A variety of scholars have explored the role of communication in reducing, maintaining, and even widening health disparities, but comparatively less attention has focused on the content and effects of communication about health disparities in the mass media. This article aims to summarize the current state of knowledge about these issues by identifying key outcomes and audiences for mass-mediated communication about health disparities, describing what is known about public opinion about health disparities, reviewing selected research on the content and effects of mass-mediated communication about health disparities, and identifying priorities for future research to better understand the role of communication in shaping public support and collective action to reduce health disparities.

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Documenting and explaining health disparities, “differences in health outcomes between groups that reflect social inequalities,” has been a major focus of public health research in recent years (CDC, 2011, p. 1). Addressing these disparities is also considered a major policy priority (Bleich, Jarlenski, Bell, & LaVeist, 2012). For example, Healthy People 2020 identifies a goal for the United States to eliminate disparities, and the Patient Protection & Affordable Care Act included stipulations for increased data collection by race/ethnicity to facilitate ongoing surveillance of disparities. In January 2011, the U.S. Centers for Disease Control and Prevention (CDC) issued a landmark report itemizing health disparities by race/ethnicity, socioeconomic status (SES), and sex (CDC, 2011). Despite these bold efforts, progress in the United States to address health disparities has been slow relative to other developed nations (Bleich et al., 2012).

Differences in health outcomes across social groups result more from social, economic, institutional, and political factors than from access to or quality of medical care or unhealthy decisions by socially disadvantaged groups (Adler & Rehkopf, 2008).
These factors, called the social determinants of health, encompass “the conditions in which people live, work, play, and age” (Robert Wood Johnson Foundation, RWJF, 2008, p. 1). Health disparities constitute an injustice because these conditions are not freely chosen and are potentially avoidable (Braveman, 2006). Reducing disparities will require attention by national, state, and local governments, as well as private and not-for-profit sectors, to improve the economic, social, and physical environments in which the socially disadvantaged live and work (Lantz, Lichtenstein, & Pollack, 2007). Attention to this broader social and economic context entails a significant change in the way the public—and policymakers alike—think about the causes of health disparities and the broad range of strategies needed to ameliorate them (Smedley, 2006).

Heightened policy attention to health disparities and renewed interest within the field of communication (e.g., Len-Rios, 2012; Viswanath & Emmons, 2006) suggests that the time is ripe to systematically identify what is known about communication and health disparities, and where to go from here. We see four discrete areas of scholarly inquiry at the intersection of communication and health disparities. The first examines effects of campaigns aimed at reducing health disparities through individual behavior change (e.g., Durkin, Biener, & Wakefield, 2009). The second addresses how organized health campaigns and mass-mediated information have the potential to exacerbate, rather than ameliorate, existing disparities (e.g., Viswanath & Kreuter, 2007). The third involves the role of communication in the clinical encounter as it contributes to disparities in both receipt of health care and health status (e.g., Kreps, 2006; Teal & Street, 2009). We classify each of these as communication directly shaping health disparities. While crucial, they are not the focus of our attention here.

A less studied, but increasingly important fourth area of inquiry is communication about health disparities in the mass media. We define communication about health disparities as communication that describes, calls attention to, or makes salient, differences in health outcomes between groups. By the mass media, we mean communication about health disparities appearing in media with the potential to reach a large audience. Communication about health disparities in the mass media may come from (a) efforts to publicize findings about health disparities through governmental efforts; (b) outreach by researchers, universities, or journals; (c) journalists or editors who choose to cover these issues; or (d) grassroots efforts to disseminate disparity-related messages via digital or social media. Communication scholars have the potential to play a critical role in enhancing understanding of the content and effects of mass-mediated communication about health disparities. Moreover, given that reducing disparities will likely require sustained policy action (Braveman, 2006), we need to better understand the role of communication in shaping or mobilizing such action. With this as our motivation, the goals of this article are to (a) identify key outcomes and audiences for communication about health disparities; (b) describe what is known about public awareness of health disparities; (c) review selected research on the content of communication about health disparities in the mass media, the effects of that communication, and opportunities for use of mass media technology in communication about health disparities; and (d)
identify priorities for future research to understand how communication about health disparities can shape concern and action to reduce health disparities.

