Science Communication
Volume 29 Number 3
March 2008 362-385
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10.1177/1075547007313031
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"To Booze or Not to Booze?"

Newspaper Coverage of Fetal Alcohol Spectrum Disorders

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This article reports the results of a qualitative framing analysis of the coverage of fetal alcohol spectrum disorders (FASD). The findings indicate that media discourse about FASD is characterized by differing story types and competing frames. The study also documents the recent emergence of a new frame in opposition to the prevailing abstinence frame in health coverage. This frame has shown physicians to be conflicted in their advice about drinking during pregnancy.

Keywords: *fetal alcohol spectrum disorders; health communication; newspapers; framing*

When the Oscar-winning British actress Rachel Weisz told a group of reporters in New York City that she considered drinking wine "fine" after the first trimester of pregnancy, she set off a major debate worldwide (Munro, 2006). English-language newspapers on at least three continents ran stories quoting doctors and advocacy group members decrying the actress's dangerous comments. The next week, *Chicago Sun-Times* writer Richard Roeper (2006) presented a column filled with the unapologetic testimonials of women who had been pregnant and continued to drink (and often smoke as well) during their pregnancies, with no negative effects on their offspring. The furor consumed some parts of the blogosphere, and Ms. Weisz ultimately

Authors' Note: We thank the Pennsylvania Department of Health's Bureau of Family Health for its support of this study and the anonymous reviewers of both this journal and the Science Communication Interest Group of the Association for Education in Journalism and Mass Communication for their helpful suggestions on earlier versions of this article. Correspondence concerning this article should be addressed to Colleen Connolly-Ahern, The Pennsylvania State University, College of Communications, 118 Carnegie Building, University Park, PA 16802; e-mail: connolly-ahern@psu.edu.

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issued an apology, stating that she was not speaking as an expert (Hancock, 2006).

Why does the idea of drinking alcohol during pregnancy engender such emotion? The answer lies in a threat associated with maternal alcohol consumption during pregnancy: fetal alcohol spectrum disorders (FASD). According to Substance Abuse and Mental Health Services Administration, a division of the U.S. Department of Health and Human Services, "FASD is an umbrella term describing the range of effects that can occur in an individual whose mother drank alcohol during pregnancy. These effects may include physical, mental, behavioral, and/or learning disabilities with possible lifelong implications" (FASD Center for Excellence, 2006). FASD include clinical diagnoses such as fetal alcohol syndrome (FAS), which includes distinct facial features, abnormal growth patterns, and brain damage. They also include alcohol-related neurodevelopmental disorder, which involves neurological abnormalities associated with alcohol use during pregnancy, and alcohol-related birth defects, which involve skeletal and organ deformities associated with alcohol use during pregnancy (U.S. Department of Health and Human Services, 2007).

The U.S. government considers FASD a major public health issue because it is a leading cause of mental retardation, affecting at least 40,000 newborns per year (U.S. Department of Health and Human Services, 2007). Aside from the effects on children and their families, the disorders have a detrimental effect on society as a whole. People living with FASD experience high levels of mental illness, school and employment problems, and criminality (Armstrong, 2003; U.S. Department of Health and Human Services, 2007).

In this article, we report the results of a qualitative framing analysis of newspaper coverage of FASD in print news sources over a 10-year period. The purpose of this study was to provide coding categories for a large-scale, quantitative assessment of newspaper coverage of FASD, as a preliminary step toward the creation of a statewide FASD awareness campaign targeting college-age women. Understanding the public discourse surrounding the issue of FASD was considered a critical element of campaign creation.

Prior studies have established that media coverage can influence what issues people think about and how they evaluate those issues (McCombs & Shaw, 1972; Iyengar, 1991; Hertog & Fan, 1995; Dearing & Everett, 1996; Fan, 1996). In particular, the print news media are ranked by health information consumers among the top sources for preventive health information, along with television and interpersonal sources (O'Keefe, Boyd, & Brown, 1998).

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Literature Review

Health Communication Research

Since the 1980s, content related to health issues has made up an increasingly large portion of the content of popular media (Kline, 2006). That focus has led to increased attention on health communication by the academic community. Several researchers have pointed to problems with media coverage of health issues, including superficial rather than in-depth treatment of health issues (Meyer, 1990; Davidson & Wallack, 2004), stories that incite an unrealistic fear of illness or health problems (Meyer, 1990), stories that inaccurately report scientific findings (Moyer, Greener, Beauvais, & Salovey, 1995), coverage that is slanted toward diseases that affect large numbers of people (Klaidman, 1990), and coverage that is biased or absent because of concerns over offending advertisers (e.g., Kessler, 1989; Meyer, 1990; Mastin, 1996).

One line of research significant to the current study deals with portrayals of illness or wellness in media (e.g., Clarke, 1992, 2006; Menashe & Siegel, 1998; Andsager & Powers, 1999, 2001; Davidson & Wallack, 2004; Clarke, McLellan, & Hoffman-Goetz, 2006; Smith & Wakefield, 2006; Wu, 2006; Dudo, Dahlstrom, & Brossard, 2007). While no studies could be found examining coverage of FASD in the communications literature, many studies have addressed coverage of health issues related to risk-associated behaviors, such as smoking, unhealthy eating habits, and engaging in unprotected sex. For example, Menashe and Siegel (1998) examined the frames invoked by the tobacco industry and the tobacco control movement in *The New York Times*. They found that the tobacco industry frames were consistent over time, giving them a coherent voice in the debate over smoking.

