AMNESTY OR EDUCATION?
PROMOTING HELPING BEHAVIOR AMONG STUDENTS IN ALCOHOL EMERGENCIES

Laura Oster-Aaland, Ph.D.
March 12, 2013
Overview of Webinar

• Definition of medical amnesty
• Overview of literature
• Methods and results of study testing
  – Medical amnesty policy
  – Educational video
• Discussion about implementation & evaluation
BACKGROUND
What is Medical Amnesty?

• Promise students amnesty (full or partial) from campus judicial sanctions in the case where a student calls for help
• Amnesty is usually provided to the drinker as well as the helper (sometimes student organizations)
• For purposes of this presentation focus is on policy, not laws -- amnesty does not usually apply to legal infractions

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Calling for help

“calling on or off-campus resources such as: 911, campus police, city police, student health services, counseling services, a member of the residence life staff, or another university official.”
Study Background

- High profile alcohol poisoning deaths
- Student Affairs consideration of medical amnesty policy
- Underlying assumptions (Oster-Aaland & Eighmy 2007)
- Overall impact (Oster-Aaland, Thompson & Eighmy 2011)
Underlying assumptions:
(Oster-Aaland & Eighmy, 2007)

(a) students can identify the symptoms of alcohol poisoning,
(b) students understand the risk associated with the symptoms of alcohol poisoning,
(c) students responsible for help-seeking are sober enough to adequately judge the level of risk involved,
(d) students are currently not calling for help due to fear of getting in trouble with the university, and
(e) students will be more likely to call for help if they are assured that they will not get in trouble.
PURPOSE OF THE STUDY
Study Purpose

• Determine if intentions to seek help are impacted by
  – Policy
  – Education
  – Both policy and education together
  – Gender
  – Age
  – Drinking level

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Study purpose (Cont.)

• Learn about sources of help students are likely to use

• Determine if recognition of and concern for alcohol poisoning symptoms are impacted by
  – Policy
  – Education
  – Both policy and education
Literature Review
Alcohol Poisoning

- Alcohol poisoning deaths
  - Popular press (Gray 2008; Parker-Pope 2008)
  - 1 in 15 presenting at campus ER for alcohol related problems (Wright et al. 1998)
  - Rates of alcohol overdose increased 25% from 1999 – 2008 for 18-24 year olds (White, et al. 2001)
Literature Review
Medical Amnesty Policies

• On-campus calls to helping agencies increased (Lewis & Marchell 2006)

• Students were willing to help already (Colby, et al. 2000)

• No differences in helping behavior in medical amnesty group vs. no medical amnesty (O’Malley 2001)
Literature Review
Helping Behavior in General

• People less likely to intervene if
  – Others are present, not expressing concern, are pre-occupied (Latane & Darley 1968; 1970)
  – Perceived lack of danger (Fischer et al. 2006)
  – Fear of police in drug overdose contexts (Tobin et al. 2005 & Tracey et al. 2005)
Literature Review
Helping Behavior in College Students

• Help-seeking increased if
  – Affinity toward person, perceived danger, and self-efficacy (Rabow et al. 1990, Thomas & Siebold 1995)

• Help-seeking decreased if
  – Feeling of powerlessness, fear of conflict, helper under influence (Thomas & Seibold 1995)

• Students reported high levels of helping in the past
  – but did so themselves (Oster-Aaland et al. 2009)
Literature Review
Helping Behavior &
Gender, Age and Drinking Level

• Women more likely to help themselves and others (Delva et al. 2004; Howard et al. 2007; O’Malley 2001)

• No age differences in helping behavior (O’Malley 2001)

• Mixed findings on drinking level (Oster-Aaland et al. 2009; O’Malley 2001)
Study Design

• Quasi-experimental 2X2 design

• Random assignment into condition
  – R0: comparison group (no intervention)
  – R1: medical amnesty policy; on-line alcohol poisoning video
  – R2: no medical amnesty policy; on-line alcohol poisoning video
  – R3: medical amnesty policy; no on-line alcohol poisoning video
Study Process