**Outcomes and Audiences for Communication About Health Disparities**

Decades of theory and research indicate that communication can shape several policy-relevant outcomes among both the public and policy sector (defined broadly to encompass those with vested authority to create rules, procedures, or policies that influence health disparities, including government officials and leaders of for- and nonprofit groups):

1. Raising awareness of the sheer existence of health disparities between particular social groups (e.g., issue awareness; Scheufele, Shanahan, & Kim, 2002);
2. Increasing perceptions that health disparities are a serious issue worthy of attention (e.g., issue importance and agenda setting; McCombs & Shaw, 1972);
3. Heightening beliefs that societal forces and actors cause, and are responsible for, addressing health disparities (e.g., attributions and framing; Iyengar, 1991);
4. Promoting support for policies that have the potential to reduce health disparities (e.g., subsidizing healthy foods in low-income areas; Gollust, Lantz, & Ubel, 2009);
5. Mobilizing issue publics (members of disadvantaged groups; other organizations) to advocate for social change (e.g., social movements and participatory action; Basu & Dutta, 2009);

To cohere these perspectives, Figure 1 presents a conceptual model informed by evidence that media effects on public opinion can influence health-related policy via issue awareness, issue importance, attributions of responsibility, policy support, and participatory action (see Rigby, Soss, Booske, Rohan, & Robert, 2009; Stone, 1989). The model does not claim to predict all possible media effects on policies related to health disparities—policies may be implemented outside of the health sector and may never mention disparities (e.g., improving universal early childhood education), yet have the consequence of reducing a health disparity. We focus on research that has been conducted in the United States in light of considerable recent activity to both assess and change public awareness of health disparities through the mass media. We recognize that the notion of a general “public” is overly simplistic, particularly in the case of mobilization where smaller “issue publics” form over shared concerns about social issues (Price, 1992). Furthermore, we note the possibility that communication about health disparities could be counter productive if calling attention to the implications of a policy for disparities mobilizes opposition to that policy among powerful groups (e.g., Harwood, Witson, Fan, & Wagenaar, 2005), reduces broader public support for policy change, or creates reactance, polarization, and/or activates stereotypes (e.g., Gollust et al., 2009).

**Public opinion about awareness and importance of health disparities**

There has been surprisingly little research on public perceptions of health disparities. A 1999 national survey revealed that a majority of Americans were not aware that
African Americans have higher rates of infant mortality and lower life expectancy than non-Hispanic Whites (Lillie-Blanton, Brodie, Rowland, Altman, & McIntosh, 2000). A parallel 2010 national survey showed little improvement in awareness of these disparities over time (Benz, Espinosa, Welsh, & Fontes, 2011). In another national survey conducted from 2008 to 2009, Booske, Robert, and Rohan (2011) found that awareness of health disparities depended on which social groups were compared. Seventy-three percent of Americans were aware of health disparities between the poor and middle class, but only 35% were aware of disparities between those with a high-school diploma only and those with a college degree. Awareness also differed by participant demographics. Younger, healthier, and more politically conservative respondents were less aware of health disparities. Members of groups who suffer higher burdens of disease (those with low education and income) were the least likely to be aware of health disparities that affect them.

Lynch and Gollust (2010) also examined the public’s moral assessments of disparities in a 2007 national survey. They found that Americans evaluated disparities concerning access to and quality of health care as more unfair than those concerning health status itself. Moreover, the perceived fairness of disparities in health status varied with respondents’ reported causal attributions for those disparities. Differences that were perceived to be due to structural factors (like discrimination) were thought
to be more unfair than differences thought to be due to individual factors (like behaviors). Gollust, Niederdeppe, and Barry (2012) conducted a national survey in 2011 asking U.S. adults whether a variety of reasons (including obesity’s long-term health consequences, costs to the health care system, impact on military readiness, and psychological consequences) were strong reasons for the government to do something about childhood obesity. Among 11 different reasons to address the issue, the existence of disparities in childhood obesity by race/ethnicity and income were rated among the least-compelling reasons for intervention. Finally, Robert and Booske (2011) also asked a series of questions in their 2008–2009 survey about the extent to which Americans perceive a variety of factors as influencing health. Although the questions did not ask about causes of health disparities per se, they revealed similarly limited public endorsement of many social determinants of health. Health behaviors (86%) and affordable health care access (73%) were rated by far more Americans as having a strong effect on health than income (47%), education (41%), location (31%), or race/ethnicity (22%).

Summary
The available evidence suggests that Americans have low awareness of health disparities, see them as only modestly important issues, attribute health more to health care and behaviors than to social determinants, and are cautious about governmental intervention.

Content of communication about health disparities in the mass media
We begin our conceptual model (Figure 1) by acknowledging that the source of media content (e.g., traditional media or new/digital media; print media or visual media) is likely to shape the volume and content of communication about health disparities that appear via these channels. Basic spatial constraints (limitations of a 30-minute news broadcast; 140 characters in twitter messages) likely influence the extent to which various mass media channels cover health disparities, as well as the depth with which they are covered. Furthermore, several theories also argue that mass media content reflects existing power structures within media channels and reinforces patterns of social inequality by ignoring inequities or describing them in ways that undermine potential solutions (e.g., cultivation theory, Gerbner, 1998; knowledge gap, Donohue, Tichenor, & Olien, 1975; communication inequality, Viswanath & Emmons, 2006). The ways these power structures shape content about health disparities likely differ across media channels.