Smith and Wakefield (2006) looked at newspaper coverage of tobacco that focused on youth, finding that stories concerning education and prevention, health effects, advertising and promotion, and youth access to tobacco made up more than 80% of stories on youth and tobacco.

In their study of national news coverage of sexually transmitted diseases (STDs), Davidson and Wallack (2004) found that newspaper coverage in general lacked detailed coverage of STDs. Part of the lack of detail the researchers found was that 66% of the articles contained no quotations. When quotations were present, advocates and lobbyists were the most frequently quoted sources, as opposed to more credible sources, such as medical professionals or public health officials. Disease transmission, causes, and symptoms—information with which individuals could assess their risks—were covered in fewer than half the stories, and recommended

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actions focused on steps that individuals rather than organizations or public health policy makers could take. The researchers concluded that the information in the print media about STDs was "often superficial, confusing, or inaccurate."

FASD and Society

One way that medical knowledge finds its way into the public arena is through the popular reporting of medical research. In her book on the history of the social construction of FASD, Armstrong (2003) suggested that the medical community has overestimated the problem, or at least simplified it:

> Two of the central tenets of FAS are that it is a "big" problem and that all pregnant women are at risk. Yet the picture drawn by the analysis . . . suggests that the conventional wisdom may be wrong on both counts. Drinking during pregnancy—and thus the risk of FAS—is not only a rare occurrence, but a highly concentrated one as well. (p. 184)

Her analysis of data from the 1988 National Maternal and Infant Health Survey, a national survey of women of reproductive age done by the National Center for Health Statistics of the U.S. Department of Health and Human Services, indicates that risk is not distributed evenly throughout society. White, educated, and married women engage in high-risk activities such as binge drinking in higher numbers than other groups, including African Americans, before pregnancy (Cui, 2000). However, with pregnancy, those populations tend to stop drinking. Studies indicate that African Americans, those without high school educations, the unmarried, and those with low incomes are less likely to change their behaviors during pregnancy. This leads to the high incidences of FASD noted in these communities (Armstrong, 2003). Armstrong also noted that government agencies and special interest groups use strong rhetoric when describing FASD. Reaching the various populations with rhetorical messages will be influenced by which channels are used by FASD organizations. Socioeconomic factors also influence health information source selection, with older, more educated, and higher income adults turning to print sources for health information and younger, less educated adults turning to television sources (O'Keefe et al., 1998).

According to Menashe and Seigel (1998), "One of the most important consequences of the way a public health issue is framed is the solution to the problem the frame implies" (p. 321). Sources of information used in

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health coverage should define issues in ways that focus on their desired solution. Stempell and Culbertson (1984) found that physicians were the most prominent, most dominant sources in health coverage. In that case, we would expect to see frames in the FASD coverage that reflect the opinion of the medical community, as articulated by Armstrong (2003): FASD is a big problem, and everyone is at risk.

While Armstrong's (2003) case study included physician interviews, medical histories, and survey data analysis, she did not undertake a comprehensive study of the framing of FASD in the popular media. This article serves to fill a gap in the academic literature on FASD, providing information about the current level of discourse about FASD in the popular press, on the basis of qualitative framing analysis.

Framing

In a broad sense, frames are ways people organize their understanding and make sense of their interactions within the larger social world (Pan & Kosicki, 1993; Hallahan, 1999; Reese, 2003). Rooted in a social constructionist perspective, frames can be understood as "*organizing principles* that are socially *shared* and *persistent* over time, that work *symbolically* to meaningfully *structure* the social world" (Reese, 2003, p. 11). Frames are not topics; frames are ways of approaching, understanding, and/or evaluating topics. Frames are embedded in cultural and symbolic systems and communicate values and beliefs that are meaningful in those systems.

While framing may occur in several different communication contexts—receiver, text, communicator, and culture (Entman, 1993)—media scholars have mainly been concerned with frames as they manifested themselves in the text (e.g., Gamson & Modigliani, 1989; Entman, 1991; Durham, 1998; Gandy & Li, 2005), while some have looked at the specific effects of frames on audiences (e.g., Iyengar, 1990, 1991; Shah, Domke, & Wackman, 2003). Framing studies of media content examine the patterns in the way issues are presented and discussed. By examining these patterns, scholars identify what Gamson and Modigliani (1989) referred to as "interpretive packages" (p. 2).

Scholars have identified media frames, these "interpretive packages," by examining selection and salience, looking at what content was included and what was left out, and looking at how that content was emphasized or deemphasized (Entman, 1993; Reese, 2003). In this often cited definition, Entman (1993) explained what results from selection and salience: "To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular

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problem definition, causal interpretation, moral evaluation and/or treatment recommendation" (p. 52). Through frames, journalists can focus a debate, highlight certain aspects of issues, and even select the terms used to describe the principal ideas (Tankard, 2003). According to Gitlin (1980), news frames are "composed of tacit little theories about what exists, what happens and what matters" (pp. 6-7). Media frames are not static; they can change, evolve, and contend over time (Hertog & McLeod, 2003; Miller & Riechert, 2003). Miller and Riechert (2003) described a multiphase framing cycle in which opposing frames may contend with one another until one frame emerges as the dominant frame.

