

Building the health news agenda in local newspapers: Lessons for health-care managers

Rachel Young, Saleem Alhabash, Shelly Rodgers, Jon Stemmler

Health Communication Research Center, Department of Strategic Communication, University of Missouri School of Journalism, Columbia, MO, USA

Correspondence to:

Rachel Young, MA
Dept. of Strategic Communication,
140 Walter Williams Hall,
Missouri School of Journalism Columbia,
MO 65211-1200
rachelyoung@mail.mizzou.edu

Abstract

Health news is a significant source of health information for many Americans, and recent research has explored how health news is produced from the theoretical perspective of agenda building. In addition, work in public health and mass communication has focused on the significance of the health literacy concept as a tool for journalists and as a rubric for evaluating media messages. However, little is known about health news agenda building or health literacy in relation to local newspapers. This study explores the health news agenda-building process from the perspective of both newspaper journalists and administrators from local public health organizations in one Midwestern state through online and telephone surveys. Results show that public health professionals and journalists offer significantly different definitions of health literacy and interpretations of what should constitute the health news agenda.

Keywords: Health news, Agenda building, Local media, Health literacy

A growing body of research in mass communication and public health is devoted to understanding how people access health information, and how that information informs health decisions. Surveys have shown that print media, including books and newspapers, remain a predominant source of health information.¹ Fox and Jones¹ showed that print media are a main source of health information for more than half of adults surveyed.

Health is the eighth most covered news topic nationally,² and provision of health information is central to public health goals.³ Thus, the manner in which the health news agenda is set in a range of media, from web sites to national and local

newspapers, is of interest to scholars of mass communication as well as public health. Health news is also seen as central to attempts to promote health literacy.^{4,36}

The current pilot research explores the process by which the health news agenda is constructed in local newspapers, primarily within small, rural communities. Extending research on the process by which the health news agenda is constructed is of potential relevance to both journalists and public health professionals, in addition to health promotion and advocacy groups. Although national and metropolitan daily newspapers are often studied by journalism researchers, by comparison, local community newspapers have received less attention. Research focused on health news at community newspapers is even scarcer. In addition, much agenda-building research presents the perspective of journalists but not of their likely sources, who are theorized to be the originators of the agenda, particularly for health news and in smaller newspapers with fewer resources for reporting. Therefore, this research addresses the process of agenda construction for both health news sources and journalist at community newspapers in one Midwestern state.

Journalists ($n = 55$) and practitioners from local health organizations ($n = 60$) were surveyed to determine how both groups vary with regard to health issue salience and definitions of health literacy, a concept that informs the practice of public health and health journalism. The goal of this research is to determine how local public health professionals define the health news agenda, and how their health agenda and conceptualization of health literacy compare with that of the local journalists they work with to increase public knowledge and understanding of health issues.

Literature review

Defining agenda building

Decades worth of agenda setting research has determined that issues receiving prominent placement in the press are often the issues perceived as most significant among the public.^{5,6} Focus on the news media agenda led to theorizing about how the press agenda itself came to be. Due to space and time constraints, the media can only ascribe news status to a finite number of issues or events. Cobb and Elder⁷ are credited with first describing the process by which issues and events become news as ‘agenda building.’ An agenda is a collection of issues or events perceived as salient by journalists or other stakeholders.

According to Berkowitz⁸ the news media’s agenda as delineated in agenda setting research ‘is the result of a *process* that depends on much more than a loosely linked transferral from one group’s priorities to another’ (p. 81). Lang and Lang⁹ have also described the agenda-building process as one that suggests reciprocity. In line with this dynamic definition, we define agenda building as a reciprocal process by which stakeholder groups, such as public relations professionals or those interviewed for news articles, interact with journalists to determine which issues are covered, with what frame, and in what depth. The major players in this process are news sources, who provide information in the form of interviews or information subsidies, and journalists. News sources are drawn from several stakeholder groups such as public relations practitioners, advocacy groups, corporations, government officials, and ‘real people.’ Engaging with the agenda-building process provides an opportunity for sources to convey information about issues of significance to those groups to a potentially broad and diverse audience. In this study, our interest is in how local newspaper journalists and health organization sources define the salience of issues on the health news agenda.

Economic factors, newspaper ownership, industry trends, journalistic standards, organizational structure, and individual differences among journalists all influence construction of the media agenda.⁸ Of the many factors and roles that influence the agenda-building process, this study focuses on two: community newspaper journalists as representatives of their media organizations as well as public health professionals who act as sources of ideas, quotations, or even content for local media. In several studies, Donohue *et al.*¹⁰ and Olien *et al.*¹¹ posit that community size

and diversity affect the relationship between local media outlets and the local institutions they depend on for information and support. The following section discusses the relevance of community size with regard to news and information production, journalist – source interactions, and health communication.

