Fidelity of implementation of 'prepackaged' youth smoking cessation programs by community-based organizations

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Helping Young Smokers Quit — Identifying Best Practices for Tobacco Cessation

UIC University of Illinois at Chicago

Background

- A growing number of 'prepackaged' youth smoking cessation programs (defined as those developed and disseminated nationally by external organizations) are available to help youth quit smoking.
- As these programs are more widely available and implemented in a variety of settings (i.e. local communities), the issue of fidelity of implementation becomes important. The impact of modifying program format or content on outcomes is unknown.
- Fidelity of implementation, or the degree to which program administrators implement the program as intended by the program developers (Dusenbury et al., 2003), of these programs has not been thoroughly examined, despite recommendations to examine the quality of implementation of programs designed to assist youth in quitting smoking (Backinger et al., 2003; Milton et al., 2003).
- Only one study has examined the fidelity of implementation of a prepackaged youth smoking cessation program (Dino et al., 1999); the program was implemented under research-based conditions. No studies have examined the fidelity of implementation of these prepackaged programs outside of the research context.
- Using data from the Helping Young Smoker's Quit (HYSQ) initiative, this paper describes the fidelity of implementation of prepackaged youth smoking cessation programs by community-based organizations.

Methods

- HYSQ profiled a national sample of youth smoking cessation programs to understand their prevalence and characteristics. A snowball sampling process identified 590 programs from 49 states across a nationally representative sample of 408 U.S. counties.
- Program administrators completed a 45-minute telephone survey that asked about the type of program used; community where the program was offered; the organization that sponsored the program; program adoption and implementation; program content; and program evaluation.
- Fidelity of implementation was measured by the following:
  - How close to the specifications of the program developer is your program implemented? (1=very closely to 3=not very closely)
  - In which ways have you modified the program: How long the program lasts? How long each contact with program participants last? Format in which the program is offered? The content of the program? (1=yes or 2=no)
  - How was the overall program length modified? (1=shorter or 2=longer)
  - How was the length of each program session modified? (1=shorter or 2=longer)
  - How was the format modified? Please specify.
  - How was the content modified? Please specify.
- Descriptive statistics (e.g., frequencies, chi-square tests) were used to examine administrators' responses to fidelity questions.

Type of cessation materials used by program administrators (N=590)

Cessation materials	%
Developed by an external or parent organization ('prepackaged' programming)	63.4
Developed internally by individuals in your immediate organization ('internal' programming)	12.7
Both prepackaged and internal programming	23.9

- Fidelity of implementation data were available only for the 64% of administrators who reported exclusively using prepackaged programs.

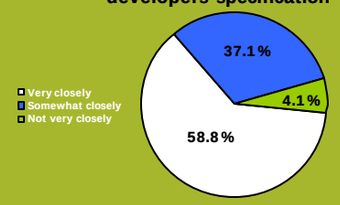
Prepackaged programs used by program administrators (N=374)

Prepackaged programs	%
1. American Lung Association's Not-On-Tobacco (NOT) program	48.4
2. Tobacco Education Group (TEG) / Tobacco Awareness Program (TAP) program	15.0
3. American Cancer Society's program	7.0
4. Other programs[1]	23.2
5. American Lung Association, American Cancer Society, and TEG/TAP programs used together	6.4

[1]Collapsed due to small percentage of each program. This category included several state-based and local county programs.

- Most administrators reported using only one program.
- Some administrators reported using a combination of materials from the American Lung Association, American Cancer Society, and from the TEG/TAP program.

Closeness of implementation to program developers' specification



- Over half of the administrators said that they followed program specifications 'very closely', while over 40% reported making changes to their program.

Modified overall program length?

- 66.1% of administrators modified the program length.

Length of program (in weeks)

	"Very closely" followed specifications (%)	"Somewhat" or "Not very closely" followed specifications (%)
< 8 weeks	32.3	42.0
8-9 weeks	18.4	24.4
10 weeks	27.8	15.3
> 10 weeks	21.5	18.3

- Programs that did not very closely follow the specifications of the developer were more likely to be shorter in duration compared to those that did (p=.02).

Modified length of each session?

- 52.8% reported modifying the length of each session; of those, 72.4% reported shortening the session length.

Length of session (in hours)

	"Very closely" followed specifications (%)	"Somewhat" or "Not very closely" followed specifications (%)
< 1 hour	43.7	61.0
1 hour	36.7	22.1
> 1 hour	19.6	16.9

- Programs that did not closely follow the specifications of the developer were more likely to have shorter sessions than those that closely followed the specifications of the developer (p<.01).

Modified the program format?

44.5% modified the program format. Of those who told us what modifications were made (N=64)[1]:

- **12.5% modified the length of the program due to time constraints. Respondents reported:**
  - "They are getting the same information in few sessions —it's a school driven request."
  - "Due to time constraints, we chopped/picked and chose areas that we considered more important than others."
- **10.9% offered co-ed group sessions instead of the prescribed single-sex groups. Said a respondent:**
  - "It's a gender-specific program. We've not had enough response to justify having two different groups."
- **23.4% offered individual, face-to-face counseling instead of the prescribed group-based counseling. A respondent reported:**
  - "We did a lot of individual face-to-face, more than originally prescribed. Because participants often had a lot of things going on that weren't appropriate to for a group session."
- **6.3% provided additional materials (e.g., handouts, videos, etc) to supplement the program.**

Modified the program content?

43% modified the program content; of those who told us what modifications were made (N=54)[1]:

- **22.2% covered other adolescent-specific issues beyond smoking. Some reported:**
  - "Generally move from cessation (because they aren't quitting) to substance abuse, conflict resolution..."
  - "Most of the kids that smoke cigarettes also smoke marijuana. Program addressed other issues including marijuana and family problems."
- **29.6% eliminated content from their program. Content was eliminated for various reasons:**
  - "No guest speakers, activities that were cheesy."
  - "There were some exercises and activities deleted or modified. There were some videos I didn't use and activities I cut out to save time."
- **35.2% reported providing additional content to enhance the program:**
  - "A CO_2 monitor was used in the program."
  - "Some content from the other smoking cessation program I mentioned-added that to our program...from the MINN program-added session on media's influence."

[1]: Percentages do not total to 100.

Discussion

- Understanding fidelity of implementation of youth smoking cessation programs is important; poor fidelity may affect the ability of the program to promote quitting among youth.
- 58.8% of administrators in our sample reported following the specifications of the prepackaged youth smoking cessation program 'very closely'.
- In some cases, the programs were not implemented as planned by the program developers. Over 40% of administrators did not implement their program very closely to specifications.
- Administrators reported modifying their program in one or more of the following ways, including:
  - Shortening the length of the overall program and/or the length of the session.
  - Providing additional materials (e.g. handouts, videos, films) to supplement the content of the program.
  - Offering co-ed groups instead of the single-sex groups prescribed by the program.
  - Offering individualized, face-to-face counseling instead of group-based counseling that was prescribed by the program.
  - Modifying the content of the program to address other adolescent-specific issues (e.g., alcohol use, marijuana use, family issues) their participants were facing.
- Our results suggest that implementation of these programs in real-world conditions requires creative adaptation.

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