## **Abstract**

## Background:

**Main objectives:** In *Paper I* and *II* we analyzed compensation claims of mother and child to NPE, to identify injury and reason for compensation. In *Paper III* we analyzed the medical experts' evaluation in claims for compensation. The main questions were if there was inadequate care (negligence) and if there was a causal relation between the injury and given health care (causality).

**Materials and methods:** *Paper I* is a study claims receiving compensation after injury to mother or child in NPE from 1994-2008. *Paper II* analyzes claims for compensation after alleged birth asphyxia in the same period. *Paper III* analyzes the medical experts' evaluation of 12 claims for compensation to NPE after birth injury.

Results: In *Paper I* we found that sphincter injury and infection was the most common injury of the mother, and asphyxia the most common injury of the child. The most frequent reason for negligence in care was failure in obstetrical and surgical treatment (27 %). In *Paper II* we found inadequate fetal monitoring to be the most important main factor leading to compensation (50 %), including omission of monitoring despite indication or overlooking signs of fetal distress. According to the medical experts the health personnel held responsible of the substandard treatment was an obstetrician in 49 % and a midwife in 46 %. Most cases were caused by human error. In *Paper III* found a moderate agreement in the evaluation of negligence in care. In the question concerning causality between the given care and the injury we found fair agreement, but there was an astonishing low concordance between the experts in evaluation of asphyxia (kappa 0.05) and sphincter tear (kappa 0.09).

## **Conclusions:**