- 5,000 potential participants (random)
- Random assignment into 1 of 4 conditions
- E-mail recruitment of participants
- On-line survey platform
  - Informed consent
  - poisoning video (R1, R2)
  - Hypothetical scenario (all)
  - Medical amnesty policy (R1, R3)
  - Questionnaires
Hypothetical Scenario
All Groups

While in your residence hall room at XYZ University on a Saturday evening you become aware of activity out in the hallway leading to the bathroom. There is a group of people who are talking loudly, some of them are laughing and not steady on their feet. One person in particular appears unconscious, is unable to stand and is being helped into the bathroom by the others. As you approach the group, you smell alcohol and the odor of vomit. You also recognize the students as first year students under the age of twenty one. One person indicates that they have been partying and that one individual had too much to drink. Another member of the group states that the student who is unable to stand had been vomiting since they left the party 20 minutes ago. One member of the group states that the person has passed out and “just needs to go to bed and sleep it off.”
XYZ University’s alcohol policy prohibits minors from being under the influence of alcohol on campus. Students found in violation of the alcohol policy will face disciplinary actions through the university judicial system.
Medical Amnesty Policy
Intervention Groups Only

In addition, the policy contains a “Medical Amnesty” clause. Medical amnesty means that if you call for medical or professional help for a friend who is intoxicated, you will not get in trouble with the university. Neither the intoxicated individual, nor the person calling for assistance will be subject to formal university disciplinary action for being intoxicated or for having provided that person with alcohol.
On-line Alcohol Poisoning Video

- [www.ndsu.edu/media/alcohol/alcohol_poisoning.htm](http://www.ndsu.edu/media/alcohol/alcohol_poisoning.htm)
- Student input in script development
- Pilot in criminal justice class
- Defines alcohol poisoning, reviews symptoms
- Reviews consequences (choking, depressed breathing, coma, death)
- Encourages to take action by calling for professional help

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Alcohol Poisoning Symptoms

- Inability to wake the person
- Mental confusion
- Passing out
- Vomiting
- Seizures

- Slow breathing
- Irregular breathing
- Low body temperature
- Blue skin color
- Pale skin color

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Participants

• $n = 1,087$

• gender breakdown
  – Male = 520 (47.8%)
  – Female = 556 (52.1%)
  – Transgender = (<1%)

• Incentives
  – Drawing for 1 of 25 gift certificates ($10 - $20)
RESULTS
HELP-SEEKING INTENTION
Descriptive Findings: Sources of help

<table>
<thead>
<tr>
<th>Source of help</th>
<th>m</th>
<th>sd</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Another student</td>
<td>3.24</td>
<td>9.16</td>
<td>1017</td>
</tr>
<tr>
<td>Hospital/Clinic/ER</td>
<td>2.80</td>
<td>9.76</td>
<td>1014</td>
</tr>
<tr>
<td>Resident Assistant</td>
<td>2.79</td>
<td>1.06</td>
<td>1016</td>
</tr>
<tr>
<td>Hall Director</td>
<td>2.14</td>
<td>1.01</td>
<td>1011</td>
</tr>
<tr>
<td>NDSU Police</td>
<td>2.13</td>
<td>1.03</td>
<td>1012</td>
</tr>
<tr>
<td>Poison Control</td>
<td>2.12</td>
<td>.99</td>
<td>1010</td>
</tr>
<tr>
<td>Internet</td>
<td>2.09</td>
<td>1.04</td>
<td>1016</td>
</tr>
<tr>
<td>Parent</td>
<td>2.06</td>
<td>.99</td>
<td>1013</td>
</tr>
<tr>
<td>Off Campus Police</td>
<td>1.93</td>
<td>1.00</td>
<td>1014</td>
</tr>
<tr>
<td>Other</td>
<td>1.50</td>
<td>.87</td>
<td>773</td>
</tr>
</tbody>
</table>

Note: 1 = very un-likely, 2 = not likely, 3 = likely, 4 = very likely

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## Descriptive Findings: Recognition

