Reviewer's report

Title: Needlestick injuries among dental health care workers in non-hospital settings

Version: 1 Date: 31 May 2006

Reviewer: Elisabeth BOUVET

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General
This work analyses data from Washington state compensation claims from 1995 to 2001 to characterize and to study mechanism of needle sticks injuries among dental health care workers.
The methodology is based on the two major workersâ€™ compensation data systems. Many data concerning, age, gender, are available from this source but not used in the study, and this is regrettable.
The chapter on methodology is too long but we lack data on the real infectious risk of workers.
In fact, in non hospital settings in Washington states, almost a quarter of needle sticks concern dental workers.
4 major mechanisms are reported= recapping, cleaning instruments, changing local anesthetic carpules and giving anesthesia. The repartition of mechanisms is different for dentists, dental assistants and dental hygienists.
Nevertheless, there is a lot of lacking data concerning the number of workers, the precise mechanisms of accidents, the type of instruments and devices used by professionals, the evolution of injuries during years related to the number of in hospital dental workers in the state. We would like to know if safety devices do exist and if yes, are they used and what is the trend of injuries when using the safety devices?
Further more, there is no data concerning hepatitis B vaccination among those professionals which is the most effective prevention of occupational hepatitis B.
These data are retrospective data reported on an administrative form. So, there is probably major biais.
Under reporting is quite sure but not controlled. Authors are aware of this limitation. An other limitation is due to the fact that data are quite old and that many things would have change since the beginning of the retrospective study.
It could have been interesting to calculate an incidence rate among all categories of dental workers and to compare with hospital dental workers. It was not performed.
It is said that the proportion of injuries increased each year, but I donâ€™t understand the proportion of what? of injuries related in non hospital settings?
In fact, those data are interesting but the mechanisms of injuries are well known before this study and the incidence of injuries is not calculated.
There is no discussion about prevention and solutions which could be proposed.
Despite the good quality of the methodology, I consider that this study displays many limitations which are not compatible with a publication in 2006.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

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