Role of community

In the United States, rural inhabitants are less likely to have health insurance or to exercise in their free time, and rural working adults have higher death rates than their counterparts in suburban areas.¹² Teenagers in rural counties are more likely to smoke, and all rural residents were less likely to have dental care. In addition, rural areas in the United States are characterized by a social context linked to poorer health outcomes, including shortages for hospital and physician services and low socioeconomic status.^{13,14} Lack of broadband Internet access in rural areas¹⁵ also limits the availability of health information. For these reasons, it is vital both to understand the nature and availability of health information in local newspapers, still potentially relevant sources of information in rural areas.

In a climate of constant newspaper mergers and layoffs, local newspapers have retained their significance.^{16,17} As the main or perhaps the only source for reporting and analysis about community issues, the selection and salience of issues in newspapers influences whether a topic will be covered in other local news media, on television, or online.¹⁸ Recent readership data indicate that 40% of respondents read daily newspapers regularly and 33% read weekly newspapers.¹⁷ Although weekly newspapers have fewer readers than daily papers, they have also lost fewer readers in recent years; readership for weekly papers dropped only 3% from 2004 to 2008. In addition, readers of newspapers with a weekly circulation are more diverse than daily readers in terms of education. High-school graduates are nearly as likely to read weekly papers as are college graduates, a change from the readership for daily papers, which skews more heavily toward college graduates.¹⁷

Weekly newspapers generally have smaller staffs to fill the news hole. The size of a newspaper’s editorial staff and the space available for news, rather than the circulation, predict the use of information subsidies.¹⁹ In small towns, mayors’ and city managers’ beliefs in the agenda setting ability of newspapers correlated with the strength of their attempts to influence news content.²⁰

In another study, Weaver and Elliott²¹ examined the role of one local newspaper as the transmitter or filter of the city council agenda. In the period covered, the newspaper printed stories about 59% of issues raised at city council meetings. For topics that required a greater amount of background knowledge or context, journalists were more likely to directly transmit the agenda put forth by the city council, in terms of both issues covered and their salience.

A survey of 468 health and medical reporters and editors found that those from smaller media organizations (with fewer than 30 news and editorial staff members) were less likely to specialize in health as a beat and were also less likely to use the expert sources traditionally associated with health reporting, such as government scientist, industry scientists, or health care providers.²² They were also less likely to use government Web sites or scientific journals as resources, but were more likely to use news releases.

Local orientation and small staff size at a weekly newspaper may provide more opportunity for sources to affect the health news agenda.²³ A community intervention to promote breast cancer coverage was associated with significant increases in column inches and number of stories published at weekly newspapers, though the intervention was not linked to increases in coverage at daily newspapers.²⁴ This relationship was seen regardless of community size and diversity.

Role of sources

The source of a story idea plays a significant role in the agenda-building process. Studies have shown that most stories in newspapers originate with quoted sources.²⁵ According to Gans,²⁶ sources determine which stories journalists print.

Berkowitz⁸ cautions against characterizing the relationship between sources and journalists as necessarily adversarial, but instead proposes a dynamic interaction affected by many factors, including the position of the news organization in relation to the source. He posits that roles have the most equivalence when a journalist and source are of the same status, i.e. both local. More than half of local television new stories originated from direct contact with a public relations person, with the next greatest number originating with press releases.

In their analysis of news-making processes, Shoemaker and Reese²⁷ describe how social norms, news values, and organizational restrictions based on the news cycle, the available space, and the newsgathering process leads journalists to value

some sources, such as government officials or experts, more than others. Although this work was not conducted specifically with health journalists in mind, the same restrictions and norms apply, in addition to some that are specific to health reporting. Health journalists report that story ideas are most often generated by 'news sources' as well as information subsidies such as press conferences or press releases.²⁸

Journalistic norms that require information to be attributed are one possible explanation for the finding of source influence.⁸ It follows that sources who can best fulfill their role in the news construction process by providing accurate, timely, and relevant information that meet's a journalists' criteria of newsworthiness are more likely to be quoted in the newspaper. Researchers have suggested that the ability to fulfill the role of source is particularly significant for the health beat because reporters writing about health might rely on expert sources to interpret the significance of medical information.²⁹ Health journalists' relative preference for expert or elite sources has been explained in several ways, including that they have more accurate information and are more accessible and therefore more able to conform to a deadline schedule.²²

Laricsy *et al.*³⁰ surveyed public health information officers working at the local, state, and federal levels about their perceptions of and attitudes about health news. In arguing for the necessity of their study, the authors point out several differences in the relationship between a public information officer at a national organization such as the Centers for Disease Control and Prevention and a national newspaper reporter vs. a small-town journalist and a local public health department official. While a national reporter might have access to scientific experts in any health topic area, sources associated with small health departments might compensate for the lack of specific expertise by providing more localized information.

