# Health Communication Through Media Narratives: Factors, Processes, and Effects

## Introduction

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Narrative health communication is a form of persuasive communication in which a health message is presented in the form of a fictional or nonfictional story, as opposed to being presented as statistical evidence or arguments to promote health-related behaviors. Recently, meta-analyses have been conducted on the effectiveness of narrative health communication; however, systematic research is still needed to further the understanding of the mechanics underlying the effects of health narratives. Addressing this gap, this Special Section provides a synthesis of knowledge and direction in the field of narrative health communication, bringing together 10 original research articles. The reported studies investigate experiences mediating the effect of narratives on health outcomes, as well as the role of moderating factors, such as cultural background, form, content, and context-related features. All 10 studies reported here have important implications for the theory of narrative processing and effects, and they are instrumental to the practice of designing effective health communication messages.

Keywords: health communication, narrative, narrative health communication, narrative transportation

In recent years, the issue of health and healthy behaviors has received increasing scholarly attention. Given the amount of financial resources and time spent on restoring people's health, it is not surprising that the investigation of communication tools for promoting health and well-being is regarded as a central area of study. Information, education, and communication approaches to changing people's

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attitudes and behaviors are an important component of health promotion policies and programs. Traditional mass media as well as online, interactive, and social media offer the possibility to educate and influence audiences.

One of the main problems in communicating health issues to audiences is overcoming possible resistance to persuasive attempts to change cherished habits and familiar ways of living. With this obstacle in mind, the way in which audiences are addressed in health communication becomes of crucial importance. Hinyard and Kreuter (2007) point out that "the dominant paradigm in health communication has involved using statistical evidence, probability, and appeals to logic and reason to persuade and motivate people to adopt behavioral changes" (p. 777). Such rational arguments about health risks and advantages for future health outcomes are often detached from audience members' own lives and their perceptions of what is relevant. Arguments encountered in health communication are met with adverse individual, social, and cultural feelings or ideologies, subjective perceptions of invulnerability—or simply disinterest.

### **Defining Narrative Health Communication**

One way to engage audiences despite possible reservations and resistance is to use narratives to communicate health issues (Hinyard & Kreuter, 2007; Kreuter et al., 2007). Although narrative health communication is strongly connected to the extensive research on persuasive communication and health communication, the study of narrative health communication deserves special attention because of its specific features and elicited responses.

Narratives are highly complex forms of communication, yet common to one's everyday life as well as pervasively present in media. Health campaigns tell stories about illness and victory over illness. Entertainment-education programs include health messages in highly emotional plots. News accounts raise their readers' interest through gripping stories and memorable exemplars. Serious games engage children with suspenseful plot lines and appealing characters.

Health narratives can be defined as a specific form of persuasive communication in which a health message is presented in the form of a fictional or nonfictional story. The common denominator of narratives includes two aspects: First, narratives are representations of events and actions, embedded in a time sequence and connected through causal relations (Abbott, 2002). Second, narratives provide representations of the inner world of characters and allow insight into their thoughts, ideas, motivations, and feelings (Fludernik, 2010). The research of narrative health communication is typically concerned with the effect of these story components and their form, structure, and content on the narrative experience and health-related outcomes, as well as with the causal relation of experiences and outcomes. Building on evidence-based models of narrative persuasion, the ultimate goal of narrative health communication research is to maximize the positive potential of health messages.

#### Previous Research on Narrative Health Communication

Over the past few years, numerous studies have investigated the effectiveness of the narrative format in conveying health messages. Meta-analytic evidence shows that using the narrative format has a small positive effect on story-consistent beliefs, attitudes, intentions, and behaviors (Braddock & Dillard, 2016). There are also several meta-analytic studies that focus on the use of stories specifically in health communication.

These have yielded some contradictory results: Zebregs, van den Putte, Neijens, and de Graaf (2015) found that statistical evidence is more effective in influencing beliefs and attitudes than narrative evidence; conversely, narrative evidence was more successful in promoting intentions. Remarkably, an overtly persuasive message does not impair narrative persuasion (de Graaf, Sanders, & Hoeken, 2016)—speaking for the robustness of narrative strategies in health communication. A different meta-analysis by Shen, Sheer, and Li (2015) also concluded that there is an overall (small) effect from the narrative format. However, this analysis found some constraining conditions: While audio and video messages were effective, print-based narratives were not. While detection and prevention messages yielded effects, narratives for cessation behaviors did not (Shen, Sheer, & Li, 2015). Positive effects of narratives for changing health-realted outcomes were also confirmed for entertainment education strategies (Shen & Han, 2014).

