What do Swiss experts think?
Results from a survey on railway suicide prevention measures

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Rationale

• Evidence-based knowledge on interventions is sparse

• If you don’t know much:
  ➔ ask the experts
  ➔ eminence based knowledge
Method: Expert groups

1. Suicide prevention activists

2. Clinicians (working close to hotspots)

3. Swiss railway experts

4. Police/Security
Experts: Interests

- Activists → optimistic: Believe in change
- Clinicians → want to help
- Railway → sceptic: money, image, loyalty
- Security → mixed interests
Method

• Part 1: Interview, open questions

• Part 2: Standardized questionnaire
Sample

Total: 56 data sets

- Activists: 17
- Clinicians: 10
- Railway: 17
- Security: 12
Method: Questionnaire

• Basic question:
«Please rate effectiveness, independent of costs»

• 7-point Likert Scale from very effective - no effect - contraproductive
Sources of items

• Brainstormining
• Restrail items
• Literature
60 items

• Based in content:
  – Structural means (26 items)
  – Means focussing operation (9 items)
  – Alarm systems I (how to alarm?, 6 items)
  – Alarm systems II ((who should be alarmed?, 6 items)
  – Teaching professionals (6 items)
  – Public activities/campaigns (7 items)
Results
Results: Overall top ten

Programs f. persons at risk: 2.44

Mean

Local suic. prev. campaigns
Fixing gaps/holes
Alarm chain: train trivers
Fencing (open track)
Teaching plattform staff
Noise protection walls
Media guidelines
Alarm chain (general)
Alarm chain: traffic control
Programs f. persons at risk
Removing vegetation versus Planting vegetation

Highly controversial (1) (highest SD)
Highly controversial (2)

Media reports focusing on psychiatric suffering
AND
Media campaigns
AND
Shock campaigns
Subscores
Fields of prevention on railway suicides (subscores)

Group Mean Rating

- Structural means: 1.26
- Focussing: 1.26
- Operation: 1.83
- Alarm systems: 1.82
- Teaching professionals: 1.27
- Public activities: 1.39
- Total

*significant group differences
Group differences
Group differences

Interventions focussing «operation»:
• Reduction of velocity of trains
• Airbags on trains
• Change of communications in trains after accidents
• Music at railway stations

In the graph, the differences are as follows:
- Clinicians: 0.0
- Railway: 0.4
- Security: 0.8
- Activists: 1.2

The p-value is .017, indicating statistical significance.
Group differences

Interventions focusing on operation

Interventions on public activities

Clinicians | Railway | Security | Activists

p = .017

Clinicians | Railway | Security | Activists

p = .015

YES YOU CAN

YES WE CAN
Contraproductive (Top 4)

(How many thought the intervention to be contraproductive)

Resentments against:
Shock campagne (%)

Resentments against:
Media: “Psychiatric suffering" (%)

Resentments against:
Removing vegetation (%)

Resentments against:
Camara dummy (%)
Contraproductive (Top 4)

Resentments against: Shock campagne (%)

Resentments against: Media: "Psychiatric suffering" (%)

Resentments against: Removing vegetation (%)

Resentments against: Camara dummy (%)
Contraproductive (Top 4)

Resentments against: Shock campagne (%)

Resentments against: Media: “Psychiatric suffering" (%)  

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Resentments against:
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Resentments against:
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Resentments against:
Camara dummy (%)
Limitations

• Limitations:
  1. Statistics: no Bonferoni correction
  2. In reality always combined measures are implemented
  3. ....
Limitation (2)

• Persons opinion may not reflect reality (contraintuitive results stay invisible)
Contraintuitive result
(experts did not expect this)

515 Persons have been hindered to jump

only 4.8% died by suicide within the next 26 years

(Seiden et al., 1978)
Discussion/Conclusion

We know little what is effective
We know something have to be done
but
We all have (different) ideas

Exchange of different eminence based ideas is needed
Research is needed
(do nothing without evaluation)
Thank you!

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<th>Mean</th>
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