A survey of health journalists found that nearly 8 in 10 journalists rated local health agencies as 'not helpful' or 'neither helpful nor unhelpful.' Fewer respondents (40%) viewed state health departments as more helpful, and federal health agencies were rated neutrally, which may indicate a lack of direct experience with national-level organizations. The findings also show that there is more frequent contact between journalists and local health departments, compared to state and federal health departments.

Survey research from Laricsy *et al.*³⁰ also found differences in the importance of issues to the

health news agenda as perceived by public health practitioners and journalists. When asked to rank the importance of covering a series of health issues such as avian flu, bioterrorism, and vaccinations, health department public information officers ranked all but one issue (drugs) as significantly more important than did journalists. In this study, we single out one health news issue, health literacy, a concept of great recent significance to public health, and journalism practice.

Health literacy and health journalism

Health literacy, as a concept, is particularly relevant to studies of health news production. The concept can be understood both as a prominent issue in the public health agenda, as detailed in government goal reports such as Healthy People 2010,³ as well as a potential guide for health journalists in producing content that is appropriate for readers. In addition, a rural population, like that served by small community newspapers, exhibits a disparity in health literacy levels compared to a suburban population.³¹ Despite the potential significance of health literacy both as an outcome of health news and a goal of news production, there has been little research exploring these relationships. We first describe the most common definitions of health literacy within public health and then some recent research relating this concept to health journalism practice.

Simonds³² first introduced the term ‘health literacy’ in 1974. The most commonly seen conceptual definition is similar to that offered by Selden *et al.*³³ in a National Library of Medicine bibliography: ‘The degree to which individuals have the capacity to obtain, process, and understand basic health information and services necessary to make appropriate health decisions’ (p. vi). In this conceptualization, health literacy is a skill set that allows people to access and make use of knowledge to improve individual health outcomes. By this definition, many US adults lack the necessary skills. A 2003 report found that only a little over half of the respondents could be categorized with an intermediate level of health literacy. Nearly one in seven respondents had below basic health literacy.³⁴ Health literacy is of vital significance in negotiating the current US health-care system, in which the onus is on the individual to find and use information.³⁵ Patients need health literacy skills to negotiate insurance options, comprehend materials provided by physicians, and find information relevant to maintaining their health.

The job of media in promoting health literacy is two-fold. In their agenda-setting function, the news media both identify and disseminate critical health information. In addition, journalists present health information that’s supposedly more understandable, more actionable, and with more context than what would be provided by physicians or other health care providers. Despite calls from public health scholars and practitioners that creators of media messages should incorporate the health literacy concept in crafting appropriate health messages, research about the penetration of this concept into health journalistic practice is in the early stages.

In a recent national survey, 57.5% of 396 health journalists surveyed had heard of the concept of health literacy.³⁶ Significantly, two-thirds of those who had heard of the concept identified the element of understanding information as most salient. Of 219 who defined the concept, 75.8% described it as the ability to understand information only, while 20% said health literacy was the ability to understand and use or act on information.

Hinnant and Len-Rios (2009) also argue that, in their role as translators of information about health to the public, health journalists are engaged in health literacy work, whether or not they are familiar with the concept, and associate it with their work. The authors exposed journalists’ tacit theories about health literacy by interviewing them about their perceptions of the audience and concluded that the role of journalists in producing appropriate health content depends on whether the audience is perceived as high health literate or low health literate. Journalists guard against ‘dumbing down’ and alienating the desirable high health-literate audience, and also against ‘boggling down’ information with so-called jargon that veils the meaning and relevance of health news for low-literate audiences. In another recent survey of health journalists, respondents from small media organizations were significantly more likely to agree that improving the health and science literacy of the public is a main goal of health news.²²

The current investigation attempts to extend the work of scholars such as Hinnant and Len-Rios (2009) by determining how local journalists define health literacy compared with their counterparts at local public health organizations. Exploring potential variance in definition of health literacy allows us to determine not just the salience of issues on the health news agenda but the conceptual understanding of one such issue, health literacy, which is significant as both a

potential news story and a standard for judging health news content.

Much agenda-building research describes the process from one perspective, usually that of journalists or of public relations practitioners. Within this body of research, the role of sources who do not work in public relations has been neglected. The role of sources is particularly significant for health news because journalists are thought to rely on experts with more background in the subject, and for community newspapers with smaller staffs that may be required to rely on sources for ideas and information. To understand the health news agenda-building process at these papers, we first need to answer basic questions about how journalists and their likely sources in public health define health news agenda, how journalists get story ideas, and how public health practitioners characterize their relationship. In this study, we explore these questions as well as understandings of health literacy, which we identify as a key concept for both groups surveyed.