Empirical studies of health disparities indeed suggest that structural factors, including news values and journalistic practices, play a role in shaping the extent to which disparities appear in the news media and how they are framed (e.g., Gandy, Kopp, Hands, Frazer, & Phillips, 1997; Hinnant, Oh, Caburnay, & Kreuter, 2011). Qualitative studies indicate that journalists view health disparities as an important but challenging topic (Gusher et al., 2007; Wallington, Blake, Taylor-Clark, & Viswanath,
Although scholarly articles, press releases, and speeches by politicians and health officials serve as key sources for health disparity stories (Amzel & Ghosh, 2007; Gasher et al., 2007; Taylor-Clark, Mebane, SteelFisher, & Blendon, 2007; Wallington et al., 2010), journalists also have expressed reticence about covering health disparities. Declining resources, difficulty describing social determinants of health in narrative format, the sensitive nature of the topics and groups involved, and a perceived lack of audience interest have been cited as challenges related to communication about health disparities (Gasher et al., 2007; Wallington et al., 2010).

Attributes of news coverage about health disparities

Coverage quantity
Assessing the overall prevalence of communication about health disparities is challenging because some researchers (e.g., Kim, Kumanyika, Shive, Igweatu, & Kim, 2010; Taylor-Clark, Mebane, SteelFisher, & Blendon, 2007) have examined coverage patterns within a sample of articles purposefully selected for a discussion of disparities. Most news media content analyses of health disparities coverage focus on racial disparities (rather than other types of group differences; Amzel & Ghosh, 2007; Gandy et al., 1997; Kim et al., 2010; Taylor-Clark et al., 2007) and find that African Americans are the most common racial group featured (Amzel & Ghosh, 2007; Kim et al., 2010). While one study suggests that coverage of racial disparities in health care increased between the mid-1990s and mid-2000s (Taylor-Clark et al., 2007), another found that coverage of racial and ethnic disparities in health status peaked in 1998 and showed signs of decline through 2005, the end of the study’s observation period (Kim et al., 2010). Studies focused on health- or disease-specific news indicate that coverage of health disparities is relatively rare and varies by disease topic and the types of groups being compared. Amzel and Gosh (2007) analyzed a sample of health news stories from 2000 to 2004 and found that racial disparities were mentioned in only 1% of the articles. Gollust and Lantz (2009) examined news coverage about diabetes in a national sample of newspapers from 2005–2006 and found that 14% of articles included reference to disparities; more focused on differences for African Americans (8%) or Latinos (7%) than differences across socioeconomic status (3%) or geography (1%).

These studies, combined with evidence that the media tend to devote less attention to diseases that disproportionately affect African Americans than diseases affecting non-Hispanic Whites (Armstrong, Carpenter, & Hojnacki, 2006), indicate that the topic of health disparities is not yet high on the mainstream media agenda. However, studies also suggest that racial health disparities are considered more newsworthy by ethnic newspapers, as might be expected based on the target market for such publications (Cohen et al., 2008; Lumpkins, Bae, & Cameron, 2010; Stryker, Fishman, Emmons, & Viswanath, 2009).

Qualities of coverage
Several studies have examined the ways that causal attributions and responsibility for addressing health disparities have been presented. Individual-oriented causal
attributions (e.g., lifestyle choices) have been prevalent in health disparities-related news coverage and are the most common explanation, but stories that include both structural and individual attributions for disparities in health outcomes (Kim et al., 2010) and health care (Taylor-Clark et al., 2007) are not uncommon. The proportion of stories citing discrimination as an explanation for racial health care disparities increased, for instance, from 1994 to 2004 (Taylor-Clark et al., 2007).

Summary
The available body of evidence about coverage of health-related disparities in the news is limited in scope and focuses largely on racial disparities involving African Americans. While collectively these analyses span a wide range of newspapers and years (although none describe content more recent than 2006), they focus largely on print news. A lack of health disparities-related news coverage may stem from hesitation among journalists to cover these stories due to institutional constraints or personal perceptions about health disparities, or broader patterns of communication inequality in the ownership and control over traditional mass media channels. As outlined in our model, the nature of communication about health disparities is likely to shape attitudes about disparities and political willpower to reduce those disparities (Figure 1). Journalistic silence on the issue of health disparities may hinder this process.

Coordinated media efforts to raise awareness of health disparities
In response to limited awareness of health disparities, several campaigns were initiated in the United States in the late 2000s and early 2010s with explicit goals of drawing attention to health disparities and their social determinants. Between 2008 and 2010, the RWJF funded the Commission to Build a Healthier America, a nonpartisan group of academics, government officials, and nonprofit organizations, to increase public understanding of social factors that affect health (and health disparities) and to improve the health of all Americans by addressing these factors (RWJF, 2008). California Newsreel (2008) also produced a 4-hour documentary, Unnatural Causes (which appeared on PBS), which argued that social factors contribute to health disparities. Finally, the Institute of Medicine released a 2012 report, Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation, which, accompanied by a four-part HBO documentary, described disparities in rates of obesity and the importance of the external environment (including media messages and marketing) in shaping obesity rates.

