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Recall of AIDS Public Service Announcements and Their Impact on the Ranking of AIDS as a National Problem

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Introduction

The evaluation of finished public health media material is often recommended for public health campaigns.¹⁻³ In late May and early June of 1990, the National AIDS Information and Education Program of the Centers for Disease Control ran a field study to test the short-term efficacy of two television public service announcements regarding human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS) from Phase V of the "America Responds to AIDS" (ARTA) campaign. The two public service announcements were "Wonderful World," which shows children playing in a field and a little girl talking

about wanting to grow up in a better world, and "Sofa," which shows a young couple on a sofa kissing while an an-

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ABSTRACT

The efficacy of two public service announcements from Phase V of the "America Responds to AIDS" (ARTA) campaign was assessed at two sites. Participants were randomly assigned to view a local news program, one with an ARTA public service announcement appearing six times and the other with no AIDS public service announcements. During telephone interviews with 907 participants 1 to 3 nights after viewing, 21% at Site A and 59% at Site B could correctly recall the ARTA public service announcements. Absolute mentions of AIDS as an important national issue increased. (*Am J Public Health*. 1992;82:1029-1032)

TABLE 1—Number of Participants by Exposure Status and Study Site

	Springfield	Memphis	Total
Exposed	230	211	441
Unexposed	223	243	466
Total	453	454	907

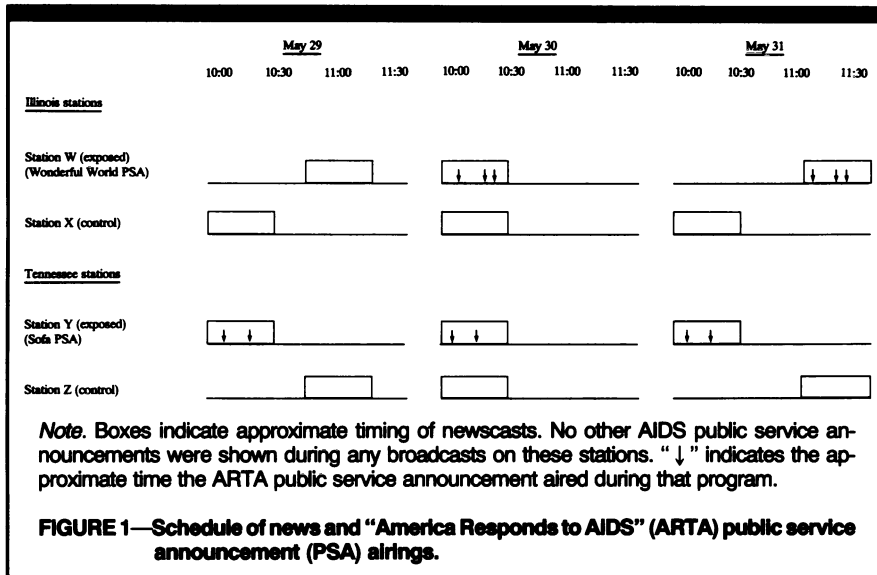


TABLE 2—Demographic Characteristics of Study Participants by Exposure Category, Springfield

Demographic Category	Exposed, % (No.) (n = 230)	Control, % (No.) (n = 223)
Gender ^a		
Male	58 (134)	49 (109)
Female	42 (96)	51 (114)
Age		
18-24	10.5 (24)	10 (23)
25-34	28 (64)	28 (63)
35-44	34.5 (79)	37 (83)
45-54	27 (63)	24 (54)
Ethnic group		
White	93 (214)	95 (208)
Black	5 (12)	4 (8)
Other	2 (4)	1 (3)
Marital status		
Married	76 (175)	73 (160)
Never married	13 (29)	16 (36)
Divorced/separated/widowed	11 (26)	11 (25)
Education		
Less than high school	4 (10)	8 (18)
High school graduate	29 (66)	26 (58)
Some college	33 (76)	32 (71)
College graduate	18 (42)	20 (43)
Postgraduate education	16 (36)	14 (31)
Income		
< \$15 000	10 (22)	11 (23)
\$15 000-\$35 000	42 (94)	40.5 (85)
\$35 000-\$65 000	41 (92)	37 (78)
\$65 000+	8 (17)	11.5 (24)

^aSignificant at *P* < .05.

nouncer on the television in front of them talks about AIDS.