News stories themselves are the vehicles for media frames. Specifically, scholars identify media frames by examining structures within text such as metaphors, anecdotes, word choice, exemplars, visuals, catchphrases, sources, quotations, symbols, representations, organization, and repeated word use (Gamson & Modigliani, 1989; Entman, 1991; Pan & Kosicki, 1993; Tankard, 2003). Qualitative framing looks at not only what is included in the frames but what is excluded (Entman, 1993).

From a public health perspective, media frames are important to study because of the ways media reflect and interact with the public's understanding of a health issue. As Gitlin (1980) described it, "media frames, largely unspoken and unacknowledged, organize the world both for journalists who report it, and, in some important degree, for us who rely on their reports" (p. 6). Understanding how the media frame an issue provides a context for understanding how the public may view an issue or, at least, what types of sense-making patterns may influence public perception. Entman (1991) said that media frames function to create a "commonsense" understanding of issues.

Best (1990) suggested that one of the major images evoked in popular press is that of the "child-victim." He argued, "The image of the child menaced by deviants has shaped public reactions to a surprisingly wide range of social problems" (p. 6), including abortion, drunk driving, and even HIV/AIDS. Child-victims often become the theme behind social campaigns designed to change behaviors. With fetal abuse a growing cause of social concern (Best, 1990), FASD coverage, a condition caused by the actions of pregnant mothers, may engender "child-victim" coverage.

The commonsense understanding of FASD is what we sought to assess in this study. A statewide health-oriented campaign adds another voice to the public discourse on an issue of importance to society. Before entering that discourse, it is critical to understand the current level of understanding of the problem.

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Research Questions

While health communications is a growing research area, no studies on communications and FASD could be found. Part of the challenge of understanding FASD coverage is determining what types of stories even mention FASD. Are newspapers writing stories that focus on FASD exclusively, or is FASD mostly mentioned as one of a long list of issues in stories focused on prenatal health care? Is coverage of FASD limited to the health section, or is it making its way into other types of stories, such as personality profiles? Unlike previous framing studies that examined whether stories are episodic or thematic (e.g., Iyengar, 1990, 1991), in this study, we asked a more basic question about where mentions of FASD appear in newspaper coverage. This interest is reflected in the first research question:

Research Question 1: Coverage of FASD appears in newspaper stories with what types of focus?

Qualitative framing analysis should offer some insight into the narratives represented in newspapers' current level of discourse on FASD. The current study was therefore guided by the additional research questions:

Research Question 2: What frames emerge from newspaper accounts of FASD?
Research Question 3: How do sources relate to the frames present in newspaper accounts of FASD?

Method

The nature of the initial project—creating a code sheet for a large-scale quantitative analysis in preparation for the creation of a statewide campaign targeting college-age women about the risks of FASD—dictated the sample. Because we were interested in the news environment that our targets might have encountered, stories were identified using the LexisNexis database, using the "Northeast newspapers" regional subcategory from the general news stories source. Articles from the past 10 years were collected, using the keywords *fetal alcohol syndrome* and *fetal alcohol spectrum disorders* in the headline, lead paragraphs, and terms. This yielded a sample of 293 articles. No effort was made to further refine this sample on the basis of relevance or story category, since the purpose of the study was to determine how an individual might encounter information about FASD in news coverage.

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Qualitative framing involves repeated and extensive engagement with a text and looks holistically at the material to identify frames. The advantages of qualitative framing are that it (a) examines the key words, metaphors, narratives, and so on, in context of the text as a whole; (b) identifies what was left out of the frame as well as what was included; and (c) recognizes that the words repeated most often in a text may not be the most important.

The main method for data analysis was a variation on a type of qualitative analysis sometimes described as the constant comparative method (Glaser & Strauss, 1967; Lindlof, 1995) and sometimes as analytic induction. The primary researchers read through the news stories multiple times, making notes on patterns and frames. As a first step, the researchers identified an extensive number of categories during the first round of open coding of the articles. These were collapsed into a few categories during the data analysis process. The researchers read the articles and made notes to identify frames separately, then talked through frames and subframes to reach an agreement on the results. As with most qualitative studies, the use of multiple coders was intended to increase the richness of the results, not to serve as a reliability check.

Findings

We retrieved a list of 293 articles that mentioned FAS over a 10 year period.[1] In 236 of these, FAS was a significant theme of the article. From these, three main story types and three major frames were identified. The researchers noted all frames present in the stories; most stories included multiple frames.

Story Types

The findings indicate that individuals are likely to encounter information about FASD in three main story types: health features, special interest profiles, and public safety news. Each of these was divided into further subcategories. Health news coverage made up the largest portion of coverage (48.3% of stories), followed by public safety news (19.5%) and special interest profiles (17.8%). Thirty-four stories were classified as "other," as in cases in which FASD was mentioned in conjunction with a character in a book or a play. Table 1 illustrates the main story types in each year of the study.