Research questions

RQ1: How does the health news agenda, defined by public health practitioners, compare with the health news agenda defined by local journalists?

RQ2: Where do local journalists get health story ideas?

RQ3: How do public health practitioners characterize their relationship with local media?

RQ4: How do public health practitioners and journalists compare with regard to defining health literacy?

Methods

Sampling and procedure

Data for the current study come from two different surveys conducted with newspaper journalists ($n = 55$) and public health professionals ($n = 60$) within a statewide health literacy initiative in a Midwestern state from March 2010 to August 2010. The overall sample of respondents includes 115 participants, acquired from a sampling pool of 504 potential respondents for the two surveys. The majority of respondents (79.9%) reported working in a small community, whereas 7.6% reported working in a suburb or medium-sized city, and only 4.2% reported working in a metropolitan area or large city. Two hundred and seventy-three newspaper journalists were recruited for the first survey from the initiative's News Service list. Most newspaper journalists reported that they worked at a weekly or twice-weekly publication (72.4%), nearly

a quarter (25.9%) reported working at a daily publication, and an extreme minority (1.7%) reported working at a monthly publication. The second survey sampling pool ($N = 231$) was compiled from online lists of health professionals in the state, including those at health education centers and community action agencies. All public health professionals self-described their employment as being at the administrative level. In addition, to increase the response rate of the second (professionals) survey, a snowball sampling method was followed; we obtained contact information for additional respondents through word-of-mouth referrals from survey participants. Thus, the overall response rate for the current study is 23%, with a 20% response rate for the newspaper journalists' survey and a 26% response rate for the public health professionals' survey. Participation in the survey was voluntary; no incentives were offered in exchange for participation. Respondents provided informed consent to participate in the study, in accordance with university institutional review board regulations.

Open-ended responses were categorized, as explained below. In cases where more than one answer was given (i.e. a respondent listed two or three stories as most important to the health news agenda), responses were coded separately to capture the broadest possible perspective, resulting in a higher overall sample size ($n = 144$) in these cases.

For the newspaper journalists' survey, participants were given the option of taking the survey by phone (70% of the sample) or online (30% of the sample). The same procedure was used for public health professionals who had the option of responding to a phone survey (90%) or an online survey (10%). The survey took between 60 and 80 minutes to complete.

The independent variable was profession, and participants were contacted on the basis of their professional affiliation. Respondents were designated as either newspaper journalists or public health professionals. In an open-ended question, newspaper journalists and public health professionals were asked to report the health issues that they considered most important for local media to cover in their communities. Using the coding scheme of the 2008 report by the Kaiser Family Foundation and the Pew Research Center's Project for Excellent in Journalism, health news issues were coded into three broad categories: health policy/health care system, public health (such as epidemics, outbreaks, health hazards, or negative health trends), and specific

diseases/conditions (such as cancer). One additional category was added – prevention, defined as health topics related to the prevention of particular behavior or outcome, such as obesity or tobacco use. Each health issue was coded into one of the four categories and was given a score of ‘1’ and a score of ‘0’ on the other categories.

Health literacy definition

Respondents from both surveys were asked to self-report their own definitions of health literacy. Using Hinnant and Len-Rios’s (2009) coding scheme, each respondent’s definition was coded using two different categories relevant to common conceptualizations of health literacy.³³ The first category, ‘knowledge,’ focused on the knowledge and understanding of health information, and the second category, ‘use,’ involved individuals’ application of information in health behavior. The current study modified the coding scheme by coding each definition categorically, so that each definition was evaluated on both dimensions. If a respondent’s definition included references to knowledge and understanding, it was given a score of ‘1’ on the first category; otherwise it was given a score of ‘0.’ If a respondent’s definition included references to actions related to one’s health, it was given a score of ‘1’ on the second category, otherwise it was given a score of ‘0.’ In the case that a definition included references to both categories, it was given a score of ‘1’ on both items.

Satisfaction with local health coverage

Public health professionals rated three items on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The three items consisted of their satisfaction with news local health news coverage in: (1) print versions of the local newspaper, and (2) online versions of their local newspaper. Print newspapers were delineated from online newspapers to account for the possibility that individuals may prefer or read one over the other, and/or that health news may differ depending on which version was read. A third item, satisfaction with the depth of local health news stories, was also included.

Journalists’ sources

Journalist participants rated sources used to generate story ideas for health news. Items were rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). There were 10 items: (1) medical journal, (2) personal interest of someone on staff, (3) reader phone calls or e-mail

messages, (4) annual calendar events, (5) reading newspapers or other publications, (6) a public relations pitch, (7) government news release, (8) non-profit organization news release, (9) corporate news release, and (10) university news release. Each of these items was evaluated individually in the data analysis, described next.

