

Nonfatal injuries in a local context

Analysing social structures and perceptions in young people

Academic Thesis

for the degree of Doctor of Philosophy (PhD) in Medical Sciences
at the Sahlgrenska Academy at the University of Gothenburg
will be presented for public oral examination at:
**Lecture room 2118, Arvid Wallgrens Backe 2, Gothenburg,
Monday, April 2, 2012 at 1:00 pm.**

PhD candidate:
Richard Allan Dale

Examiner:
Professor Toomas Timpka
Department of Medical and Health Sciences,
Social Medicine and Public Health Sciences, Linköping University.

The thesis is based on the following studies:

I	<u>Dale RA</u> , Hasselberg M, Petzold M, Hensing G. Alcohol environment, gender and nonfatal injuries in young people: An ecological study of fourteen Swedish municipalities (2000–2005). <i>Substance Abuse Treatment, Prevention, and Policy</i> (Submitted, 2011)
II	<u>Dale RA</u> , Hensing G, Petzold M, Hasselberg M. Nonfatal childhood injuries and their association with socioeconomic and gender structures: An ecological study of fourteen Swedish municipalities (2000-2005). <i>Italian Journal of Public Health</i> , vol. 8, nr 1, 2011
III	<u>Dale RA</u> , Hasselberg M, Jakobsson A, Hensing G. Children’s perspectives of injuries – a qualitative study in Sweden. <i>Journal of Pediatric Nursing</i> (In press, 2012)
IV	<u>Dale RA</u> , Hensing G, Sverker A, Hasselberg M. Young adults’ lived experiences and management of “near injury situations” – a critical incident study in Sweden. <i>Journal of Youth Studies</i> (Submitted, 2011)



UNIVERSITY OF GOTHENBURG

Gothenburg 2012

Nonfatal injuries in a local context

Analysing social structures and perceptions in young people

Richard Allan Dale

ABSTRACT

Background: Injuries are a common public health problem in children and young people. The uneven distribution over gender and socioeconomic groups is partly explained by factors at both the individual and family levels, but sociocultural structures at the municipality level may contribute with yet unrecognised associations. If so, these associations might be important, since a large part of preventive work is done in municipalities. Few studies have included the perspectives of children themselves, who may be an important source of information in the development of new knowledge in this area. The overall aim of this thesis was to try to understand the relationship between the continuous interplay of individuals and their environment with the distribution of nonfatal injuries in young people. This thesis had two specific aims. The first aim was to explore whether the distribution of nonfatal injuries in young people was associated with the local sociocultural conditions, and the second to explore how children and young adults perceived and experienced injuries and injury risk situations.

Methods: The studies in this thesis were performed in Skaraborg, in the Southwest of Sweden. Two quantitative and two qualitative studies were included. A comprehensive health care register was used to estimate mean annual rates of nonfatal injuries and fractures by gender and age groups (2000–2005) for the quantitative studies. The local alcohol environment was assessed using indicators of access, consumption, and alcohol-related crimes in 14 municipalities. The local socioeconomic and gender structures were assessed using the following main components: relative poverty, relative wealth with male managerial dominance, narrow gender ratio in unskilled working positions and politics, and wider income distribution. Pearson's correlation coefficients were used to measure linear associations. The qualitative data were gathered in interviews. Six small homogeneous groups selected by gender and age (9, 13, and 17 years) were used to interview children and the critical incident technique was used for the interviews with young adults. Content analysis was used to analyse the interview data.

Results: Local alcohol access and local alcohol consumption were associated with the distribution of injuries in boys aged 6–17 years, while negative associations were observed between alcohol consumption and fractures in girls aged 6–17 years. None of the alcohol indicators were associated with injuries in young adults. Positive associations were identified between “narrow gender ratio at unskilled working positions and in politics” and injuries in both boys and girls aged 6–17 years. Negative associations were found between “wider income distribution” and boys' injuries. No linear association was observed between level of poverty and childhood injuries. Children usually attributed their injuries to personal and situational characteristics, although sometimes their injuries were ‘just inexplicable’. Children seemed to have a broad perspective on injury severity, including the psychological and social consequences of an injury. Three main categories characterized young adults' experiences with near-injury risk situations: performing under pressure, close encounters with more or less unexpected environmental factors, and while learning; and five categories summarized their ways of managing near-injury situations: escape, release control, confront, cry out for help, and do nothing.

Conclusions: The findings suggest the involvement of both individual and socio-cultural conditions in the distribution of nonfatal injuries in young people. On one hand, associations were found between socioeconomic and gender structures and the local distribution of nonfatal childhood injuries, and the strength of the area-level associations varied by sex, age, nature of injury, and type of socio-cultural condition studied. On the other hand, the children in this thesis seemed to have a holistic perspective of injury severity that health workers attending paediatric injuries should consider. Children's familiarity with the injury-risk situation seemed to decrease their awareness of potential negative consequences associated with the activity. Young adults' frequent exposure to new environmental conditions may increase their risk of injury, and their lack of experience might influence their subjective interpretation of the situation. The findings in this thesis can be seen as points of departure for future research and for the development of local injury prevention programmes.

Keywords: nonfatal injuries, near injury situations, children, young adults, ecosystem, alcohol environment, socioeconomic structure, gender structure, experiences, perceptions.

ISBN: 978-91-628-8435-2

E-publication: <http://hdl.handle.net/2077/28262>