Hospital disaster victim registration:
A national standard in Belgium

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Background information University Hospitals Leuven

- **Staff:** 9178
  - Physicians 1525
  - Nurses 3020
  - Others 4632

- **Authorised beds:** 1995

- **Activities per year**
  - Admissions 57,438
  - Surgical interventions 56,563
  - Day care 108,476
  - Outpatient appointments 702,712

- **ED visits per year:** 56,700
Background

- Emergency situations and reception of victims
- Need for accurate information about victims / relatives
- Current proceedings of disaster victim registration?
- Need for a standardised exchange disaster victim identification system
- Federal Ministry of Public Health in Belgium
  - Initiative developing workable system within hospitals
Objectives of the study

- Testing feasibility system in a pilot hospital
- Performing a Command Post Exercise (CPX)

- System and action cards usable in all hospitals as a national standard?
- Collaboration hospital internal & external services during the process?

  **Focus:** SWS/PCS - ED - Medical Administration - IM - C & C cel - PSIS (BRC)

- The role of the hospital disaster coordinator in the hospital?
Methods

Mixed Method Feasibility study (explanatory sequential study design)

- **Phase 1: quantitative approach**
  - Structured questionnaire ED’s: Flemisch part Belgium
  - Accuracy measurements of attendance lists (victims - relatives)
  - Questionnaires (cfr De Soir, Zech & Rimé)

- **Phase 2: qualitative approach**
  - Observer reports (11)*
  - Semi-structured interviews (10)*
  - Evaluation action cards (concept organisation registration process)

*Modified Delphi: expert panel 2014 (following emergency drill Vesalius SN 500)
Results Quantitative Research

Questionnaires (cfr De Soir, Zech & Rimé)

### Questionnaires observers (n=3)

<table>
<thead>
<tr>
<th></th>
<th>Externals (%)</th>
<th>Interns (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aid worker</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asking questions/listening</td>
<td>16</td>
<td>62</td>
</tr>
<tr>
<td>Giving information</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>Showing empathy</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>58</td>
<td>21</td>
</tr>
<tr>
<td><strong>Receiver</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could express themselves</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>Felt understood</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total score:</strong></td>
<td>17</td>
<td>36</td>
</tr>
</tbody>
</table>

### Questionnaires simulants (n=20)

<table>
<thead>
<tr>
<th></th>
<th>Mean scores (%)</th>
</tr>
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<tbody>
<tr>
<td>1. Could express themselves</td>
<td>69</td>
</tr>
<tr>
<td>2. Felt understood</td>
<td>61</td>
</tr>
<tr>
<td>3. Overall satisfaction</td>
<td>52</td>
</tr>
</tbody>
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Observer reports (n = 11)

- **Responsible registration process**
  - Structural briefing: ‘freeze in time’
  - Medical Incident Manager → Supervising the process?

- **Registration victims**
  - Registration, collecting and exchanging information: fast process

- **Point of contact victim registration**
  - Staff
  - Up-dating victim / relative information
  - Improved communication Central Point of Information - Internal

- **Triage ER**
  - Chaotic - Patient appeal - Staff - Physician? - AMP?

- **Psychosocial intervention**
  - Range of duties - Organisation - Coordination

- **Hospital disaster coordinator**
  - Not officially informed by key figures - informed by Security / Call Center Hospital
Semi-structured interviews  (n = 10)

- Theme 4: Quality and continuity of the process

“... One of the obstacles was that there were two different action cards for the medical incident manager, the two persons who have made it should contact each other and create a unique document ...”

(Medical Incident Manager, Interviewee 1)

“... Also communication was a problem. Some were unaware of what was an action card and they had never read it. It is important that if one starts working on an ER, that they know what is an action card and that it is known when and where you need to pick it up ... if they do not know that, then there is a problem ...”

(Medical Incident Manager, Interviewee 1)

“...This is a pretty good system. There is always a line of contact between PSIS (BRC) and the hospitals, but most of these have yet to be negotiated, which takes a lot of time. Now the contact is there from the start ... Only the hospital should take care that this number is not spread internally of given to the victims and relatives ...”

(Central Point of Information – PSIS, BRC, Interviewee 1)
Results Qualitative Research

Organisation registration process in the hospital
(Validation framework january 2017 Wim Hermans: psychosocial manager Belgium)
Discussion: limitations - biases - confounders

- **Limitations**
  - Limited space ER (location)
  - Simulants / Participants

- **Biases**
  - “Reality” of the exercise
  - No real victims / family

- **Confounders**
  - Daily activities of the hospital
  - Limited interest in crisis management
Conclusions (1)

- National implementation in Belgian hospitals
  - Effective system → refining registration methods
  - Attention: accuracy and completeness (up-dating)

- Communication and coordination
  - Space for improvements

- Efforts of good collaboration during the process

- Hospital disaster coordinator
  - Awareness - preparedness - coordination

- Importance of attitude - quick reassurance: ‘comfort talk’ on the ER
  - Optimizing psychosocial intervention: tools psychosocial triage
Conclusions (2)

- Education - Training - Exercising principles of HIMS
- Highly appreciated by experts, internal & external services
- Lack of preparedness in hospitals
- Need for well grounded research of disaster exercises
A special word of thanks to:

- Wim Hermans: psychosocial manager - Federal Ministry of Public Health Belgium
- PSIS - Red Cross Belgium
- Participating departments of University Hospitals Leuven
- Participating experts - observers

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