Data analysis

The current study aims at giving an overview of the journalist – source relationship with regard to health coverage and building of health news agenda. The study also strives to compare newspaper journalists and public health professionals in terms of health issue salience and definition of health literacy. To answer these questions, the study utilizes a number of statistical analyses, including descriptive statistics and non-parametric statistical tests. In addition, the current study utilizes the free online software www.wordle.net to visually document answers to open-ended questions. The software represents data based on their frequencies, where the size of the font is positively associated with the frequency of occurrence in the data set. The reason for using such a visualization technique is to support the results of the statistical tests with a visual overview of the raw (uncategorized) data.

Results

The purpose of the current study is to explore ways in which the agenda for covering health issues is constructed in a Midwestern state, with a focus on small communities, as defined by our respondents. We compare health issue salience between newspaper journalists and public health professionals. Moreover, the study attempts to answer questions about the sources of health story ideas for newspaper journalists, and the satisfaction of public health professionals with health coverage in local newspapers. Finally, the paper attempts to differentiate the journalists from professionals in perceptions of health literacy.

Health issue salience

The first research question dealt with comparing newspaper journalists and public health professionals with regard to health issue salience. More than half of these issues (51.6%) were coded as public health issues, while 28.6% of the issues were coded as prevention, 12.1% were coded as issues related to diseases and chronic conditions, and 7.7% of the issues were coded as policy.

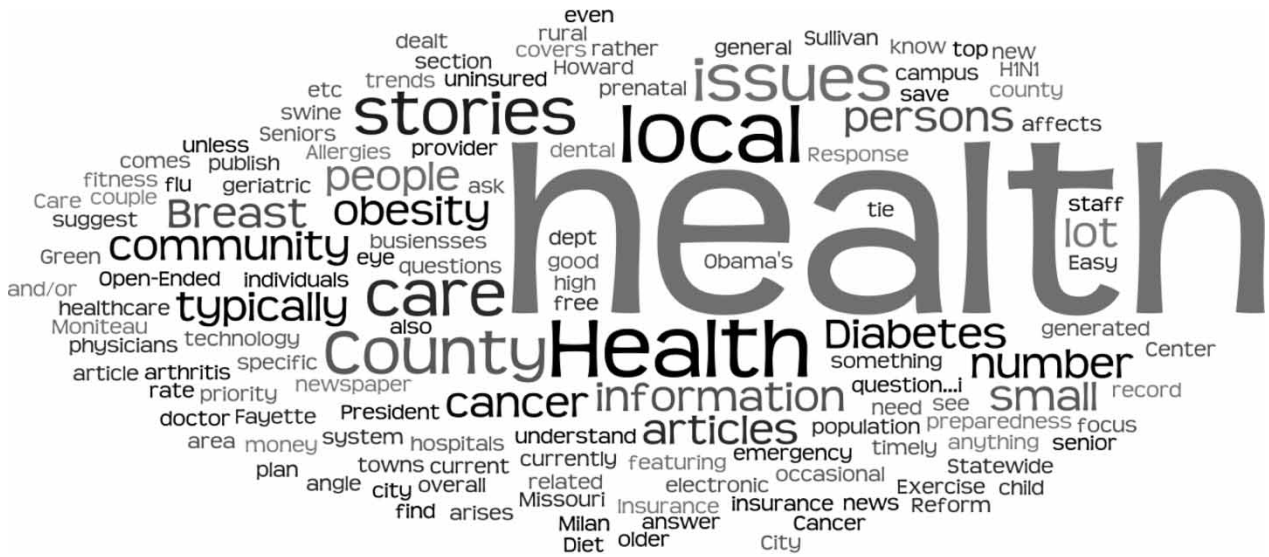


Figure 1: Visual representation of the salient health issues for newspaper journalists. Visualization created using www.wordle.net.

Next, a χ^2 analysis was conducted to compare journalists and public health officials in terms of health news issues. The results show significant differences for policy issues ($\chi^2 = 5.46, P < 0.05$), public health issues ($\chi^2 = 8.739, P < 0.01$), and prevention ($\chi^2 = 7.35, P < 0.01$). Specifically, 85.7% of the issues coded as policy were reported by journalists compared to 14.3% of policy issues reported by public health professionals. Public health professionals reported a higher number of public health issues (74.5%) compared to newspaper journalists (25.5%). When issues were coded as dealing with health prevention, more than two-thirds of issues (80.8%) were reported by public health professionals compared to 19.2% of the health prevention issues that were reported by newspaper journalists. Finally, with regard to issues coded as related to diseases and chronic conditions, there were no significant differences, comparing newspaper journalists and public health

professionals ($\chi^2 = 0.03, ns$). Fig. 1 shows a visual illustration of the raw responses of newspaper journalists to the question about important health news issues in their community, and Fig. 2 illustrates answers of the public health professionals to the same question.