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Table 1
Story Types in News Coverage of Fetal Alcohol Spectrum Disorder by Year

	Article Type				
Year	Health Coverage	Special Interest Profiles	Public Safety News	Other	Total
1997	18 (48.6%)	5 (13.5%)	5 (13.5%)	9 (24.3%)	37
1998	13 (72.2%)	2 (11.1%)	2 (11.1%)	1 (5.6%)	18
1999	8 (42.1%)	1 (5.3%)	8 (42.1%)	2 (10.5%)	19
2000	12 (57.1%)	4 (19.0%)	4 (19.0%)	1 (4.8%)	21
2001	11 (50.0%)	6 (27.3%)	1 (4.5%)	4 (18.2%)	22
2002	8 (66.7%)	1 (8.3%)	3 (25.0%)	0 (0.0%)	12
2003	6 (23.1%)	5 (19.2%)	4 (15.4%)	11 (42.3%)	26
2004	15 (71.4%)	2 (9.5%)	2 (9.5%)	2 (9.5%)	21
2005	10 (27.0%)	10 (27.0%)	15 (40.5%)	2 (5.4%)	37
2006	12 (60.0%)	5 (25.0%)	2 (10.0%)	1 (5.0%)	20
2007[a]	1 (33.3%)	1 (33.3%)	0 (0.0%)	1 (33.3%)	3
Total	114	42	46	34	236

Note: Values are numbers and percentages of articles.
a. Data collected included the 10-year period between February 17, 1997, and February 17, 2007.

Health coverage. Health coverage features included four subcategories. First were feature stories focusing on prenatal health. For example, one feature went over the details that one might expect from a "preconception planning visit" with a medical practitioner. These stories tended to include information on multiple risks associated with pregnancy in addition to FASD—cigarettes, caffeine, unpasteurized cheese, and too much exercise were frequently mentioned—and offered advice on avoiding those risks. This category also included a few articles whose main topic was mothers drinking while pregnant.

The second health coverage subcategory included stories that focused on FASD as the primary topic. These stories tended to include many facts and figures about the condition, especially its relative occurrence in the country compared with other birth defects. This coverage was characterized by its emphasis on the size and scope of the problem.

The third health coverage subcategory was science stories. These reported the results of academic research in the area of FASD. The fourth category included op-ed columns and letters to the editor that discussed

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FASD. These were dominated by letters from members of interest groups associated with FASD.

Special interest profiles. Special interest profiles were human interest stories about people dealing with FASD. This category was dominated by stories of adoptive or foster families that were coping with the results of FASD. A related but separate group of profiles dealt with special needs children who were currently available for adoption. These features usually included information about the disabilities the children had, along with appeals for the "right" family to contact government agencies that were handling the case. A third subcategory included a few stories about the Special Olympics.

Public safety news. Public safety news came in three main types. The first subcategory included stories involving stories in which women were accused of committing fetal abuse. These were sometimes based on arrests and sometimes based on trials.

The second subcategory of public safety news included stories in which individuals accused of crimes used FASD as a defense. These stories often focused on whether individuals were competent to stand trial on the basis of retardation linked to FASD.

The third subcategory of public safety news, comprising far fewer stories than the prosecution and defense frames, included stories in which FASD was used to explain socially unacceptable behavior, but not necessarily associated with crimes. For example, one story featured an adoptive mother discussing the drowning death of her adoptive son. She explained that he had suffered from FASD and described the ways in which it had affected his life.

Frames

Three main frames emerged from the text: dangerous mothers (dominant in 21.2%), fetal wellness (21.2%), and victimization (57.6%). Each of these held multiple subframes. Table 2 details the dominant frames in each of the 10 years studied.

Dangerous mothers. Dangerous mothers was by far the most disturbing frame in the news coverage, emerging in each of the story types. The frame was characterized by women engaged in dangerous behaviors during pregnancy. Some of these behaviors were linked directly to alcoholism: "Tyler's birth mother was an alcoholic, but pregnancy didn't stop her drinking. The

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Table 2
Dominant Frames in News Coverage of Fetal Alcohol Spectrum Disorder by Year

	Dominant Frame			
Year	Dangerous Mothers	Fetal Wellness	Victimization	Total
1997	8 (21.6%)	2 (5.4%)	27 (73.0%)	37
1998	5 (27.8%)	5 (27.8%)	8 (44.4%)	18
1999	7 (36.8%)	4 (21.1%)	8 (42.1%)	19
2000	6 (28.6%)	2 (9.5%)	13 (61.9%)	21
2001	2 (9.1%)	7 (31.8%)	13 (59.1%)	22
2002	3 (25.0%)	3 (25.0%)	6 (50.0%)	12
2003	3 (11.5%)	3 (11.5%)	20 (76.9%)	26
2004	5 (23.8%)	11 (52.4%)	5 (23.8%)	21
2005	4 (10.8%)	5 (13.5%)	28 (75.7%)	37
2006	5 (25.0%)	8 (40.0%)	7 (35.0%)	20
2007[a]	2 (66.7%)	0 (0.0%)	1 (33.3%)	3
Total	50	50	136	236

Note: Values are numbers and percentages of articles.
a. Data collected included the 10-year period between February 17, 1997, and February 17, 2007.

boy forever will bear the marks of his mother's addiction"[2] (Swingle, 2000). Of course, the ultimate "dangerous mothers" are those who are charged criminally with abusing their children or fetuses. An Associated Press story published in the *Boston Globe* describes a Wisconsin mother charged with attempted homicide and reckless injury when she and her baby both tested for blood alcohol levels above 0.10 shortly after the baby's birth. The mother was quoted as desiring an unmotherly thing: to "kill this thing" (Associated Press, 1999).

