

FETAL ALCOHOL SYNDROME DISORDER PILOT MEDIA INTERVENTION IN NEW JERSEY

O Awopetu¹, M Brimacombe^{1,2}, D Cohen³

¹School of Public Health- University of Medicine and Dentistry of New Jersey, ²Department of Preventive Medicine & Community Health, New Jersey Medical School- University of Medicine and Dentistry of New Jersey, ³New Jersey Department of Human Services, Office for Prevention of Mental Retardation & Developmental Disorders, USA

ABSTRACT

Background

The New Jersey Fetal Alcohol Spectrum Disorders Task Force launched the “Be in the kNOW” multimedia public education campaign in July 2006. The campaign continued until December 2006.

Objective

To report on the pilot media intervention campaign in Essex and Atlantic Counties, New Jersey, with the goal of identifying strategies to help prevent Fetal Alcohol Syndrome Disorder (FASD).

Methods

The campaign used various media outlets from July 2006 to December 2006, including billboard posters along New Jersey transit routes serving Atlantic City and Newark, local newspapers and radio public service announcements. Messages were distributed in English and Spanish and were primarily aimed at Essex and Atlantic counties. Printed material was distributed throughout the community. All media materials included an 800 number for the New Jersey Family Health Line. Data was collected from individual callers.

Results

A total of 49 Fetal Alcohol Syndrome (FAS) related telephone calls were received through the Family Health Line over the six-month period. An increase from the 5-6 FAS calls typically received in a six-month period. Callers were located throughout New Jersey with 24.5% from Essex County, 12.2% from Mercer County, and 12.2% from Bergen County. 69% of callers identified themselves as white, 25% black, and 6% other. 76% of callers were female. Ages ranged from 8 to 50.

Conclusion

The media intervention reached a wide geographic audience, provoking interest beyond the initial target area and expected age ranges. The results, however, point to the difficulty of raising awareness of FASD.

Fetal Alcohol Syndrome (FAS) is the leading preventable cause of mental retardation in the United States and is 100% preventable if a woman does not drink alcohol while pregnant.¹ The more broadly defined Fetal Alcohol Syndrome Disorder (FASD) is also completely preventable. Current Centers for Disease Control (CDC) data reports FASD rates varying from 0.2 to 1.5/1000 live births² depending on surveillance methods and the population studied. According to the National Pregnancy and Health Survey sponsored by the

National Institute of Drug Abuse (NIDA), National Institutes of Health (NIH), an estimated 4 million women gave birth in 1992 and of these 19% drank alcohol during their pregnancy.³ The Office of the Surgeon General published an “Advisory on Alcohol Use in Pregnancy” in February of 2005⁴ and the American College of Obstetricians and Gynecologist now warns that women who are pregnant or who may become pregnant should abstain from alcohol use. FASD education and prevention efforts have been ongoing for several

years. In 1997, the CDC initiated a multi-site project to evaluate the efficacy of a brief intervention, PROJECT CHOICES (Changing High-Risk AlCOhol Use and Increasing Contraception Effectiveness Study), to help women cease consumption of alcohol during pregnancy.⁵ The baseline drinking habits of women involved in PROJECT CHOICES were evaluated and women with lower baseline drinking levels were found to be the least likely group to reduce their consumption of alcohol.

In 1998 the National Task Force on Fetal Alcohol Syndrome and Fetal Alcohol Effect was established by the Secretary of the U.S. Department of Health and Human Services (DHHS) through the Public Service Act, (42 U.S.C. 280f), Section 399H.⁶ It provides recommendations for nationwide educational planning⁷ of FAS educational outreach programs, helping healthcare workers diagnose pregnant women or educate women who are thinking of becoming pregnant.

The 2002 Behavioral Risk Factor Surveillance System (BRFSS) survey was used to examine drinking patterns in women between the ages of 18-45.⁸ The BRFSS survey categorized drinking patterns into binge drinking (5 or more drinks at one occasion), frequent drinking (7 or more drinks in a week), and any use of alcohol (at least 1 drink per occasion). The prevalence of any use of alcohol in women of childbearing age was 52.6%, 54.9% in women who might become pregnant, and 10.1% for pregnant women.⁹

The specific types of media based intervention that would be most useful in preventing FAS/FASD remains unknown. The CDC funded the creation of four regional training centers (RTCs) in 2002 to aid in the development and dissemination of FAS/FASD based educational materials appropriate for the training of medical students and practicing health professionals.