While these efforts were not coordinated, they shared some common features. Each acknowledged that individual decisions and health care are consequential for health but emphasized that social determinants play a major, if not the most important, role. Each used statistical images (graphs, charts, and/or maps) to illustrate associations between markers of social disadvantage and health outcomes. Each made prominent use of vignettes about specific individuals, families, and/or communities to illustrate effects of social determinants on health outcomes and health disparities. Unfortunately, none of these efforts were systematically evaluated for effects on
beliefs about health disparities or their social determinants. Most also had limited distribution, reducing the likelihood of having a major impact on these outcomes. Several studies, however, have examined the effects of various message strategies, tactics, and frames employed in these campaigns. We turn now to a review of this research on the effects of messages about health disparities in an effort to better understand how communication might influence public opinion about health disparities if employed in large scale.

**Effects of different message strategies for communication about health disparities in the mass media**

Agenda-setting theory suggests that the quantity of communication about health disparities in the media can influence both issue awareness and issue importance (McCombs & Shaw, 1972). Framing theory predicts that message qualities in mass-mediated communication about health disparities can affect beliefs about the causes of health disparities and whether public policies should play a role in addressing them (Iyengar, 1991). In turn, issue awareness, perceived issue importance, and acceptance of social determinants as causal factors should influence levels of support for policies addressing health disparities and their social determinants, as well as the degree of interest-group mobilization and advocacy efforts to facilitate the passage of these policies. As described earlier, media content about health disparities could also have a variety of unintended consequences—reactance to messages about disparities or their sources, polarization between social groups in views about the importance of addressing disparities, and/or the activation of stereotypes about groups referenced in disparity messages (e.g., Cho & Salmon, 2007). Our conceptual model acknowledges each of these possible outcomes of communication about health disparities in both (a) its links between media content and perception of disparities and (b) its predicted pathway from disparity perceptions to policy-related outcomes (Figure 1).

A growing literature examining effects of communication about health disparities on public opinion and policy support has focused on isolating effects of the way social group comparisons are made (“disparity frames” vs. “progress frames”), the specific social group highlighted in a comparison (“group cues”), and the type of causal attributions offered for these disparities (“attribution frames”). These studies tend to focus on changing perceptions of health disparities (awareness, importance, and attributions), but a few examine support for policies related to these disparities (the final link in the conceptual model outlined in Figure 1).

**Effects of different types of social group comparisons**

The way that health disparities are presented is likely to shape how the public perceives these disparities (King, Harper, & Young, 2012). Disparity frames emphasize differences in risks between groups relative to one another and therefore are intergroup social comparisons (Bigman, in press). There is some evidence that exposure to intergroup social comparison frames in news about racial disparities
lowers people’s perception of the risk faced by the less at-risk racial group in the comparison (Bigman, in press). Progress frames present current risks as a gain over past conditions, even if disparities between groups still exist (Nicholson et al., 2008). For example, a news story that uses a disparities frame might emphasize that Blacks have disproportionately higher cancer death rates than Whites. An intragroup progress frame might instead focus on the fact that cancer fatalities have declined for Blacks. Research on perceptions of gender equality and civil rights indicates that some people focus on progress that groups have made toward equality, while others—often members of the disadvantaged group—focus on the remaining disparity (Eibach & Ehrlinger, 2010). Limited research is available to evaluate how these social comparisons might affect relevant outcomes (Figure 1). While one study suggests that negative affect generated by disparity frames may dampen interest in cancer screening among some Blacks (Nicholson et al., 2008), progress frames may undermine support for policy change by suggesting that disparities are less important than they might otherwise have been considered (Eibach & Purdie-Vaughns, 2011).

Summary
Although few studies have examined effects of different ways of framing social comparisons in the context of communication about health disparities, the available evidence suggests that the nature of these comparisons could be consequential for support for policies to reduce health disparities. Since the types of comparison frames the media present are likely to reflect, at least in part, how public health researchers themselves present their findings (i.e., as absolute, relative, or progress-oriented comparisons), attention to elite disparities frames is another promising area of inquiry (e.g., King et al., 2012).

Effects of group cues
Several studies have examined how the specific groups highlighted in communication about health disparities influence public opinion and support for policies aimed at reducing disparities. This research finds mixed results. Gollust and Lynch (2011) report that study participants expressed no differences in blame or support for health care costs when a sick individual was identified as Black or White but that participants expressed greater sympathy for a low-income individual than a middle-class individual. Gollust et al., (2010) found minimal effects of a photograph (of a Black or White individual) in priming racial cues on attitudes toward funding for diabetes.