However, sometimes the dangerous mothers frame is presented without information about levels of alcohol use: "The children of mothers who drank alcohol in pregnancy suffer numerous mental problems, central nervous system defects and physical symptoms. Alcohol crossing the placenta and leaving the fetus oxygen- and nutrient-deprived causes Fetal Alcohol Syndrome (FAS)" ("It's the Cold Truth," 2001). Some stories associated even small amounts of alcohol use with dangerous mothers: "So those of us who drink, even occasionally, during pregnancy face unanswerable questions, like why would anyone risk the health of a child for a passing pleasure like a beer?" (Moskin, 2006).

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The dangerous mothers frame also included pejorative descriptions of drinking by mothers. One story suggested that pregnant mothers choose to "booze or not to booze" (Lomrantz, 2006), while another story suggested that a perceived lack of effects of drinking during early pregnancy was "not license for would-be moms to live it up" (Querna, 2007). Both "boozing" and "live it up" suggest a type of heavy, irresponsible alcohol consumption that is frowned on generally, and the context of the stories equated any level of drinking during pregnancy with that stigmatized, heavy drinking.

There were a number of subframes evident in the dangerous mothers coverage. One, slippery slope, implied that mothers could not be trusted with alcohol while pregnant because they might not stop drinking. In one article from *The Daily News*, a dietician asked, "Why entice yourself? It's best to just have the mind-set that you're just going to give it up for a finite period of time, because a sip might lead to two sips, which can lead to two glasses" (Lomrantz, 2006).

A second subframe, multiple dangers, linked drinking alcohol—even in small amounts—to two addictive behaviors, cigarette smoking and drug use. Some suggest that smoking is preferable to drinking during pregnancy. For example, offering guidelines for women trying to conceive, one physician offered this advice about drinking alcohol:

> Unfortunately, there is no safe level of alcohol during pregnancy, nor is there any time during a pregnancy when the developing fetus is immune to the effects of alcohol. Periodic or binge drinking is as bad as chronic use. Individual fetuses vary in susceptibility to injury from alcohol exposure, but none will benefit from the experience. Smoking cigarettes, although not damaging to the fetus except for growth delay, lowers the threshold in the fetus for adverse effects of alcohol. (Amato, 2007)

Fetal wellness. The fetal wellness frame was an instructional frame, giving directions to women so they could attain the most desirable outcome of pregnancy: a healthy baby. For example, one story that compared U.S. infant mortality rates unfavorably with those of countries such as the United Kingdom, Austria, and Greece explained the rationale for the lengthy prenatal recommendations recommended by the Centers for Disease Control and Prevention:

> The recommendations come out of studies showing that specific health issues in mothers can affect their unborn children. . . . For example, babies born to mothers with uncontrolled diabetes are three times more likely to have birth defects than those born to mothers without diabetes. Smoking can cause

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> preterm birth or low birth weight and drinking alcohol while pregnant can cause fetal alcohol syndrome. (Querna, 2007)

This frame was divided into two subframes, which were in direct contradiction to each other, although they were often found together in stories. The first, and most prevalent, subtheme was abstinence. This frame conveyed the message that there was no known safe level of alcohol use while pregnant, so expectant mothers were encouraged to abstain completely from alcohol while they were pregnant, and even before they were pregnant, if at all possible:

> Women who are pregnant should not drink alcohol. It seems so simple. Alcohol is the leading known cause of preventable birth defects. Fetal Alcohol Syndrome and its little sibling, Fetal Alcohol Effect, damage babies in ways ranging from mental retardation to poor coordination. (Curtin, 1998)

> For Dr. Amos Grunebaum, an obstetrician who is chief of labor and delivery at New York Weill Cornell Medical Center, the answer is clear. "No amount of alcohol is safe during pregnancy," Grunebaum says. "There is no discussion. The surgeon general is very clear on this, and you can damage the fetus even with small amounts of alcohol." (Lomrantz, 2006)

This frame is especially associated with credible sources of health information: medical professionals, scientists, and the government. At least one study presented scientific information as gaining in authority: "Obviously, newer studies show the best prevention [for FASD] is to stop drinking before you plan on becoming pregnant" ("It's the Cold Truth," 2001).