<table>
<thead>
<tr>
<th>Actual Symptoms</th>
<th>n</th>
<th>Freq</th>
<th>%</th>
<th>Non-symptoms</th>
<th>n</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to wake</td>
<td>986</td>
<td>941</td>
<td>95.4</td>
<td>Late to work</td>
<td>983</td>
<td>759</td>
<td>77.2</td>
</tr>
<tr>
<td>Vomiting</td>
<td>985</td>
<td>875</td>
<td>88.8</td>
<td>Work high/ drunk</td>
<td>983</td>
<td>740</td>
<td>75.3</td>
</tr>
<tr>
<td>Irregular breathing</td>
<td>985</td>
<td>862</td>
<td>87.5</td>
<td>Argumentative</td>
<td>981</td>
<td>700</td>
<td>71.4</td>
</tr>
<tr>
<td>Low body temp.</td>
<td>982</td>
<td>816</td>
<td>83.1</td>
<td>Headache</td>
<td>981</td>
<td>569</td>
<td>58.0</td>
</tr>
<tr>
<td>Bluish skin color</td>
<td>983</td>
<td>782</td>
<td>79.6</td>
<td>Withdrawal symptoms</td>
<td>980</td>
<td>506</td>
<td>51.6</td>
</tr>
<tr>
<td>Passed Out</td>
<td>982</td>
<td>834</td>
<td>76.7</td>
<td>Violent behavior</td>
<td>987</td>
<td>508</td>
<td>51.5</td>
</tr>
<tr>
<td>Seizures</td>
<td>986</td>
<td>746</td>
<td>75.7</td>
<td>Memory loss</td>
<td>981</td>
<td>227</td>
<td>23.1</td>
</tr>
<tr>
<td>Slow breathing</td>
<td>985</td>
<td>742</td>
<td>75.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pale skin color</td>
<td>980</td>
<td>694</td>
<td>70.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental confusion</td>
<td>989</td>
<td>634</td>
<td>64.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Frequencies of correct answers
Non-symptoms in italics

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## Descriptive Findings: Concern

<table>
<thead>
<tr>
<th>Actual Symptoms</th>
<th>$m$</th>
<th>$sd$</th>
<th>$n$</th>
<th>Non-symptoms</th>
<th>$m$</th>
<th>$sd$</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seizures</td>
<td>4.62</td>
<td>.81</td>
<td>970</td>
<td>Memory loss</td>
<td>3.42</td>
<td>1.15</td>
<td>969</td>
</tr>
<tr>
<td>Inability to wake</td>
<td>4.53</td>
<td>.80</td>
<td>962</td>
<td>Violent behavior</td>
<td>3.33</td>
<td>1.15</td>
<td>966</td>
</tr>
<tr>
<td>Bluish skin color</td>
<td>4.38</td>
<td>.93</td>
<td>967</td>
<td>Withdrawal symptoms</td>
<td>3.23</td>
<td>1.15</td>
<td>968</td>
</tr>
<tr>
<td>Irregular breathing</td>
<td>4.13</td>
<td>.90</td>
<td>967</td>
<td>Work high/drunk</td>
<td>3.06</td>
<td>1.22</td>
<td>962</td>
</tr>
<tr>
<td>Low body temperature</td>
<td>4.01</td>
<td>.98</td>
<td>968</td>
<td>Late to work</td>
<td>2.72</td>
<td>1.15</td>
<td>966</td>
</tr>
<tr>
<td>Pale skin color</td>
<td>3.91</td>
<td>1.05</td>
<td>966</td>
<td>Headache</td>
<td>2.35</td>
<td>1.10</td>
<td>964</td>
</tr>
<tr>
<td>Slow breathing</td>
<td>3.71</td>
<td>1.08</td>
<td>969</td>
<td>Argumentative</td>
<td>2.35</td>
<td>1.07</td>
<td>969</td>
</tr>
<tr>
<td>Passed out</td>
<td>3.63</td>
<td>1.07</td>
<td>965</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vomiting</td>
<td>3.36</td>
<td>.99</td>
<td>965</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental confusion</td>
<td>2.83</td>
<td>1.10</td>
<td>964</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** 1 = not at all concerned, 2 = a little concerned, 3 = somewhat concerned, 4 = very concerned, 5 = extremely concerned
Intervention groups were more likely to report intentions to seek help than control group.