Journalists' sources for story ideas

As illustrated in Fig. 3, the story idea source most used by the journalists was reported as phone calls or e-mail messages from readers ($M = 3.93, SD = 0.89$). This was followed by reporting annual calendar events, such as breast cancer awareness month ($M = 3.80, SD = 0.97$), reading newspapers or other publication ($M = 3.57, SD = 0.98$), personal contact or a staff reference ($M = 3.62, SD = 1.08$), non-profit press release ($M = 3.36, SD = 0.89$), a university press release ($M = 3.33, SD = 1.04$), government press release ($M = 3.04, SD = 1.01$), public relations pitch ($M = 2.93, SD = 0.99$), corporate



Figure 2: Visual representation of the salient health issues for public health professionals. Visualization created using www.wordle.net.

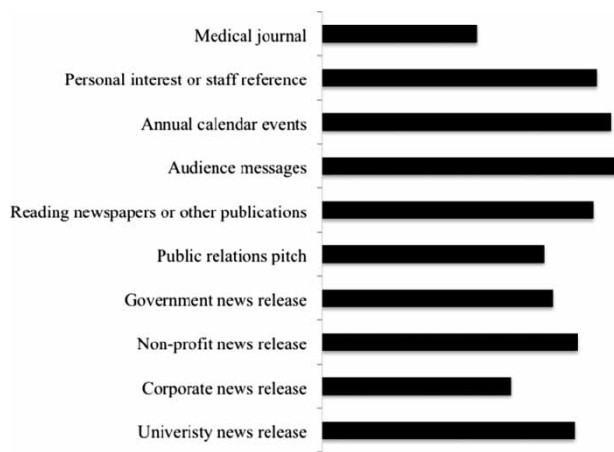


Figure 3: Mean scores for sources of story idea as reported by the newspaper journalists ($n = 55$). Respondents were asked to rate the agreement/disagreement with statements related to their reliance on each of these sources. Items were rated using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

press release ($M = 2.49$, $SD = 0.88$), and medical journals ($M = 2.04$, $SD = 1.02$). Answers related to press releases were distinguished to determine which types of press releases journalists used most often. Means for each story idea source are displayed in Fig. 3.

Satisfaction with health news coverage

The third research question focuses on the public health professionals’ satisfaction with the health news coverage. Satisfaction was measured for stories appearing in print media and online media, in addition to the respondents’ satisfaction with the depth of coverage. Results showed that public

health professionals were satisfied more with stories appearing in print versions of their local newspaper ($M = 3.38$, $SD = 1.13$) compared to those appearing in the online version of the newspapers ($M = 2.16$, $SD = 1.35$). The mean scale scores indicate that participants were slightly satisfied with print coverage and slightly dissatisfied with online coverage. This comparison was qualified by a significant pair-wise significant difference ($t(44) = 5.50$, $P < 0.001$).

Comparing definitions of health literacy

To answer RQ4 concerning the differences between newspaper journalists and public health professional regarding health literacy definitions, an χ^2 analysis was computed. Results showed that public health professionals were more likely than newspaper journalists to define health literacy based on knowledge and understanding ($\chi^2 = 7.28$, $P < 0.01$). No significant differences were observed when comparing journalists and professionals’ definitions from an action-oriented perspective, that is, whether respondents mentioned application or use of health knowledge ($\chi^2 = 1.11$, *ns*). Visual illustrations of each group’s definitions are displayed in Figs 4 and 5.

Discussion

Health news agenda building is a process that varies based on the size of the newspaper and the community in which it is situated. This exploratory study attempted to elucidate the process of health news agenda building at primarily small-town newspapers through surveys of



Figure 4: Visual representation of newspaper journalists’ definition of health literacy. Visualization created using www.wordle.net.

health professionals might be concerned not just with conveying health information but also with how it is used, with the ultimate goal of improving health outcomes among a population, whereas journalists may feel their responsibilities apply to providing information but not to how it is, or is not, used.³⁶ However, we did not find differences in invocation of use and application in health literacy definitions, perhaps because too few respondents from either category included this dimension in their definitions.