In contrast, Rigby et al. (2009) observed stark differences in perceived importance, causal attributions, and support for policy intervention to address health disparities depending on which group cues were emphasized. Economic health disparities (poor vs. middle class) were seen as a more important problem and generated more support for policy intervention than racial health disparities or disparities by education.

Summary
Although work on the effects of group cues is characterized by inconsistent findings, the specific groups being compared appear consequential under some conditions,
likely having to do with whether messages identify groups (as in Rigby et al., 2009) or individuals (as in Gollust & Lynch, 2011), and the extent to which causal attributions are primed as relevant.

**Effects of attribution framing**

Rigby et al. (2009) and Gollust and Lynch (2011) further suggest that group cues might exert effects because they prime individuals to think about causes of health disparities. Rigby et al. found that group cue differences were driven, in part, by the fact that respondents were more likely to believe that genetics cause health disparities by race than they were to believe that genetics cause disparities by income. Gollust and Lynch similarly found that health disparities by race were attributed to genetics more often than were health disparities by income.

Attributions are often derived from stereotypes about which groups are seen as deserving (Cook & Barrett, 1992). In response, Westen (2010) cautioned against the use of social group cues at all. The author gaged responses to messages about social determinants in a national survey and found that messages which explicitly referenced disparities evoked negative reactions by activating existing prejudices and previously held beliefs about personal responsibility. In contrast, messages that avoided explicit group cues, but emphasized equal opportunity, evoked positive emotional responses and were seen as more effective at shifting public support for action to address the social determinants of health (and, indirectly, disparities caused by social factors). Lundell, Niederdeppe, and Clarke (2012) similarly observed reactance in focus group responses to a series of statistical images conveying social disparities on a variety of health outcomes by income, race, and education. While these images promoted some discussion about factors that might have led to health disparities, they also raised concerns about widening divisions between social groups, often reinforcing strong pre-existing beliefs about individual responsibility.

Strategic efforts to raise awareness of health disparities through the news media attempt to identify structural causes of health disparities in an effort to reframe the discussion away from individual behaviors and concomitant individual blame (media advocacy; see Wallack & Dorfman, 1996). The effects of these social determinants frames are not fully clear, but some work suggests that frames emphasizing social determinants of health disparities, without acknowledging personal responsibility, risk alienating some political groups (Westen, 2010), and evoking reactance (Gollust & Cappella, in press). At the same time, other work suggests that too much emphasis on personal responsibility in messages about social factors can focus attention on previously held beliefs about individual factors (Niederdeppe, Shapiro, & Porticella, 2011).

To further complicate matters, effects of attribution framing for health disparities and their social determinants also vary by a person’s political ideology and values (Gollust et al., 2009; Gollust & Lynch, 2011). For instance, Gollust and Cappella (in press) found that Republicans reacted more negatively to messages about health disparities than Democrats, with differences in values about personal responsibility partially explaining this partisan gap. Niederdeppe, Shapiro, & Porticella (2011)
likewise found that conservatives were more likely than liberals to think about individual causes in response to messages that described both individual and social determinants of obesity.

Summary
The ways that messages describe the origin of health disparities can influence beliefs about disparities and support for remedies to address them. These effects vary by political ideology, and some research suggests that discussion of disparities can be politically polarizing.

Use of narrative messages to present attributions
Some authors have argued that narratives have the potential to overcome challenges to communication about health disparities, particularly among those with conservative values, because they (a) resonate with people from different backgrounds, (b) reduce counterarguing, and (c) uniquely convey the complexity of factors that influence health disparities (e.g., Niederdeppe, Bu, Borah, Kindig, & Robert, 2008). There is mixed support for these assertions. Oliver, Dillard, Bae, and Tamul (2012) compared narrative and nonnarrative news stories in shaping empathy for stigmatized groups (e.g., illegal immigrants) suffering from various health problems. The narratives produced greater empathy for the stigmatized group than nonnarrative messages. Niederdeppe, Shapiro, & Porticella (2011) also tested effects of narrative and nonnarrative messages about social determinants of obesity on support for societal solutions. The narrative message produced more support for societal action than the nonnarrative message, but only among political liberals. These effects were driven by a reduction in counterarguing in the narrative condition. Niederdeppe, Shapiro, Kim, Bartolo, and Porticella (2011) varied the extent to which a narrative about social determinants of obesity included reference to individual responsibility. Stories that made either moderate or no reference to individual responsibility were effective at generating support for policy change (including policies for low-income groups), but only among political conservatives. The moderate responsibility condition facilitated more complex thinking about the role of social and environmental factors that cause obesity.