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>m</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1 (MA, Video)</td>
<td>281</td>
<td>4.48</td>
<td>1.33</td>
</tr>
<tr>
<td>R3 (MA, No Video)</td>
<td>285</td>
<td>4.37</td>
<td>1.40</td>
</tr>
<tr>
<td>R2 (No MA, Video)</td>
<td>246</td>
<td>4.06</td>
<td>1.42</td>
</tr>
<tr>
<td>R0 (No MA, No video)</td>
<td>268</td>
<td>3.72</td>
<td>1.46</td>
</tr>
<tr>
<td>Total</td>
<td>1,080</td>
<td>4.17</td>
<td>1.43</td>
</tr>
</tbody>
</table>

ANOVA: 1 = definitely would not help; 6 = definitely would help
F(3, 1076) = 16.2, p = .000

Chi Square: Would help = 1; Would not help = 2
x² = 3, n = 1080 = 31.5, p = .000

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Females were more likely to report intentions to seek help than males

- Chi-square
  - Females (75.7%) more likely to report intentions to help than males (61.6%)
  - Significant association between gender and help-seeking \( x^2 = (2, n = 1080) = 26.0, p = .000 \)

- T-test
  - \( t(1077) = -.481, p = .00 \)
  - Females \( (m = 4.37, sd = 1.29) \)
  - Males \( (m = 3.95, sd = 1.54) \)

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Abstainers and light drinkers were more likely to report intentions to seek help

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>m</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstainers</td>
<td>342</td>
<td>4.57</td>
<td>1.33</td>
</tr>
<tr>
<td>Light</td>
<td>191</td>
<td>4.48</td>
<td>1.27</td>
</tr>
<tr>
<td>Moderate</td>
<td>305</td>
<td>4.14</td>
<td>1.32</td>
</tr>
<tr>
<td>Heavy</td>
<td>169</td>
<td>3.54</td>
<td>1.51</td>
</tr>
<tr>
<td>Total</td>
<td>1007</td>
<td>4.25</td>
<td>1.40</td>
</tr>
</tbody>
</table>

ANOVA: 1 = definitely would not help; 6 = definitely would help
F(3, 1003) = 24.43, p = .00

Chi Square: Would help = 1; Would not help = 2
x² = 3, n = 1007 = 53.8, p = .000

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No difference between students < 21 and 21 & over on intentions to seek help

- Chi-square
  - Percentage & odds ratio of those who ‘would seek help’
    - Under 21 – 71.4%
    - 21 and over – 66.5%
  - $x^2 = 1, (n = 1027) = 2.92, p = .087$

- T-test
  - Under 21 ($m = 4.23, sd = 1.40$)
  - 21 and over ($m = 4.11, sd = 1.45$)
  - $t(1025) = 1.39, p = .70$

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Accounting for all variables which was most influential?

- Age not significantly associated
- Being female was significantly associated
- Being abstainer or light drinker was associated
- Group R1 (Video, MA) and Group R3 (No video, MA) significantly associated
- Group X gender not significant (i.e. males and females did not differ in response to treatments)

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RESULTS
RECOGNITION AND CONCERN
Intervention groups had higher recognition scores than comparison. – Particularly true for groups with video

<table>
<thead>
<tr>
<th>Condition</th>
<th>n</th>
<th>m</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2 (No MA, Video)</td>
<td>217</td>
<td>12.88</td>
<td>2.91</td>
</tr>
<tr>
<td>R1 (MA, Video)</td>
<td>246</td>
<td>12.78</td>
<td>3.17</td>
</tr>
<tr>
<td>R3 (MA, No Video)</td>
<td>242</td>
<td>11.87</td>
<td>3.00</td>
</tr>
<tr>
<td>R0 (No MA, No video)</td>
<td>230</td>
<td>11.23</td>
<td>3.30</td>
</tr>
<tr>
<td>Total</td>
<td>935</td>
<td>12.19</td>
<td>3.17</td>
</tr>
</tbody>
</table>

ANOVA (3, 931) = 14.7, p = .00.
High level of **concern** was shown for all symptoms for all groups.