The study addressed four questions: (1) Did either public service announcement increase awareness of AIDS as an important national issue? (2) Did people remember the announcements? (3) Was one more effective than the other in accomplishing these two objectives? (4) Did either produce negative effects?

Methods

Each public service announcement was tested at a discrete site: "Wonderful World" was randomly assigned to the Springfield, Ill., "area of dominant influence," as defined by Arbitron, Inc.,⁴ and "Sofa" was randomly assigned to the Memphis, Tenn., area of dominant influence. A week prior to the study, 4181 eligible households were contacted via a random-digit dialing system. Of those contacted, 1909 (46%) declined to participate, 341 (8%) did not receive the channel they were asked to watch, and 1931 (46%) agreed to participate. An even gender distribution of participants 18 to 54 years old was randomly assigned to the exposed or unexposed (control) groups. Of the 1931 respondents agreeing to participate, 907 (47%) completed the follow-up questionnaire (Table 1).

At recruitment, participants were told only that the study was to examine important health and national issues facing the nation; AIDS was not mentioned. They were asked to watch one of two local late news programs and then asked to list "the most important problems facing our country today." The question on important health and national issues was also the first question asked during the follow-up interview to avoid any bias in responses. One station in each city aired no AIDS public service announcements (the control station). One station in each city was paid to air the announcement two times per night for 3 consecutive nights on its 10:00 PM news program, and each agreed to air no other AIDS public service announcements. The news programs were scheduled to air simultaneously, from 10:00 PM to 10:30 PM from May 29, 1990, through May 31, 1990, but the actual timing of the news programs and public service announcement airings was changed because of the National Basketball Association playoffs (Figure 1). After the scheduling problem was discovered, attempts were made to contact all of the study participants and ask for their continued cooperation. Follow-up telephone interviews were completed from June 1, 1990, through June 3, 1990.

TABLE 3—Demographic Characteristics of Study Participants by Exposure Category, Memphis

Demographic Category	Exposed, % (No.) (n = 211)	Control, % (No.) (n = 243)
Gender		
Male	45 (94)	47 (113)
Female	55 (117)	53 (130)
Age		
18–24	9.5 (20)	14 (34)
25–34	33 (70)	30 (73)
35–44	39 (82)	33 (81)
45–54	18.5 (39)	23 (55)
Ethnic group		
White	65 (137)	63 (151)
Black	34 (72)	36 (88)
Other	1 (2)	1 (3)
Marital status		
Married	63 (134)	65 (158)
Never married	25 (52)	21 (50)
Divorced/separated/widowed	12 (25)	14 (35)
Education		
Less than high school	9 (19)	11 (26)
High school graduate	23 (49)	27 (67)
Some college	39 (82)	35 (84)
College graduate	20 (43)	15 (37)
Postgraduate education	9 (18)	12 (29)
Income		
< \$15 000	18 (36)	19 (45)
\$15 000–\$35 000	44 (90)	37 (87)
\$35 000–\$65 000	28 (57)	34 (80)
\$65 000+	10 (21)	10 (23)

^aSignificant at $P < .05$.

TABLE 4—Proportion of Exposed Participants Recalling an AIDS Message, by Study Site

	Study Site, No. (%)	
	Springfield (n = 230)	Memphis (n = 211)
Unprompted	66 (24.4)	90 (42.7)
Prompted	47 (20.4)	63 (29.9)
Total	113 (44.8)	153 (72.6)

Note. Unprompted recall represents those respondents who replied by describing an AIDS message when asked if they had seen any public health messages. Prompted recall represents those who responded positively to the prompt "Did you see any commercial messages or public health messages that dealt with AIDS?" if they had not mentioned an AIDS message when asked if they had seen a public health message.

validity of self-reported measures has been questioned,⁵ but this method was the only practical one in this situation. Third, the overall response rate was low (47%), possibly because of the relatively large effort required of participants and the unforeseen scheduling changes. However, response rates to telephone surveys have been declining in recent years as a result of the proliferation of telephone survey research and telemarketing attempting to disguise itself as research.^{6,7}

Day-after recall of an advertisement for a given product averages 20% (range = 0% to 70%).⁸ Thus, the recall levels of "Wonderful World" (21%) and "Sofa" (59%) are comparable or superior to the recall levels obtained in commercial advertising.