Educational Outreach

Public education through mass media advertisement is an important component of health intervention strategies designed to alter risky health behaviors through education and persuasion.¹⁰ Mass media has the capacity to reach and influence many individuals, making it an important aspect of campaigns to promote public health awareness. Smoking cessations campaigns are an example of the powerful effects of mass media on individual

behavior and political decisions.^{11,12} The Truth® mass media anti-smoking campaign, is an example of a public awareness campaign launched successfully and effectively to provide information to targeted groups.¹³

Developing effective mass media public education campaigns requires identification of target behavior. This guides the identification of risk factors and characteristics most frequently associated with the behavior and target group. The campaign message should be specifically tailored to the target group and if there are a number of related messages, they should include a consistent slogan and message content should be realistic and credible, portraying members of the target group.

A basic issue in considering campaign characteristics is the choice of appropriate media, including television, radio, press advertising, and brochures. Television has generally been considered the most persuasive medium due to the addition of colorful moving images that are emotionally arousing to the campaign message.¹⁴ Radio can also be significant in areas with wide population distribution at a lower cost. Press advertising allows for the portrayal of graphic images, and the use of text. Outdoor advertising is confined to graphic images and key text. Brochures are useful as they can include both graphic images and text, with the advantage of being able to convey complex messages.¹⁵

Other important variables relate to media placement, including issues such as duration of campaign, intensity, timing and exposure. A meta-analysis of 48 media campaigns found that campaigns that were longer in duration were more successful because they provided enough of time for people's behaviors to change, including those people who are slower to change.¹⁶ However, a Fetal Alcohol Syndrome campaign conducted in St. Louis, Missouri targeted at African-American women implemented for two years, October 2002 to March 2004, found that increases in public knowledge were dependent on the increase in frequency of FAS message penetration rather than duration of the campaign.¹⁷ Several states have launched mass advertising campaigns to raise public awareness of FASD. In 2002, the National Institute on Alcohol Abuse and Alcoholism and the National Organization on Fetal Alcohol Syndrome launched several advertising campaigns in Washington D.C, specifically targeting its African-

American population.¹⁸ Minnesota's Department of Health launched its awareness campaign in 2003 geared at its minority population targeting the urban African-American, American Indian and Latino populations.¹⁹ The statewide campaign used posters, newspaper ads, toll-free hotlines, and bus-side and radio advertising.

New Jersey

The first New Jersey Task Force on Fetal Alcohol Syndrome was established in 1983 and reorganized in 1998. Since its establishment, the Task Force has played a central role in increasing awareness in the community as well as professional awareness. FASD related measures were initiated in New Jersey with the intention to improve reporting and accurate diagnosis of FASD.²⁰

In July 2006, the New Jersey Fetal Alcohol Spectrum Disorders Task Force, in collaboration with the New Jersey state Office of Prevention of Mental Retardation and Developmental Disorders (OPMRDD) and The Arc of Atlantic County, launched the "Be in the kNOW" advertisement campaign, (www.beintheknownj.org) urging women of childbearing age to not drink alcohol, take drugs or smoke cigarettes if they are pregnant, and, to avoid these substances if they could become pregnant in order to reduce risks. The Arc of Atlantic County organized local partners that included the Atlantic City Health Department-Community Health Services, the Atlantic City Healthy Mothers/Healthy Babies Coalition, the Atlantic City Municipal Alliance, the Atlantic County Smoke-Free Air Coalition, and the Atlantic Prevention Resources.

In August 2006, the NJ FASD Task Force partnered with the Gateway Maternal and Child Health Consortium and the FASD Diagnostic Centers at Newark Beth Israel Hospital and at University of Medicine and Dentistry of New Jersey, New Jersey Medical School, and Integrity House - an addictions treatment program to launch the campaign in Newark. The purpose of this study was to report the outcome of this pilot FASD media intervention.

METHODS

The images and text underlying the New Jersey FASD campaign advertisements reflected strategies

to answer potential questions regarding negative consequences associated with alcohol consumption in pregnancy (Why is drinking alcohol while I'm pregnant such a bad thing?), as well as providing resources for women who have alcohol dependency (What if I need help to stop drinking?). These messages were distributed in both English and Spanish. Printed materials (countertop inserts and brochures,) were distributed to churches, several community centers and local grocery stores.