While medical professionals are most associated with the abstinence frame, mothers are also heard from:

> Lily Perry, a stylist from Brooklyn who recently gave birth to her second child, says that for her, pregnancy was teetotal time. "No matter how many women tried to convince me that one drink was okay with both of my pregnancies, the slight risk of harming my babies kept me from listening," Perry says. (Lomrantz, 2006)

The countervailing theme to abstinence was safe levels. This is a relatively new frame in the FASD discourse. This frame carried the message that small amounts of alcohol *might* be okay during pregnancy. This frame often depends on tenacity and intuition as support. For example, a mother of two from Illinois was quoted in *The New York Times*, asking, "How can

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a few sips of wine be dangerous when women used to drink martinis and smoke all through their pregnancies?" (Moskin, 2006). This theme communicates sophistication, often invoking "Europe" to buttress arguments in favor of drinking during pregnancy: "Many women who choose to drink have pointed to the habits of European women who legendarily drink wine, eat raw-milk cheese and quaff Guinness to improve breast milk production, as justification for their own choices in pregnancy" (Moskin, 2006).

At least one woman in the coverage invoked the safe levels frame, even when she was herself abstinent, indicating that the frame is making its way into public discourse:

> Still, some women—particularly European women—feel confident in their ability to exercise self-control. Denise Gordon, a 38-year-old editor at Glamour who is expecting twins for the first time, said she was out for dinner with a pregnant friend from London who admitted to the occasional glass of wine. "Although I'm not drinking myself, I don't judge any pregnant women who do drink occasionally. Perhaps if your body is accustomed to a little wine now and then, it wouldn't be a shock." (Lomrantz, 2006)

Another feature of this safe levels frame comes from the academic and medical community, sometimes in conjunction with the abstinence frame:

> Some children are adversely affected by the alcoholic drinks their mothers consumed while pregnant; many are not. Researchers cannot predict which child will fall into which category, although they think genetics plays a role. To be safe, the federal government's official position since 1981 is that women who are pregnant or who might be should abstain from alcohol. (Swingle, 2000)

The safe levels frame advantages one kind of alcohol over all others: wine. The controversy involving Rachel Weisz was started by her statement that it was that it's "fine to have the occasional glass of wine" while pregnant (Ridley, 2006). Women who described themselves drinking during pregnancy almost all discussed having wine with a meal or a glass of wine to relax after a rough week. Again, there seems to be some level of desired sophistication in the choice of beverage: These are not beer-swilling barflies or hard liquor–using hussies. Wine is framed as more refined than other alcohol choices.

Further complicating the safe levels frame are widely varying definitions of what constitutes light and heavy drinking. The range of light drinking estimates varies between "one sip" of alcohol to fewer than five drinks per

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week. Heavy drinking estimates range between more than one drink per day for a woman at the low end to as many as four drinks per day. "Binge drinking" is also defined differently throughout the news coverage, with some experts suggesting that one or two drinks in quick succession might qualify as a binge, with others suggesting that more than five drinks in one day for a woman constitute a binge.

Victimization. The world of FASD is divided into perpetrators (the dangerous mothers described above) and victims. Victimization descriptions are present in most of the story types but are most prevalent in the public safety stories and in the special interest profiles. This frame contains descriptions of suffering through the stories of three basic types of victims: children or adults who suffer from FAS, children or adults who have been victims of people suffering from FAS, and the society or the community that must deal with the economic, social, and emotional cost of FAS and/or FASD.

The victimization frame centering on children and adults with FAS describes the physical, emotional, and social problems of FASD: physical abnormalities, cognitive impairments, learning disabilities, hyperactivity, social stigma, and isolation. For example, a *Boston Globe* story described the effects of FAS on an adopted son:

> Kelly believes that her son, whom she adopted, was born with fetal alcohol syndrome that affected his learning skills and made his childhood difficult. He was held back twice in elementary school. Soon after he turned 12, he began smoking and then turned to alcohol. He joined a substance abuse treatment program at 14. (Cramer, 2006)

The lead of a *Sunday News* (Lancaster, PA) story described an FASD child's inability to understand the consequences of her actions:

> Just before Christmas, 8-year-old Mandi Peters set a fire in her sister's bedroom, then climbed into bed and pulled the covers over her head as the flames licked the walls. Once the fire was contained, and everyone deemed safe, Mandi's adoptive mother questioned her about the blaze. Mandi was matter-of-fact. Yes, she'd lit a fire; yes, she knows it can burn. But in the mind of a child with fetal alcohol syndrome, words communicate little more than sketchy ideas. Cause and effect have no meaning. (Harvey, 2001)

The cognitive effects of FASD also mean that some of the stories in the child and adult victim frame include stories about adults accused of crimes; these adults claim impaired judgment or a lack of competence as a result of FASD.

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However, the number of adults claiming FASD as a defense or as a mitigating factor is part of another subframe of victimization: the focus on children and adults who have been victimized by people suffering from FASD. One of the most infamous defendants to claim effects from FASD was Jesse Timmendequas, who was convicted of killing Megan Kanka, the 7-year-old for whom the sex offender registry and notification laws are named. The stories are unsympathetic about the adult perpetrator's claims of FASD, adding the word *alleged* in front of the claim of FASD in some cases and in others focusing the attention on the severity of the crime or on the victim rather than on the health effects claim.

