“Not without inventing a helmet, you don’t!”
Co-Authors and Collaborators

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- Farah Ahmad
Intentional Injury

- 4th Leading cause of death in Canadian youth aged 15 to 19
- most common reason for emergency department visits
- Repeat victims

‘Treat and Street’

- Teachable Moment
Little is known about perceptions of youth, parents, and community organizations about such interventions in emergency departments

OBJECTIVE: To engage youth, parents, and frontline community workers in conceptualizing a hospital-based violence prevention intervention
Methods

- Concept mapping
  - Mixed methods research approach
  - Qualitative:
    - Group brainstorming on perceptions
    - Group sorting to identify themes
  - Quantitative
    - Multidimensional scaling
    - Hierarchical clustering
- Analyze and create maps that illustrate patterns of relationships between themes
Concept Mapping

1. Brainstorming
2. Sorting
3. Rating
4. Interpretation

Completed Online

At community meeting
Methods

- CS Global software from Concept Systems (Ithaca, NY 2009)
Study Setting and Population

- Purposive sample in Toronto
  - Posters at community partner sites and schools
  - Online Networking (Facebook, MySpace)
  - Partner emails
Results - Participants

- Brainstorming
  - 48 participants

- Sorting
  - 103 participants

- Rating
  - 102 participants

- Interpretation
  - 25 participants

- 60% Youth, 20% Parents, 20% CYW

- 30% Black, 30% White, 40% other

- 55% exposed to violence
Methods - Brainstorming

- Jan – Feb 2009
- “Hospitals try to help by treating the physical injuries of youth who are injured by violence but they could also help these youth avoid future violence by...”
Results - Brainstormed Statements

- 48 statements
  - condensed to 44 statements

- Examples:
  - Mentorship
  - Connect to programs for housing
  - Help get youth back in school
  - training doctors and nurses to be non-judgmental
  - treat youth with an anti-racist approach
Methods – Sorting

- Mar – April 2009
- Sort brainstormed statements into themes
Methods - Sorting

- **multidimensional scaling**
  - Combine sorting of all participants to develop simple point maps where each statement represents a point on a map
  - Points sorted into the same category by many people are closer to each other on this simple map
    - Stress value calculated
Training doctors and nurses to ask questions about what happened

Training doctors and nurses to be non-judgmental

Connect youth with organizations in the community

Stress Value: 0.22
Methods - Sorting

- Hierarchical cluster analysis
  - sort this simple map into clusters
  - Various cluster solutions are produced
    - shared with the participants in the interpretation step
Cluster Map

1. Engagement Resources
2. Personal Development
3. Increased Public Awareness
4. Needs Assessment and Support
5. Training Staff
6. Confidentiality
7. Non-Judgemental Environment
Methods - Rating

- March – April 2009

- Importance: "For each of the following items, please rate how important it is that hospitals deal with this issue. (1 = not at all important to 5 = extremely important)"

- Realistic: "For each of the following items, please rate how realistic it is that hospitals could help with this issue" (1 = not realistic to 2 = very realistic)
## Ratings - Results

<table>
<thead>
<tr>
<th>Cluster 1: Engagement Resources</th>
<th>Importance</th>
<th>Realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>connect to education</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>connect youth with organizations in the community</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>connecting youth to peer support (youth helping youth)</td>
<td>high</td>
<td>mod</td>
</tr>
</tbody>
</table>
## Ratings - Results

<table>
<thead>
<tr>
<th>Cluster 5: Training Staff</th>
<th>Importance</th>
<th>Realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>training doctors and nurses to be understanding</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>training doctors and nurses to not make assumptions</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>training doctors and nurses to stay open-minded to youths' experiences and choices</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>training doctors and nurses to be non-judgmental</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>training doctors and nurses to listen to the patient</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>training doctors and nurses to ask questions about what happened</td>
<td>high</td>
<td>high</td>
</tr>
</tbody>
</table>
### Ratings - Results

<table>
<thead>
<tr>
<th>Cluster 7: Non-Judgmental Environment</th>
<th>Importance</th>
<th>Realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>treat youth with respect</td>
<td>high</td>
<td>high</td>
</tr>
<tr>
<td>treat youth with an anti-racist approach</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>treat youth with an anti-class approach</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>treat youth with an anti-homophobia approach</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>treat youth as knowledgeable individuals</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>Provide mental health services targeted towards youth</td>
<td>high</td>
<td>mod</td>
</tr>
<tr>
<td>create a youth friendly environment in the hospital</td>
<td>high</td>
<td>mod</td>
</tr>
</tbody>
</table>
## Ratings - Results

<table>
<thead>
<tr>
<th>Cluster 6: Confidentiality</th>
<th>Importance</th>
<th>Realistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>keep confidentiality from police</td>
<td>low</td>
<td>low</td>
</tr>
<tr>
<td>keep confidentiality from parents</td>
<td>low</td>
<td>low</td>
</tr>
</tbody>
</table>
Interpretation Session - Small Group Discussions

- **Group 1**
  - How would you design a program to train healthcare workers to be more sensitive?

- **Group 2**
  - What qualities do you want a mentor to have? (i.e. write a job description)

- **Group 3**
  - What are important skills that these youth should develop? Where do they learn these? Why are they important for avoiding future violence? Which activities should these youth be connected to? Where are these?

- **Group 4**
  - If you were to develop a public awareness campaign what would it look like?
Interpretation Session - Large Group Discussion

How do we know our intervention worked?

- Decrease overall violent injury and death
- Reduction in repeat injury
- Use of referral services
- Decreased fighting
- Changed perceptions
- Changed attitudes
- Return to school

Ask about any negative impact the program may have had on the life of a youth.
Conclusion

- Connection to community resources
  - Mentorship
  - Case Management
    - substance use, education, family conflict, job readiness, housing, financial, legal, mental health and gang involvement
- Training Emergency Department Staff
A Feasibility Study Examining Referral To Community-Based Youth Violence Interventions For Youth Injured By Violence

- Ongoing
- Outcomes
  - Recruitment, follow-up
  - Barriers to participation
  - Reinjury Rates
    - Measurement Issues
  - Program involvement
  - Changes in Attitudes and Behaviours
  - Negative Impacts of program
Long Term Plan

- Pragmatic Randomized Control Trial
  - 8 hospitals in Toronto
  - Reinjury Rates
Questions, Comments & Ideas

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