Summary
Collectively, these studies suggest that narratives can increase empathy for stigmatized groups and support for health disparity-related policies, but there is much to learn about the conditions that maximize this potential among diverse political groups.

Use of mass-mediated digital technology for communication about health disparities among disadvantaged groups
Most of the research we have discussed thus far has focused on the role of traditional media sources and channels (e.g., newspaper stories, messages developed by academics or governments) to shape mass media content about health disparities. This means
relying on traditional power structures to frame the conversation of the needs of groups that are, by definition, not in power. One of the hallmarks of digital media is that they provide an outlet for everyday people (with access to appropriate technology) to potentially reach a wide audience, as reflected in the feedback link between mobilization (the final stage in our conceptual model) and the use of specific mass media channels to communicate about health disparities (see Figure 1).

In this section, we explore implications of the rise of mass-mediated digital technology for communication about health disparities. How might these forms of media shape policy support and/or mobilization among those who have been marginalized by structural inequalities? We offer brief case examples in which marginalized groups have used social media to publicly address health disparities. These examples signal the potential for interruptions in traditional communication patterns going forward.

**Individuals as mass media broadcasters**

Scholars have debated the Internet’s potentially democratizing effect on communication (e.g., Hague & Loader, 1999). Proponents have lauded the upset of hierarchical media structures with the more accessible, interactive structure of the Web (Shirky, 2008). Critics have warned against naïve utopianism, noting that many of the traditional power structures are retained in this new sphere (Morozov, 2011). This debate has seen new life with the popularization of social networking sites, especially since 2010 as major social movements have spread across the globe.

**Social movements**

The Web has undeniably played a role in the organization of protests in the Arab Spring, in the Occupy Movement, and in antiausterity movements throughout Europe. In Egypt, for example, social media has been a primary means of organizing protests amidst government opposition (Tufecki & Wilson, 2012). It was also a means of sharing images and videos from the center of the conflicts, an essential process in raising global awareness and support. In addition to digital media’s organizational properties, dissemination of user-generated content to engage and inform the broader public is a unique contribution of digital media in affecting social change (Bennett & Segerberg, 2012). Although these social movements were not focused exclusively on health disparities, they demonstrate the role of social media in shaping broader public discussions about social justice. More importantly, they reflect the potential of digital technology to enable direct communication between individuals and large audiences, sometimes with measurable impacts on policy changes.

**Shaping public discussion**

There are other examples of localized groups taking advantage of social media to shape discourse about health disparities. The following are among a growing number of projects that incorporate digital media into community-based participatory practices. VOZMOB, for example, is a Web platform designed for Latino immigrants
and day laborers to post images, texts, and videos to a single Web site using their mobile phones (http://www.vozmob.net). The aim of the project is to increase the visibility of this population and empower its members by giving them a say in the public construction of their social identity. Although health is not the only issue discussed at VOZMOB, members have posted about health concerns, including information on health fairs, workshops, and their own health needs (VozMob Project, 2010). Another project from USC Annenberg, Metamorphosis (http://www.metamorph.org/), is a multimodal communication network designed to give urban residents, largely immigrants, opportunities to share personal stories. Personal storytelling is a means of reinforcing community ties, but it may also raise the visibility of the health concerns of otherwise overlooked populations (Ball-Rokeach, Kim, & Matei, 2001). Finally, it is not uncommon for the homeless to seek regular access to mobile phones and the Web as a means of staying connected to family, friends, and life resources (Koepfler & Hansen, 2012). Research on homeless people has identified the use of social media to document daily experiences and navigate the public identity of homelessness (e.g., @wearevisible; Koepfler & Hansen, 2012; Woelfer & Hendry, 2010). VOZMOB and work with the homeless show how social media has become a primary tool for linking activists and those in need with the rest of the digital public.

**Summary**

Digital media allows for broad dissemination of user-generated content, a resource for mobilizing public support. It enables members of marginalized groups, and the organizations that work on their behalf, to speak for themselves about health disparities to a broad audience. Although visible examples to date have not focused on health disparities, these cases illustrate the potential for a new form of communication about health disparities to shape public awareness and action.

**Discussion and questions for future research**

The research described above makes clear that evidence on communication about health disparities is accumulating. Yet, there remain important gaps in our knowledge—gaps that the field of communication is ideally equipped to address. In completing this review, we observed that much of the attention to issues related to communication, health disparities, and public policy has been contributed in journals and, to a lesser extent, from scholars outside of communication—particularly in public health and medicine. While some studies have tried to understand effects of communication about health disparities using theories of message processing and effects (e.g., attribution, framing, and narrative persuasion theories), other work in this area has lacked specific theoretical grounding. Articulating the unique insights offered by communication researchers and communication theories will be critically important in advancing this scholarship. In this final section, we highlight what we consider important gaps in knowledge about communication about health
disparities, identify relevant areas of communication theory and research that could inform these issues, and identify several key questions for future research in this area.