The mention of AIDS as an important issue by exposed participants also increased at both sites. Baseline levels did differ between sites, and differed between groups in Springfield. Also, participants in Memphis may have been sensitized by an AIDS special that ran on a local news program 1 week prior to the study, which may account for baseline differences between sites. However, no stories on AIDS appeared on any of the news programs over the 3 nights. The public service announcements were the only AIDS-related materials aired. Furthermore, the increases were significant and occurred only among the exposed participants.

"Sofa" appeared more effective than "Wonderful World" in terms of viewer recall. Both appeared effective in prompting viewers to cite AIDS as an important issue facing the nation. However, direct

Results

The demographic characteristics of exposed vs control participants at both sites are presented in Tables 2 and 3.

The proportion of exposed participants recalling "an AIDS message" was significantly higher in the Tennessee site than in the Illinois site (Table 4; $P < .001$). In addition, 59% of those in Tennessee assigned to the exposure group could correctly recall specific elements of the "Sofa" public service announcement; 21% of those in Illinois assigned to the exposure group could correctly recall specific elements of "Wonderful World" ($P < .001$).

The proportion of participants mentioning AIDS as an important issue increased at both sites from recruitment to follow-up for the exposed groups, but not for the unexposed groups (Table 5). Mentions of AIDS increased 54.8% in Memphis (20.8% to 32.2%) and 72.9% in Springfield (9.6% to 16.6%). Categories of exposed participants vs unexposed participants were based strictly on recruitment assignment.

Three open-ended items were used to examine whether the public service announcements had unintended negative effects. In Illinois, 5 of 453 responses to an AIDS prevention question referred to "quarantine" of infected persons, 2 in the exposed group and 3 in the unexposed group. In Tennessee, 1 of 211 exposed respondents described the public service announcement as "offensive" and 1 described it as "too passionate to be shown on television." Since the general viewing population also could view the public service announcement, the station airing the announcement in Tennessee was questioned about complaints. The station received only 5 complaints, a number it classifies as negligible compared with a strong reaction, which it classifies as 25 or more calls and/or letters.

Discussion

A number of real-world problems and limitations were encountered in this study. First, unexpected scheduling changes occurred during the study. Second, all exposure information was self-reported. The

TABLE 5—Proportion and Change in Proportion Mentioning AIDS as an Issue, by Exposure Category

Category	Participants Mentioning AIDS, %		Change, %	P
	Pre	Post		
Springfield Exposure	9.6	16.6	+ 7.00	.03
Control	17.5	17.5	...	NS
Memphis Exposure	20.8	32.2	+11.4	.01
Control	14.8	16.5	+ 1.6	NS

Note. At recruitment, and again during the follow-up interview, respondents were asked simply, "In your opinion, what are the most important problems facing our country today?" Up to the first five answers were recorded.

comparisons of the public service announcements are confounded by study site and airing schedule differences. It should also be noted that these results cannot be generalized to the entire viewing population.

Despite problems and limited exposure, this study shows that under field conditions viewers do recall ARTA public service announcements, and these announcements can affect viewers' beliefs concerning AIDS as a national problem. Furthermore, neither public service announcement produced negative effects.

The testing of finished public health media material is beneficial for practical decision making. For example, prior to this study, the Tennessee Department of

Health had concerns that Tennessee residents would find the "Sofa" public service announcement offensive. However, the study results did not indicate this to be the case, and the announcement was later aired on a statewide basis.

Since ARTA campaign materials include print, radio, and television public service announcements and informational brochures and these materials are distributed extensively, and because this trial involved only six exposures over a short period of time, effects on attitudes and behaviors were not expected. However, future efficacy studies will be adapted to test for these effects. Upcoming efficacy studies will be run in several markets for 12 to 20 weeks following the release of the materials. They

will examine various broadcast media combinations and media emphasis in relation to campaign objectives. □

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