Results of this pilot study are relevant to the practice of journalism and public health. As all US counties, even in rural areas, have health departments and likely also health organizations, public health practitioners may serve as local expert sources of story ideas and quotations. Although this study was not equipped to determine information about news frames, we found significant variance in what sorts of issues public health practitioners see as most salient for the health news agenda. Public health practitioners, not surprisingly, view issues from a public health perspective, with a focus on preventing illness or outbreaks, whereas journalists are more likely to see policy issues as significant. In accordance with this finding, public health or public relations practitioners attempting to garner coverage of issues related to disease prevention could find more success by tying issues to policy events, in accordance with journalistic standards of newsworthiness. For example a story about increased focus for disease prevention resulting from health care reform might be more appealing to journalists than a general story about preventing obesity.

Journalists in our study depend on community interest, in the form of reader messages, for story ideas, and health departments might then serve as intermediaries between journalists and people within the community who are affected by a health issue. Journalist awareness of health literacy might also mean that public health practitioners can use this concept to add context to health information in interactions with local media. Public health practitioners reported relatively positive attitudes toward health coverage in the print version of their local newspaper as well as depth of coverage, which is of use to local journalists in forging relationships with sources. As practitioners immersed in health issues specific to local communities, public health practitioners are a resource for journalists both as sources and for their role in the agenda-building process.

This study is a first attempt to explore health news agenda building at local community newspapers from the perspective of both sources and journalists. As such, there are several limitations to the study and much room for future research. The sample size was small, although reasonable considering the number of respondents who fit our inclusion criteria. In addition, future surveys should include additional questions for journalists about the space available for news in general and health news in particular as well organizational characteristics such as the size of the newspaper editorial staff and its ownership,²² all of which could greatly influence the agenda-building process. Content analysis of health stories in local newspapers could also determine which topics are covered most frequently and which news frames are used.

Research on health news can illuminate the differences in how health is covered at media outlets of varying size and resources. The role of local newspapers in providing health information is especially significant given the shortage of broadband Internet access and health care providers in rural US communities. Weekly newspapers have a relatively stable readership that is heterogeneous in terms of educational level and also skews toward older adults.¹⁷ Because of these factors, weekly newspapers are an underexplored outlet for providing health information to at-risk rural populations. This research contributes preliminary information to the understanding of how different stakeholders determine the health news agenda at these understudied yet significant news outlets.

References

1. Fox S, Jones S. The social life of health information. Washington, DC.: Pew Center for the Internet and American Life; 2009 [accessed 2010 Oct 2]. Available from: <http://www.pewinternet.org/Reports/2009/8-The-Social-Life-of-Health-Information/>
2. Kaiser Family Foundation & Pew Research Center's Project for Excellence in Journalism. Health news coverage in the U.S. media: January 2007–June 2008 [accessed 2010 Aug 3]. Available from: <http://www.kff.org/entmedia/upload/7839.pdf>.
3. Parker RM, Ratzan SC, Lurie N. Health literacy: a policy challenge for advancing high-quality health care. *Health Aff* 2003;22:147–54.
4. Hayes M, Ross IE, Gasher M, Gutstein D, Dunn JR, Hackett RA. Telling stories: news media, health literacy, and public policy in Canada. *Soc Sci Med* 2007;64(9):1842–952.
5. Iyengar S, Kinder DR. News that matters: television and American opinion. Chicago, IL: University of Chicago Press; 1987.