Public Service Announcements (PSAs) were developed for radio broadcast. The spots were each 20 seconds long and were sent to both AM and FM stations in Morris, Atlantic, Mercer, Middlesex and Ocean County. The stations include the following counties in their service areas: Mercer, Burlington, Hunterdon, Somerset, Middlesex, Monmouth, Ocean, Atlantic, Essex, Union, Morris, Passaic, Bergen, Hudson and Sussex. Advertising mediums included billboard posters located along New Jersey Transit routes (Table 2), interiors of Newark subway trains, and interiors of city buses (Table 2), local newspapers (Table 3) along with the radio public service announcements. Brochures were distributed to local bodegas and grocery stores in the Newark and Atlantic City areas. Campaign kick-off events were organized to attract local community newspapers. These were held in July and August 2006, in Atlantic City and Newark.

A key distinguishing key factor of the New Jersey campaign was a 24-hour referral service available for individuals to FASD diagnostic centers. This service was made available via the New Jersey Family Health Line, whose staff was trained and prepared to answer calls and refer people to appropriate services and/or MCHCs and FASD Diagnostic Centers. A toll-free number was provided on media advertisement material for the "Be in the kNOW" campaign. Over 13,000 calls are received by the Family Health Line annually.²¹

Campaign materials also included the website address for the New Jersey FASD Diagnostic Centers (www.fasnj.org). The website, which is funded by the NJ Department of Health and Senior Services, is administered by the FASD Diagnostic Center based at UMDNJ-New Jersey Medical School. The website provides basic information about the effects of prenatal exposure to alcohol as well as a description of the FASD Diagnostic Centers.

TABLE 1 Total Number of Calls and Demographic Characteristics

Characteristic		Freq	%	Characteristic		Freq	%	Characteristic		Freq	%	Characteristic		Freq	%
Age	0-17	4	8.2	Ethnicity	Black	12	24.5	Gender	F	38	77.5	Contact	Self	37	75.5
	18-25	8	16.3		White	34	63.4		M	9	18.4		F/R	11	22.5
	26-45	36	73.5		Other	3	6.1		U	2	4.1	Other	1	2.0	
	46-64	1	2.0		Total	49	100		Total	49	100	Total	49	100	
	65+	0	0												
	Total	49	100												
County	Bergen	Essex	Hudson	Hunterdon	Mercer	Middlesex	Monmouth	Morris	Passaic	Union	Sussex				
Freq	6	12	4	1	6	5	2	1	2	1	0				
%	12.2	24.5	8.2	2.0	12.2	10.2	4.1	2.0	4.1	2.0	0				

M-Male F-Female U-Unknown F/R-Friend/Relative

TABLE 2 Details of Media Intervention

Duration of Billboard Panel	8/11/06-11/20/06	8/11/06-11/20/06	8/21/06-9/20/06	10/2/06-11/29/06
County	Atlantic	Atlantic	Atlantic	Atlantic
#Advertising Cards	200		36	
Duration	7/10/06-10/10/06		7/10/06-10/10/06	
Location	Essex & Atlantic County Bus lines		Newark Subway lines	

TABLE 3 Local Newspapers

Newspaper Ads	Publication Dates (2006)	
Atlantic City Weekly	August 31 September 7 and 21	October 5, 19 and 26 November 2 and 16 December 7 and 14
El Especialito (Essex)	September 1, 15 and 29 October 6, 13 and 27	November 3 and 10 December 1 and 8
Nuestra Comunidad	September 1, 15 and 29 October 6, 13 and 27	November 3 and 10 December 1 and 8
The Connection	September 7, 14 and 21 October 6, 13 and 27	November 3 and 10 December 1 and 8

RESULTS

Data collected from July 2006 to December 2006 showed a total of 49 FAS related telephone calls were received by the Family Health Line. This represents an increase from the 5-6 FAS related telephone calls received in a similar period in 2005-2006, though in absolute numbers it remains small. Caller identifier information was not recorded for FASD/FAS related calls in 2005-2006. Caller characteristics for July 2006 to December 2006 callers are displayed in Table 1. The majority of calls originated from Essex County with 24.5%, 12.2% from Mercer County

and Bergen County with 12.2%. Surprisingly no calls came from Atlantic County where 4 billboard posters, newspaper advertisement and train advertisement cards were placed. Figure 2 displays the FAS related calls by county. Surprisingly, calls were received from 13 of the 21 counties in New Jersey. In terms of background, 69 percent of the callers were white, 25% black, and 6% other. The majority of the telephone calls came from female callers (76%). All callers received referrals related to their specific concerns.

