results** 2,575 people injured received EMS in both hospitals. Of them, 64% required care in hospital <24 hrs, 27% were hospitalised, 6% suffered permanent disability and 3% died. About 47% received PHC in León and 38% in Guadalajara. Time to access EMS was 32 min in Guadalajara and 38 in León; those who received PHC had lower times compared to those who did not in both cities. Opportunity of EMS was only associated to being hospitalised: the lower the time, the lower the likelihood of being hospitalised adjusting by covariables of interest. According to our data, opportunity of EMS was not statistically associated to disability and death.

**Conclusions** Authorities should promote strategies to comprehensively evaluate and improve quality as well as opportunity of EMS care in both cities.

## Fire Safety and Burn Injuries

Post Tue 2.20

### 794 EVALUATING DISABILITY IN ADULT BURN INJURY PATIENTS TREATED AT A TERTIARY-CARE BURN UNIT IN KARACHI, PAKISTAN: A LONGITUDINAL STUDY USING WHO DISABILITY ASSESSMENT SCHEDULE II

<sup>1</sup>Nukhba Zia, <sup>2</sup>Asim Durrani, <sup>3</sup>Safia Awan, <sup>4</sup>Madiha Hashmi, <sup>2</sup>Mazhar Nizam, <sup>1,5</sup>Asad Latif. <sup>1</sup>Johns Hopkins International Injury Research Unit, Department of International Health, Johns Hopkins School of Public Health, Baltimore, MD, USA; <sup>2</sup>Burns Unit, Patel Hospital, Karachi, Pakistan; <sup>3</sup>Department of Medicine, Aga Khan University Hospital, Karachi, Pakistan; <sup>4</sup>Department of Anesthesiology, Aga Khan University, Karachi, Pakistan; <sup>5</sup>Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

10.1136/injuryprev-2016-042156.794

**Background** Disability after burn injury is not assessed in the context of Pakistan. This study assesses disability among adult burn injury patients presenting to a burn unit in Karachi, Pakistan.

**Methods** This longitudinal study was conducted at a burn centre in Karachi, Pakistan. Adult patients (>18 years) who were discharged after 24-hour admission were enrolled from August 2014–March 2015. Baseline assessment before discharge and follow-up at 2, 6 and 12 weeks after discharge via telephone was done using 12-item WHODAS 2.0 (5 -point likert-scale; 1 = none; 2 = mild; 3 = moderate; 4 = severe; and 5 = extreme)

related to cognition, mobility, self-care, getting along, life activities and participation. The score range was 12–60 with higher score being worse. Ethical approval was taken from collaborating and participating sites.

**Results** Of the 59 eligible patients, 53 completed all follow-ups. There were 69.8% males. Mean age of all patients was 36.8 ± 14.0 years, 71.7% were married and 17.0% had no/informal education. About half the patients were breadwinners. More than half of burn incidents occurred at home. Flame burns (50.9%) and scalds (17%) were the most common type of burns. The average surface area burnt was 43.0 ± 14.2%. The mean-scores for all patients at baseline, 2-week, 6-week and 12-week were 13.9 ± 4.9, 35.3 ± 13.8, 26.8 ± 11.9 and 20.1 ± 9.1, respectively. The mean-scores for males were lower than that of females for the four assessments (Males: 13.5 ± 1.8, 34.2 ± 14.1, 25.3 ± 10.7, 19.2 ± 8.4 and females: 16.1 ± 8.5, 37.3 ± 13.3, 30.5 ± 14.4, 22.1 ± 10.6). The two-week score was higher for those with >15% burn (36.7 ± 13.9) compared to those with ≤15% burn (34.6 ± 14.2) while the score were similar at 12-week follow-up.

**Conclusions** This analysis shows that the burn injury patients tend to recover from their injury over a period of 12 weeks after discharge. Future work should focus on larger group of patients and long term follow-up at one and two years after burn injury.

### 795 GENDER-RELATED CHARACTERISTICS OF BURN INJURY PATIENTS PRESENTING TO DESIGNATED BURN CENTRES IN SOUTH ASIA

<sup>1</sup>Nukhba Zia, <sup>1</sup>Huan He, <sup>2</sup>Saidur Rahman Mashreky, <sup>3</sup>Ehmer Al-Ibran, <sup>2</sup>AKM Fazlur Rahman, <sup>1</sup>Adnan A Hyder, <sup>1,4</sup>Asad Latif. <sup>1</sup>Johns Hopkins International Injury Research Unit, Department of International Health, Johns Hopkins School of Public Health, Baltimore, MD, USA; <sup>2</sup>Centre for Injury Prevention and Research Bangladesh, Dhaka, Bangladesh; <sup>3</sup>Burn Centre, Civil Hospital, Karachi, Pakistan; <sup>4</sup>Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA

10.1136/injuryprev-2016-042156.795

**Background** Burn injury causes more than three-fourth deaths in Africa, Eastern Mediterranean and South-East Asia regions affecting females more than males. This study assesses the gender-related burn injury characteristics in South Asia.

**Methods** This prospective study was conducted at two main burn centres in Dhaka, Bangladesh and Karachi, Pakistan from October 2014 – January 2015. All adult (>17 years) burn injury patients were included in the analysis. Gender differences in patient demographics, burn injury characteristics and outcome were compared using Chi-square test for categorical and t-test for continuous variables. Ethical approval was taken from all collaborating and participating sites.

**Results** Of 1470 adult patients, 57.3% were males. Mean age of females was 36.85 ± 14.61 years and of males 33.49 ± 13.52 years. Among females, 81.6% were married and 63.7% among males (p-value<0.001). About 35.2% of females had no/informal education. Eighty% females were housewives and most males were manual-labourers (23.2%). For females, burns were common in kitchen (72.8%) while cooking (49.4%) and for males, industrial area (29.5%) during work (40.5%). Females suffered from flame (52.9%) and scalds (42.6%) while males had electrical burns (17.2%) in addition to flame (38.1%) and scalds (29.8%). Hot liquid was the common cause of burn in females (42%). Total body surface area(%) burnt was more in females (16.88 ± 20.85) compared to males (12.89 ± 17.47) (p-value<0.001). Around one-third of males and females were