– Differences in concern by condition for three symptoms only (ANOVAS)
  • Mental confusion $F(3,960) = 6.36, p = .00$
  • Vomiting $F(3,961) = 5.16, p = .00$
  • Pale skin color $F(3,962) = 2.54, p = .05$
Limitations

• Self-report data regarding drinking levels
  – Anonymity
  – Marlatt et al. 1998; Cooper et al. 1981

• Hypothetical scenarios
  – Pogarsky 2004; Green 1989; Kim & Hunter 1993

• Homogenous sample (90.4% white)
Conclusions

• Students in intervention groups more likely to report intentions to seek help than comparison (especially MA policy)
• Women reported greater intentions to seek help than did men
• Men and women did not differ in their response to the treatments
• Intentions to seek help declined as drinking level increased

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Conclusions (cont.)

• No difference between student under age 21 and those 21 and over on intentions to help.
• Interventions effective in increasing recognition of alcohol poisoning symptoms (especially groups with video)
• Overall high levels of concern for alcohol poisoning symptoms
• Interventions effective in increasing concern for three symptoms (mental confusion, vomiting, pale skin color)

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Conclusions (cont.)

• Students expressed low likelihood of using most sources of help except
  – Another student
  – Hospital/clinic/ER
  – Resident assistant
Underlying Assumptions:  
(Oster-Aaland & Eighmy, 2007)

(a) students can identify the symptoms of alcohol poisoning,  
(b) students understand the risk associated with the symptoms of alcohol poisoning,  
(c) students responsible for help-seeking are sober enough to adequately judge the level of risk involved,  
(d) students are currently not calling for help due to fear of getting in trouble with the university, and  
(e) students will be more likely to call for help if they are assured that they will not get in trouble.
Implications for Administrators

• Support for implementing medical amnesty policy and educational video together

• Be clear about who gets amnesty and from what

• Focus campaigns to educate students about medical amnesty policies on
  – Gender specific
  – Heavy drinkers (student athletes, fraternity members)

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Implications for Administrators

• Educate *about* formal sources of help
  – 911, Police, Poison Control, Res. Life Staff

• Train informal sources of help
  – Parents, friends

• Bystander training in general
  – Implications for alcohol use, sexual assault, racism, sexism, etc.
  – Focus on what to do, how to do it, and why we need to help

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Implications for Administrators

• Communicate consistently and frequently about the policy, symptoms, and required action
  – Northwestern University “RAP”

• Education about alcohol emergency is crucial
  – Gordie Center for Substance Abuse Prevention – University of Virginia
  – Red Watch Band - Stonybrook
GORDIE Check
Alcohol overdose can have any of these four PUBS symptoms.

Unresponsive (to pinching)  
Breathing (irregular)  
Puking (while passed out)  
Skin (cold or blue)

"Unsure? Call Poison Control  
Call 911  
Learn about Gordie’s story - gordiescall.org

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Recommendations for Further Research

• Explore
  – interaction between recognition and intentions to seek help
  – Reasons why heavy drinkers less likely to seek help

• Replicate on diverse campuses

• Evaluate medical amnesty policies before and after implementation on campuses
Recommendations for Further Research

• Longitudinal study to determine time effects of educational video on recognition scores

• Research relationship of campus medical amnesty policies in relation to states that have amnesty policies (CA, IN, ND, CO, MI, NJ, NY, TX)
Examples of Comprehensive Policies

- Northwestern
- Cornell
- Duke
- Emory
- Georgia
- MIT

- NYU
- Ramapo
- Rollins
- SMU
- Tulane

Jim Neumeister: 2010 NASPA Annual Conference: Chicago IL
QUESTIONS?

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