Gaps in our understanding of the sources, content, and effects of communication about health disparities
The available evidence reveals a somewhat narrow picture of the content of the media environment as it relates to communication about health disparities, with the majority of studies describing health disparities by race and ethnicity. This focus may reflect the fact that the term “health disparities” has historically been synonymous with racial and ethnic disparities in the United States (Braveman, 2006). There has been less attention to whether and how the mass media cover other population groups that are also characterized by health disparities, such as those differentiated by sex, sexual identity, age, disability, socioeconomic status, and geographic location. The dearth of studies examining other types of disparities prompts the question of whether discussion of disparities across other groups shapes public opinion in ways different from racial/ethnic disparities (as other social cleavages may be less polarizing than race, at least in the United States).

There are also notable demographic differences in awareness of health disparities and support for action to address them through policy change. Low-income and less-educated groups who suffer disproportionately high burdens of disease are less aware of health disparities than more affluent and educated groups (e.g., Booske et al., 2011). It remains unclear, however, the extent to which these differences may have been shaped by differential exposure to, or resonance of, messages about health disparities in the mass media. If these differences are due in part to a lack of exposure to messages in the mass media, it would point to a need to increase the quantity of coverage and attention to these issues in the media. If these differences are due to a lack of resonance among audiences based on the way that messages are framed in the media, it would suggest a need to improve the quality of this coverage so that it resonates with diverse groups.

The role of communication theory in enhancing our understanding of communication about health disparities
Major questions also remain about the role of theory in informing the quantity, qualities, and effects of communication about health disparities. Framing theory (e.g., Iyengar, 1991; Scheufele, 1999) and attribution theories (e.g., Gilbert & Malone, 1995; Weiner, 2006) have been fruitfully applied to research efforts examining the extent to which highlighting specific social groups and attributions for health outcomes affect attitudes and policy opinion. Theories of narrative persuasion (e.g., Green, 2006; Moyer-Guse, 2008; Slater & Rouner, 2002) seem particularly relevant to the topic of communication about health disparities, where many members of the general public are likely to have limited experience with the causes of poor health (e.g., poverty, unsafe living, or working conditions). These theories suggest that well-crafted stories can increase identification with others and transport readers
Communication About Health Disparities

J. Niederdeppe et al.

into the narrative world, which in turn could help readers/viewers to see how structural factors shape health disparities (see Moyer-Guse, 2008). While a few studies have examined this possibility, this research remains in its infancy. In light of the ideological reactions seen in response to some messages about health disparities (e.g., Gollust & Cappella, in press; Niederdeppe, Shapiro, Kim, et al., 2011), greater attention to the factors that activate stereotypes about disadvantaged groups, or beliefs about personal responsibility, is warranted. Researchers should consider attending to theories of biased processing and motivated reasoning (Kunda, 1990; Taber & Lodge, 2006) to better explain the conditions under which communication about health disparities might backlash, producing polarized opinion and reactance rather than uniform message effects.

One of the biggest gaps in theory and research on communication about health disparities stems from the fact that almost all effects studies are one-sided framing studies conducted at a single point in time. These studies pay little to no attention to the complexity and likely competing nature of various perspectives about health disparities, changes in messaging over time, or audience exposure to these issues outside of the experimental context (see Druckman, Fein, & Leeper, 2012, for an exception; see also Hornik, 2002 for broader discussion of health campaign exposure). For example, in a world where media are increasingly interactive, user-generated responses (such as online comments) can change the framing of a message and are another factor that might influence the effects of communication about health disparities (e.g., Rock, McIntyre, Persaud & Thomas, 2011). Recent theorizing about competitive framing (e.g., Druckman et al., 2012) should inform future research on this topic. Research designs that carefully measure exposure to and selection of mass media content—including that from strategic campaigns and social media—will be vital to expand the knowledge base.

Finally, if we hope to understand how communication about health disparities influences policy with the potential to reduce health disparities, we must better understand the link between communication and policy change. More work is needed to understand communication-related determinants of issue public mobilization (e.g., Basu & Dutta, 2009), effects of communication strategies on policymakers, and rhetorical strategies policymakers themselves employ in efforts to advance legislative or administrative approaches to reduce health disparities, particularly in cross-sector policy work (see Rigby, 2011). Comparative case studies and retrospective time series studies should contribute to an understanding of how media content has, in the past, shaped actual policy outcomes (see Hornik, 2002, for a similar argument). For instance, researchers might examine the characteristics of media content in national, state, or municipal settings where policies likely to reduce health disparities have been passed or not. These efforts could identify what, if any, impact communication might have had in producing those policy outcomes (Bleich et al., 2012).

