

## **Function, health related quality of life and cost after injury in a city of North India: Interim results**

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### **Abstract**

The abstract presents the interim results from a multi-site cohort study reporting impact of non-fatal injuries requiring hospitalisation. Participants were recruited from two secondary and one tertiary level hospitals in a North Indian city. The results highlight the huge health, social, and economic impact of non-fatal injuries in a low and middle income setting.

### **Background**

There are no comprehensive studies in existence that document the burden of non-fatal injuries in India. The burden of traumatic injury in India is certainly high, but remains ill-defined and poorly quantified. Whilst progress has been made in improving mortality data, our understanding of non-fatal injuries and their impact remains limited. Cost of road traffic injuries in India is estimated to be 3% of the GDP, much higher if all injuries are considered (Mohan, 2008). The potential catastrophic effects of injuries on families due to out of pocket (OOP) expenditure for medical care, particularly those of low socioeconomic status, has generated a need to document burden in economic terms. This research works aims to measure the impact of traumatic injuries on functioning and health-related quality-of-life (HRQoL), to identify predictors of poor outcomes post-injury and assess the OOP expenditures and financial risk protection for hospitalisation due to injuries.

### **Methods**

A prospective observational study was conducted at three hospital sites for all ages admitted for more than 24 hours with an injury. Consent was sought and participants were followed at 1, 2, 4 and 12 months after injury collecting information on socio-demographics, circumstances of injury, cost associated with injury, disability, function and health related quality of life (Jagnoor et al., 2015).

### **Results**

The results presented here are based on interim- analysis. 2950 (90%/3255 eligible) participants were recruited, with a follow-up rate of 74% (2180) at 4 months; 12 months follow up is under way. Road traffic injuries (55%/1622) followed by falls (31%/914) and burns (13%/ 383) were the leading cause of injury; 86% of participants were male, 79.5% were in paid employment at the time of injury. At the first interview, most participants were experiencing worse health status (EQ5D a mean difference of -0.679; <0.0001) as compared to their pre-injury status, whilst high disability proportions were reported on GOSE (73% upper or lower extremity) at 4 months follow up. Return to work was reported by 71% (1526) with the prevalence of catastrophic expenditure 30% (95% CI 26.95–31.05), which was significantly associated with those in the lowest income quartile (OR 23.3 [95% CI 5.7–73.9]; p <0.01), inpatient stay greater than 7 days (OR 8.8 [95% CI 3.8–20.6];

$p < 0.01$ ), major surgery (OR 4.9 [95% CI 2.7–8.4];  $p < 0.01$ ), and occupation as wage labourers (OR 8.1 [95% CI 1.6–24.6];  $p = 0.01$ ).

### Conclusion

This is one of the first studies reporting health related quality of life after injury in India. The health services expenditure in India is not well documented however with a health budget of less than 1% of GDP most of the expenses are out of pocket. The results highlight the catastrophic effect of injury, both in terms of health and cost for the injured and their families. The results highlight the need for major national investment in public health insurance schemes and better, affordable acute care and rehabilitation.

### References

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