FIG. 1 FAS Be In The kNow Advertising Image

Pregnant women need to

BE IN THE kNOW

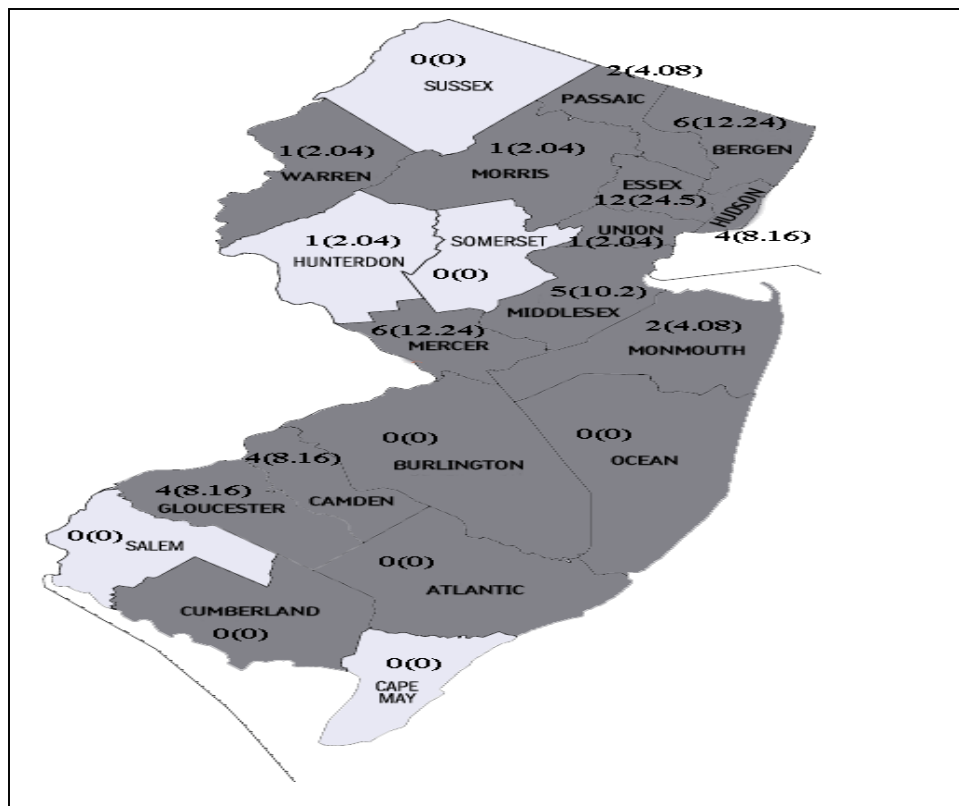
- ✓ **NO** Alcohol
- ✓ **NO** Smoking
- ✓ **NO** Drugs

Think about it...
Every time you drink alcohol, smoke or use drugs, so does your baby. Alcohol, cigarettes and drugs can harm your unborn child!

For more information, call the New Jersey Family Health Line at **1-800-328-3838** or **www.fasnj.org**

NEW JERSEY
Fetal Alcohol Spectrum Disorders

FIG. 2 Map of FAS Related Calls Received over Six-Month Period



DISCUSSION

The numbers gathered so far demonstrate the difficulty in discussing issues related to alcohol and fetal exposure to alcohol. While the numbers are limited, they hold potentially large economic benefit as estimated lifetime health care cost related to FASD is approximately \$1 million US.²² The New Jersey Department of Human Services appropriated \$60,000 to support the “Be in the kNOw” campaign. The implementation of more preventive programs by state agencies would potentially result in substantial economic savings.

The wide-ranging origin of calls is surprising though the PSA’s were located along major transit routes. The age range of callers is of interest. Callers as young as eight years old may imply the need to incorporate prevention messages that appeal to all members of the family, including siblings who are aware of high-risk FASD parental behavior.

Media intervention is generally an effective way to reach a broad range of target audience and generate community awareness about Fetal Alcohol Syndrome. Future campaign efforts should focus on providing an on-going baseline source, such as pamphlet and community posters, while intermittently employing various media mediums that will serve to ensure a continued response.

Limitations

The Public Service Announcements (PSAs) for the “Be in the kNOw” campaign did not run on a set schedule. They ran on a station’s loop of announcements and, as a result, it is not known how frequently they aired. PSAs are an inexpensive advertising medium, but often run in the middle of the night. A majority of the “Be in the kNOw” print advertisements were withdrawn in early November 2006, except for pamphlets that remained in circulation. The PSAs also ended at the end of December 2006 along with contracts for subway advertisement cards/posters.

CONCLUSIONS

The development of practical and useful large-scale media interventions to prevent FASD is a challenging and important issue. The potential

damage caused by FASD gives impetus to the development, study and application of large-scale media based FASD prevention efforts.

Corresponding Author:

brimacmb@umdnj.edu

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