6. McCombs MF, Shaw DL. The agenda-setting function of mass media. *Public Opin Q* 1972;36:176–87.
7. Cobb RW, Elder CD. The politics of agenda building: an alternative perspective for modern democratic theory. *J Polit* 1971;33(4):892–915.
8. Berkowitz D. Who sets the media agenda? The ability of policymakers to determine news decisions. In: Kenamer JD (ed.), *Public opinion, the press, and public policy*. Westport, CT: Praeger; 1992. p. 81–102.
9. Lang GE, Lang K. Watergate: an exploration of the agenda-building process. In: Wilhoit GC, de Bock H (eds.), *Mass communication review yearbook* (Vol. 2). Beverly Hills, CA: Sage; 1981. p. 447–68.
10. Donohue GA, Olien CN, Tichenor PJ. Reporting conflict in the press by pluralism, newspaper type, and ownership. *Journalism Q* 1985;62:489–499, 507.
11. Olien CN, Donohue GA, Tichenor PJ. Community structure and media use. *Journalism Q* 1978;55: 445–55.
12. National Center for Health Statistics. *Health, United States, 2001 with Urban and Rural Health Chartbook;2001* [accessed 2010 Sep 2]. Available from: <http://www.cdc.gov/nchs/data/hus/hus01.pdf>.
13. DeNavas-Walt C, Proctor BD, Smith JC. U.S. Census Bureau: current population reports, income, poverty, and health insurance coverage in the United States 2007. Washington, DC: U. S. Government Printing Office; 2008.
14. National Advisory Committee on Rural Health and Human Services. *The 2008 Report to the Secretary: Rural Health and Human Services Issues; 2008* [accessed 2010 Sep 18]. Available from: <ftp://ftp.hrsa.gov/ruralhealth/committee/NACreport2008.pdf>.
15. Horrigan J. Home broadband adoption. Washington, DC: Pew Center for Internet and American Life; 2009 [accessed 2010 Sep 15]. Available from: <http://www.pewinternet.org/Reports/2009/10-Home-Broadband-Adoption-2009.aspx>
16. Nisbet MC (under review). Communicating the public health relevance of climate change: a news agenda-building analysis. *Sci Commun*
17. Pew Research Center for the People and the Press. *Key news audiences now blend online and traditional sources*. Washington, DC: Pew Research Center; 2008.
18. Pew Project for Excellence in Journalism. *How news happens: a study of the news ecosystem of one American city*. Washington, DC: Pew Research Center; 2010 [accessed 2010 Aug 28]. Available from: http://www.journalism.org/analysis_report/how_news_happens.
19. Morton LP, Warren J. Acceptance characteristics of hometown press releases. *Public Relations Rev* 1992; 18:385–91.
20. Kanervo E, Kanervo D. How town administrator's view relates to agenda building in community press. *Journalism Q* 1989;66(2):308–15.
21. Weaver D, Elliott S. Who sets the agenda for the media? A study of local agenda-building. *Journalism Q* 1985;62(1):87–94.
22. Wallington S, Blake K, Taylor-Clark K, Viswanath K. Antecedents to agenda setting and framing in health news: an examination of priority, angle, source, and resource usage from a national survey of U. S. health reporters and editors. *J Health Commun* 2010;15(1):76–94.
23. Hindman DB. Community newspapers, community structural pluralism and local conflict with nonlocal groups. *Journalism Mass Commun Q* 1996;73:708–21.
24. Martinson BE, Hindman DB. Building a health promotion agenda in local newspapers. *Health Educ Res* 2005;20(1):51–60.
25. Berkowitz D, Adams DB. Information subsidy and agenda-building in local television news. *Journalism Q* 1990;67:723–31.
26. Gans HJ. *Deciding what's news*. New York: Pantheon Books; 1979.
27. Shoemaker PJ, Reese SD. *Mediating the message: theories of influence on mass media content*. White Plains, NY: Longman; 1996.
28. Viswanath K, Blake K, Meissner H, Saiontz N, Mull C, Freeman C, et al. Occupational practices and the making of health news: a national survey of U.S. health and medical science journalists. *J Health Commun* 2008;13(8):759–77.
29. Tanner AH. Agenda building, source selection, and health news at local television stations: a nationwide survey of local television health reporters. *Sci Commun* 2004;25(4):350–63.
30. Lariscy R, Avery E, Sohn Y. Health journalists and three levels of public information: issue and agenda disparities? *J Public Relations Res* 2010;22(2): 113–35.
31. Agency for Healthcare Research & Quality. *Literacy and health outcomes*. Rockville, MD: AHRQ; 2004. Evidence Report/Technology Assessment No. 87.
32. Simonds SK. Health education as social policy. *Health Educ Monogr* 1974;2:1–25.
33. Selden C, Zorn M, Ratzan SC, Parker RM. *Health literacy (bibliography online)*. Bethesda, MD: National Library of Medicine; 2000 [accessed 2010, Sep 4]. Available from: <http://www.nlm.nih.gov/pubs/resources.html>.
34. Kutner M, Greenberg E, Jin Y, Paulsen C. *The health literacy of America's adults: results from the 2003 national assessment of adult literacy* (NCES 2006–483). Washington, DC: Department of Education, National Center for Education Statistics; 2006.
35. Rudd R, Keller D. Health literacy: new developments and research. *J Commun Healthc* 2009;2(3):240–57.
36. Hinnant A, Leu-Rios M. Tacit understandings of health literacy: interview and survey research with health journalists. *Sci Commun*. 31(1):84–115.

Author information

Rachel Young is a doctoral student in health communication at the University of Missouri School of

Journalism. She is also pursuing a master's degree in public health at the University of Missouri.

Saleem Alhabash is an assistant professor jointly appointed by the Department of Advertising, Public Relations, and Retailing, and the Department of Telecommunication, Information Studies, and Media at Michigan State University. He received his doctorate from the University of Missouri School of Journalism.

Shelly Rodgers is an associate professor of strategic communication at the University of Missouri School of

Journalism and the director of research for the Health Communication Research Center. She received her doctorate from the University of Missouri School of Journalism.

Jon Stemmler is the associate director of the Health Communication Research Center at the University of Missouri School of Journalism. He has a master's degree in journalism from the University of Arizona.