

Administration was commissioned by the Swedish government to investigate and propose a development for the Swedish traffic accident data.

The investigation was conducted and as a result the Swedish government commissioned the Swedish Road Administration in 1996 to initiate a new information system covering injuries and accidents in the entire road traffic system.¹

Methods The first data collection in the new common information system – Strada (Swedish Traffic Accident Data Acquisition) – started in four geographic areas in 1999.

Since 2003 the official statistics of road traffic injuries are based on data extracted from the police reports in Strada.

From 2009 onwards the Swedish Transport Agency is the authority responsible for Strada.

In 2015, all but one county report to Strada on a complete basis. One remaining hospital is yet to join.

Results Data from two sources – the police and the hospitals – provides more detailed information, thus increasing the knowledge of road traffic injuries and accidents.

By accessing Strada's web-based system for extraction of information without intermediaries or by requesting information from the Swedish Transport Agency, municipalities, researchers etc. can make use of the information. In practice, Strada is capable of providing a basis for national, regional and local traffic safety efforts.

Conclusions Strada was created in close collaboration with all parties concerned. The efforts to maintain as well as develop the information system continue and from the last 15–20 years there are lessons to be learned. Lessons concerning collaboration between agencies, financing, legislative issues, software development and more.

When hospital data is included there is a decrease in the number of unrecorded cases, since the police have limited knowledge about some road traffic accidents (mainly involving unprotected road users: pedestrians, cyclists and moped drivers). In addition, the hospitals' reporting of diagnoses broadens the knowledge of the injuries and their degree of seriousness.

NOTE

- 1 The governmental commission was accomplished in co-operation with the Swedish Police, the Swedish National Board of Health and Welfare, the Swedish Institute for Transport and Communications Analysis, Statistics Sweden and the Swedish Association of Local Authorities and Regions.

166 EPIDEMIOLOGY OF BURNS IN RURAL BANGLADESH: AN UPDATE

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Background Burns account for approximately 265,000 deaths each year with predominance in low and middle-income countries. Since most existing estimates of burn mortality and morbidity in Bangladesh have been derived from hospital records or small-scale surveys, the aim of this study was to get prevalence measures for burns and risk factors at a population level in rural Bangladesh.

Methods Census household data collected from seven rural sub-districts in Bangladesh was used to assess injury outcomes, including burns, in 2013–2014. Descriptive statistics, and univariate and multivariate analyses were conducted to determine the epidemiological characteristics and risk factors for burn injuries.

Results The overall burn mortality and morbidity rates were 2.14 deaths and 528 burn injuries per 100,000 populations. Females had a 63% (95% confidence intervals, CI: 15%–75%) higher chance of burn injuries than men across all age groups, with majority of injuries occurring inside the home. Approximately 50% of burn injuries occurred in the 25–64 year old age group. Deaths occurred mainly by flame burns (88%) where as non-fatal injuries were largely due to contact with hot liquids (56.53%), like cooking oil (21.4%). Deaths were also observed mostly in the winter season. Furthermore, children 1–4 years of age were 4.36 (95% CI: 3.37–5.63) times likelier to suffer from burn injuries than infants keeping all other factors constant. Higher level of education was seen to be associated with lower risk of burn injuries.

Conclusions Burns in rural Bangladesh are mainly seen across two extremes of ages in men and women, the propensity being higher in females. Crammed housing spaces, young age and poor educational background were found to be risk factors for burn injuries.

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SOCIOECONOMIC STATUS AND NON-FATAL INJURIES: A POPULATION-BASED MULTILEVEL ANALYSIS IN OSLO, NORWAY

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Background Research has consistently shown an inverse relationship between socioeconomic status (SES) and both fatal and non-fatal injuries (e.g., Laflamme *et al.*, 2009). Many studies using multilevel analysis assume independence between geographical areas, thus ignoring any spatial dependencies of injury rates. Likewise, studies using spatial modelling of rates will not capture the degree to which the observed rates are explained by individual (composition) and neighbourhood (context). This study aimed to examine SES by using both a multilevel and a spatial modelling approach. We examined the rates of all-cause non-fatal unintentional injuries among the adult population in 94 neighbourhoods in Oslo, Norway, adjusting for individual demographic and socioeconomic indicators.

Methods Multilevel Poisson regression models were used to analyse the relationship between neighbourhood SES and individual SES for 150 000 non-fatal injuries from hospital data from the Norwegian Patient Registry for residents in Oslo in the period 2009–2011. Additional registry information on each individual was linked using a unique personal identification number. Area-level information was linked from Statistics Norway. In addition we used geographically weighted regression (GWR) to capture the spatial heterogeneity in associations between injury and the explanatory variables.

Results Our analyses of hospital data showed strong evidence of socioeconomic differences at both individual and neighbourhood levels. However, the magnitude and direction of these differences was not uniform, but varied as a function of gender, age, activity and location at time of injury, diagnosis and severity of injury.

Conclusions These findings highlight that both contextual and compositional effects of socioeconomic status should be considered in allocating resources for injury prevention. Given the population-based nature of this study, these findings are likely to generalise to other settings.