Another type of victimization story centers on the societal costs of FASD. Most of these types of victimization-framed stories chronicle the problems of foster parents and adoptive parents in caring for FASD children. For example, one adoptive parent in a *Times Union* (Albany, NY) story described her life with an FAS child: "As a baby, he was extremely challenging, 24 hours a day. He exhausted me. He would just go into screaming rages" (Swingle, 2000). Adoptive and foster parents in these frames talk about economic costs, schooling problems, and socialization concerns for FASD children. One mother's description is typical of this type of frame: "(Children with FAS) don't understand the consequences of their actions. They are very friendly and are often taken advantage of by their peers because they'll basically do whatever they are asked to do without fear or concern" (Harvey, 2001).

Sources

In all of the coverage, no one source spoke for any segment of concerned society: No recognizable spokesperson for FASD emerged. The surgeon general's 1981 recommendation for warning labels on alcohol was often mentioned as the beginning of a significant attempt by the government and physicians to change attitudes about drinking. However, the current debate in the fetal wellness frame focuses more on celebrities (both Rachel Weisz and Gwyneth Paltrow have been the objects of both ire and admiration in the coverage) and pregnant women and mothers than on government sources.

Mothers, both adoptive and biological, make up a significant number of the sources in the victimization frames. They are also featured, not surprisingly, in the dangerous mothers frame. Often, this discussion takes the form of adoptive mothers explaining the reason that their children have difficulties. In only a few cases, the sources were the mothers who were responsible for their children's conditions. In one case, a woman pleaded for her son's death sentence to be commuted to life in prison:

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> "Willie had a rough childhood and mostly it was because of my alcoholism," his mother, Barbara Sullivan, told the board. "I didn't have the time for him. They didn't call us alcoholics then. They called us drunks. I was a drunk." (Thorne, 1999)

Doctors and researchers also play an important role as sources in both the fetal wellness and dangerous mothers frames. However, they are characterized by duality. Almost all of the doctors quoted in the articles made it clear that abstinence was the best, and officially prescribed, form of maternal conduct during pregnancy. However, a few alluded to their ambivalence about light drinking:

> Many American obstetricians, skeptical about the need for total abstinence, quietly tell their patients that an occasional beer or glass of wine—no hard liquor—is fine. . . . "If a patient tells me that she's drinking two or three glasses of wine a week, I am personally comfortable with that after the first trimester," said Dr. Austin Chen, an obstetrician in TriBeCa. "But technically I am sticking my neck out by saying so." (Moskin, 2006)

Mothers describe conversations they have had with their doctors in support of their moderate drinking during pregnancy. The off-the-record versus on-the-record discourse of physicians in FASD coverage has left them an ambiguous source: sympathetic and realistic, but unpredictable.

Discussion

This qualitative framing analysis was initiated to give us some idea about the media environment into which a health campaign for FASD would be placed. The results of this study indicate that FASD coverage is characterized by competing story types and frames. Most of these frames are extremely negative.

People entering the news environment are likely to encounter information about FASD in health features, special interest profiles, and public safety news. Of these three, only health features are likely to supply messages about avoiding FASD. The special interest profiles focus on the effects of FASD, vis-à-vis children and their (largely) adoptive families. Public safety news also discusses the effects of FASD, usually as encountered through the prism of the criminal justice system. These stories may be read by our target audience of young, college-age women. But they are not likely to see themselves in the discourse.

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Health coverage did offer women plenty of information about avoiding FASD. However, the information itself added its own confusion to the current discourse. Medical personnel, government agencies, and members of advocacy groups are quoted in the coverage, but they each offer different information to readers.

The frames presented in the coverage of FASD suggest a number of different solutions to the problem. The first and most predominant solution from the fetal wellness frame was to avoid alcohol, both before and during pregnancy. A second, more controversial solution from the standpoint of the medical community is the limiting of alcohol during conception and pregnancy. However, the FASD coverage examined offered no consensus as to what that safe level might be. This reflects the tension between members of the medical community who espouse abstinence and those who believe from past experience that alcohol in small amounts is unlikely to harm a baby.

The dangerous mothers and victimization frames present a third possible solution to the problem of FASD: societal intervention. The government (through the legal system) and civil society (through foster parents, adoptive parents, and support groups) share responsibility for ensuring that children are safe, healthy, and protected. To the extent that FASD exists, society as a whole, not just the dangerous mothers whose behaviors caused the FASD, has failed.

In terms of framing, a frame not favored by health officials, safe limits, seems to offer an attractive alternative in terms of the public agenda compared with its rival frame, abstinence. The frame's focus on sophisticated elements, such as wine and Europe, combined with the star power of some of the celebrities who have become enmeshed in the public debate about drinking during pregnancy, may serve to make the safe levels frame particularly appealing for young women.

Research indicates that public opinion on health issues is most likely to change when they have been framed as involuntary risks, universal risks, environmental risks, or knowingly created risks (Lawrence, 2004). This qualitative analysis indicates that many medical professionals, government officials, and advocates have been framing the issue as a knowingly created risk: Once a woman is aware of the risks of FASD, she is jeopardizing her baby's health in a deliberate way. However, the safe levels frame challenges that characterization, allowing for some level of alcohol use that is not risking the baby's health. The growing importance of this relatively new frame in public discourse must be taken into account by the creators of any public service campaign dealing with the topic of FASD.