Related, the assumption that changing public views on health disparities can contribute to policy changes demands greater scrutiny. Theoretical and empirical attention to the use of media by disadvantaged groups and their advocates, as we
Table 1  Selected Questions for Future Thinking About Communication About Health Disparities in the Mass Media

<table>
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<th>Topic</th>
<th>Questions</th>
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| Content of communication about health disparities in public discourse | 1. How has the volume of coverage of health disparities in mass media (including social media) changed in the past decade?  
2. What types of group cues, social comparison frames, and attribution frames related to health disparities commonly appear in the mass media, and have they changed over time?  
3. How often have news stories about health disparities been accompanied by user-created content (e.g., comments on news stories)? Is it supportive or oppositional content?  
4. Given the message qualities in news coverage about health disparities to date, should scholars advocate for more coverage of these issues? |
| Effects of communication about health disparities in public discourse | 5. Under what conditions do group cues influence outcomes (importance, attributions, and policy support), and how might a focus on groups other than racial groups affect these outcomes?  
6. To what extent do attributes of the health disparity outcome (e.g., health care versus health outcome disparities; disparities in infectious versus chronic diseases) influence policy support?  
7. How do images depicting health disparities (graphs, figures, and photographs) influence beliefs, attributions, and intentions to engage in action to reduce health disparities?  
8. How can we design communication about health disparities to reduce the likelihood of priming stereotypes about disadvantaged groups or strongly held existing beliefs about personal responsibility?  
9. Do results from short-run experimental studies on effects of communication about health disparities, often featuring single message manipulations, predict how audiences will respond to large-scale campaign exposure? |
| Use of digital media for communication about health disparities among disadvantaged groups | 10. Are populations who are disproportionately affected by health disparities willing and able to access and utilize digital media to engage in communication about health disparities?  
11. How large is the audience for communication about health disparities via digital media technology among various disadvantaged groups?  
12. What effect might communication about health disparities through media technology among disadvantaged groups have on the public? Does it risk inadvertently reinforcing beliefs about personal responsibility?  
13. How can we minimize the risk of reinforcing disparities through digital media technology, given existing disparities in access to and experience with digital media?  
14. What effects does communicating publicly about experiences with health disparities have on the individuals themselves? |
have outlined above, is one step toward unpacking this assumption. Interventions that seek to work with community-based organizations to change media coverage of health disparities with a more downstream aim of policy change, such as the ongoing “Influencing Media and Public Agenda on Cancer and Tobacco Disparities” (Principal Investigator: K. Viswanath), are beginning to investigate these questions.33 It also remains to be seen whether existing media theories can be productively applied to emerging digital media. Studies focused on the use of these media among disadvantaged populations have potential to inform both applied questions related to communication about health disparities and contribute to broader theoretical development. Although it is possible that the effects of mass media communication could be similar among the general public, vulnerable populations, groups with the capacity to mobilize efforts to address health disparities, and policymakers, this is not a given. Future research will need to assess the unique needs of each population group.

Other key questions for future work on communication about health disparities
We describe a select list of future research questions in Table 1. It is our hope that by identifying areas ripe for further attention, we can encourage communication scholars to engage in this topic. Communication researchers are well positioned to understand the role of communication in shaping public perceptions, support, and action to reduce health disparities. These efforts should be pursued in parallel with research that examines the direct influences of communication on health disparities, including communication processes by patients, providers, community groups, and the public at large. As the media landscape continues to change, and communication about health disparities changes with it, we foresee continued need for scholarship on this topic if we are to make headway in reducing health disparities.

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Notes
1 We use the term “disparities” here, which is typical in U.S. scholarship and rhetoric. Other terms, like “health inequalities” or “health inequities,” are favored by some scholars in the United States and internationally and convey the implication of differences that connote
injustice and thus remedy. Two additional issues that arise from defining the term “health disparities” are the particular outcomes being compared and the manner of comparison; we address both of these issues in more detail in the pages to follow (see especially FN #2 and discussion of social group comparisons).

2 Our emphasis is on health status outcomes (e.g., self-rated health, presence or absence of specific diseases or conditions), following the CDC definition that begins this paper, and not on disparities within the health care setting (e.g., differences in access to and quality of care), which are one important but relatively small contribution to overall health outcome disparities. Since the outcome of comparison between groups can convey—however implicitly—the communicator’s perception of the appropriate arena for policy response (i.e., the health care setting versus society at large), we believe it is important whenever possible to be explicit about the specific outcome of interest. Thus, for the remainder of the paper, “health disparities” refer to differences in health status outcomes; we state the specific outcome to which authors refer whenever possible and identify whether the term used by the authors cited refers to disparities in health care.

3 More details on this project can be found at the following link: http://projectreporter.nih.gov/project_info_description.cfm?aid=8377240&icde=13878567. Last accessed on September 25th, 2012.

References


J. Niederdeppe et al.

Communication About Health Disparities


