Product related head injuries in infants and toddlers – starting point for a campaign

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Product related head injuries

Content

- Head injuries in < 18 year-olds
- The Injury Database (IDB)
- Product related head injuries among infants and toddlers
- Conclusions
All Injuries / head injuries, Germany 2014
Hospital admissions in < 18 year-olds

Infants and toddlers are most at risk of being hospitalised due to injury or head injury

Source: Hospital Discharge Register, Federal Statistical Office, Germany
Trend of head injuries in < 18 year-olds

Germany 2005 - 2014

Increase in the hospitalisation rates in the < 1 year-olds and to a lesser degree in the 1-4 year-olds

Head injuries (ICD-10 / S00-09) per 100,000

Source: hospital discharge register, Federal Statistical Office, Germany
Hospital Discharge Register

- No available information on injury location, mechanism or product(s) involved
- The above would be important in defining specific injury prevention measures and possible intervention settings
The current Injury Data Base (IDB) helps fill this information gap

- The IDB is an Europe wide injury monitoring system headed by EuroSafe and administered by Swansea University
- The IDB monitors all injured patients admitted to hospital, whether at A and Es or specialised wards
- Europe wide the Full Data Set (FDS) includes further information on the product that caused or triggered the injury
- In Germany, FDS also includes the doctor's narrative regarding the injury event, thus providing valuable information on how the accident occurred
- Since 2008, the FDS has been implemented in three main German hospitals with pediatric wards
- We used the data base from 2008 – 2014, total number of cases 37,140
Method

**IDB 2008-2014**

In under 5 year-olds

- Case analysis of 5,969 medically treated injuries
- Head injuries 3,521 (59 % of all injuries)
Product related injuries in < 5 year-olds (IDB) % of all injuries / head injuries

Product related injuries , in % of...

- All injuries (n=5,969): 76%
- Head injuries (n=3,521): 79%
## Product related head injuries in the < 1 year-olds

The five most frequent products

<table>
<thead>
<tr>
<th>Product</th>
<th>Cases (n)</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Changing table</td>
<td>111 (20%)</td>
<td>fall</td>
</tr>
<tr>
<td>2. Furniture (e.g. couches)</td>
<td>96 (17%)</td>
<td>falls</td>
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<tr>
<td>3. Beds (mostly parental)</td>
<td>84 (15%)</td>
<td>falls</td>
</tr>
<tr>
<td>4. Buggies and strollers</td>
<td>40 (7%)</td>
<td>falls</td>
</tr>
<tr>
<td>5. Carry cots</td>
<td>20 (4%)</td>
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Falls out of buggies often occurred whilst climbing stairs or entering/leaving public transport, especially buses.
### Product related head injuries in the < 1 year-olds

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Five products account for 62 % of all product related head injuries.

Falls out of buggies often occurred whilst climbing stairs or entering/leaving public transport, especially buses.
### Product related head injuries in toddlers (1-4 year olds)

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<tr>
<td>1. Stairs</td>
<td>257 (12%)</td>
<td>falls</td>
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<td>2. Furniture (e.g. couches)</td>
<td>159 (7%)</td>
<td>falls whilst playing</td>
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<tr>
<td>3. Beds (mostly parental)</td>
<td>88 (4%)</td>
<td>falls whilst playing</td>
</tr>
<tr>
<td>4. Bunk beds</td>
<td>73 (3%)</td>
<td>falls</td>
</tr>
<tr>
<td>5. Tricycles</td>
<td>54 (2%)</td>
<td>falls</td>
</tr>
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With the development of the child increased mobility introduces a wider range of products.

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Conclusion

- Products play an important role as triggers of head injuries among young children.

- Age specific safety recommendations for parents and carers are regularly given by The Pediatric Association and play an important part in injury prevention in Germany.
Thank you for your kind attention

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