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The dangerous mothers frame has particular resonance because it presents readers with a cultural aberration: Mothers stand above all things for the protection of children. This probably serves to give the frame particular news value, of the man-bites-dog variety. However, its inclusion in the fetal wellness stories as a negative example may serve to further separate average readers from the FASD issue. Dangerous mothers is a construction that is "other" oriented. Along with the victimization frame, it has the effect of portraying FASD as an issue for "bad," "irresponsible," "threatening," even "evil" people. It is not difficult for young women to feel empathy for those suffering from the effects of FASD. However, it is probably difficult for college-age women to see themselves as potential *causes* of FASD in children, through their future behavior.

The problems inherent in this "other"-oriented construction of the FASD issue have been addressed in the literature on tailored health communication (e.g., Heimendinger et al., 2005; Marcus et al., 2005; Rimer & Kreuter, 2006). Tailoring literature indicates that individuals are most motivated to process health information when that information is framed in a context that is meaningful to the individual (Rimer & Kreuter, 2006). In the case of FASD, the results of this study indicate that the content of the current frames may lack context for young women, leaving them less likely to process important health information.

The news coverage of FASD provides no overarching source: No expert emerges in the coverage as the "leading" expert. The sources expected from other research on health coverage—physicians, other medical professionals, government officials, and advocates—were apparent in the coverage. However, one frame, safe limits, had a more sympathetic cast of characters, including young stars who have recently had children and "real" moms who had lightly used wine during pregnancy to no ill effect on their children. The abstinence frame, in contrast, was populated by strident, judgmental voices. Their message was communicated clearly, but far less appealingly. Any campaign brought into the current environment should focus on possible sources for the abstinence message that might be as appealing as those on the safe levels side of the debate.

Conclusion

FASD is a complex, multidimensional social problem. That complexity has made comprehensive coverage of the issue especially difficult. With

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few journalists trained in science writing, and even fewer of them responsible for public safety news, a large proportion of the news coverage of this issue has been framed to emphasize the aberrant behavior of the dangerous mother. A young woman in the target audience for our campaign is not likely to see herself in the characterization of this modern-day Medea. Nor is she likely to see herself in the victimization stories, unless she unfortunately has a personal association with FASD. The adoptive mothers are saintlike, but few young women aspire to be saints.

In the area of health coverage, two countervailing frames serve to confuse public debate on the issue. Having dutifully read the health coverage available to her, the average young woman of college age would still have to judge for herself what the acceptable levels of alcohol use during pregnancy might be: somewhere between none and "a glass of wine with dinner," whatever that means. The fact that doctors make some statements "on the record" and others "off the record" would serve to confuse the young woman even further: Which doctor should she believe?

Like all social scientific research, this research has some limitations. By limiting the study to print sources, we did not explore the manner in which FASD has been framed in other media, including television news, women's magazines, and Web sites, other places where young women are likely to encounter information about FASD. Additionally, the current study did not explore young women's perceptions of the FASD issue and their understanding of the existing frames. Triangulating the results of this study with focus groups of young women constitutes an important area of future research.

While the qualitative framing analysis described was originally designed to inform future research, it also stands on its own. The results indicate a pressing public relations need within the governmental organizations responsible for combating FASD. Better outreach to physicians is necessary to confirm the important role of abstinence in prenatal health. The current work serves not only as a benchmark for the coverage of a significant public health issue but as further evidence of the desperate need for journalists to be better trained in the communication of science and health topics. Without such training, the complexity of health-oriented issues may overwhelm the media, resulting in a chaotic discourse that ill serves audiences.

Notes

1. The state in which the anti-FASD campaign was to run, Pennsylvania, led the authors to choose Northeast news sources. Newspapers with articles included in this study were: *Bangor Daily News*, *The Berkshire Eagle* (Pittsfield, MA), *The Boston Globe*, *The Boston Herald*,

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Brattleboro Reformer, *Buffalo News*, *Christian Science Monitor* (Boston, MA), *Connecticut Post* (Bridgeport, CT), *Daily News* (New York), *The Daily Record of Rochester*, *Hartford Courant*, *Herald News* (Passaic, NJ), *Intelligencer Journal* (Lancaster, PA), *Lancaster New Era*, *Lowell Sun*, *Morning Call* (Allentown, PA), *New Hampshire Sunday News* (Manchester, NH), *New Jersey Lawyer* (South Plainfield, NJ), *The New York Post*, *The New York Sun*, *The New York Times*, *The Patriot Ledger* (Quincy, MA), *Pittsburgh Post-Gazette*, *Portland Press Herald* (Maine), *The Post-Standard* (Syracuse, NY), *Providence Journal-Bulletin*, *The Record* (Bergen County, NJ), *Sunday News* (Lancaster, PA), *Telegram & Gazette* (Worcester, MA), *The Times Union* (Albany, NY), *Tribune-Review* (Greensburg, PA), *The Union Leader* (Manchester, NH), *The Village Voice* (New York), *The York Dispatch*.

2. Because the data set for this analysis was derived from the LexisNexis database, no page numbers have been included for direct quotations. This is consistent with other qualitative textual analyses, which treat text as data and omit page numbers and in some cases citations to original works. The page numbers given in the "References" section indicate the first pages of news articles as reported by LexisNexis.

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