Apart from the specific behavior advocated and the form (audio, video, print), the way in which a narrative is processed by the viewer or reader also emerged as a relevant intervening condition for narrative persuasion. The feeling of being deeply immersed in a story (transportation, narrative engagement) was shown to be instrumental in creating effects, as two meta-analyses show (Tukachinsky & Tokunaga, 2012; van Laer, de Ruyter, Visconti, & Wetzels, 2014). Related to immersive processes, researchers have also shown that story-elicited emotions (e.g., Yoo, Kreuter, Lai, & Fu, 2014) and experiential processing—thinking in terms of emotions and personal experiences—is conducive to narrative effects (Dillard & Hisler, 2015).

Summing up, research shows that while narratives are effective for influencing health outcomes, the effects are small and contingent on diverse mediators and moderators. This Special Section examines the moderating factors and mediating processes that impact the effect of mediated narratives on perceptions, attitudes, or behaviors.

#### The Special Section on Narrative Health Communication

This Special Section on narrative health communication was initiated by the network HealthNar, which received funding from the European Union Marie Curie Actions program—IRSES from May 1, 2014, to April 30, 2017 (project number 612675; see http://healthnar.ruhosting.nl). The network, which connects scholars from seven European and Australian universities, contributed to multidisciplinary research on narrative health communication from varied theoretical and methodological perspectives.

The Special Section brings together 10 articles from three continents and presents important research currently being undertaken in the area of narrative health communication worldwide. Using textual, audio, and audiovisual stimuli, these articles investigate a wide range of health topics, such as HPV vaccination, HIV prevention, physical exercise, organ donation, drunk driving, cancer, and cardiovascular diseases, through experiments, surveys, and qualitative research.

In the first article, "Operational and Conceptual Trends in Narrative Persuasion Research: Comparing Health- and Non-Health-Related Contexts," Dahlstrom, Niederdeppe, Gao, and Zhu present a systematic analysis of available empirical research published between 2000 and 2013 that used narratives in health- and non-health-related contexts. The study included 135 published papers and found great variety in how the term *narrative* is conceptualized and operationalized. Many of the studies employed vague definitions of narrative and used materials that may not qualify as a narrative in a narrow sense. The analysis also showed that the majority of studies utilized text-based narratives, whereas other modalities are underrepresented. Furthermore, the analysis revealed that text-based narratives were more likely to have been researcher-created, whereas video-based narratives were more likely to represent unmodified professional media products, which may create an imbalance in quality across media formats. By reflecting on these issues, the article synthesizes knowledge about the current state of narrative persuasion research.

Three papers in the Special Section focus on narrative transportation, an experiential state channeling persuasive effects. In "Transportation into Narrative Worlds and the Motivation to Change Health-Related Behavior," Gebbers, De Wit, and Appel report the results of an experiment in which an audiovisual message about the potentially fatal consequences of drunk driving was presented in low and high transportation conditions. The results showed that transportation directly influenced risk severity, which in turn influenced outcome expectancies and self-efficacy; however, the integrated statistical model showed the limited effect of transportation on these variables. Reflecting on the outcomes of the study, the authors point out several directions and research gaps future studies should address.

Das, Nobbe, and Oliver, in their article "Moved to Act: Examining the Role of Mixed Affect and Cognitive Elaboration in 'Accidental' Narrative Persuasion," focus on the persuasive potential of being moved in the context of audiovisual eudaimonic entertainment. The authors present data from an experiment in which reflective narrative processes were manipulated by increasing or decreasing cognitive load in an emotionally moving film segment and in a nonmoving segment. The results showed that increasing cognitive load decreased transportation and mixed affects in the moving segment but not in the control condition. Transportation mediated the effect of increased mixed emotions on the intention to engage in physical activity for those viewing the moving segment. These findings assert the importance of eliciting reflective thoughts in audience members in persuasive health communication.

Ooms, Jansen, Hommes, and Hoeks investigate the mechanisms of processing narrative fear appeals in "'Don't Make My Mistake': On the Processing of Narrative Fear Appeals." Ooms and colleagues conducted a study using three stories presenting a protagonist who is dealing with cancer to identify the causal path through which intentions toward performing self-exam can be enhanced. Of the four emotional states that were investigated, fear appeared to have a strong link to increased intentions for self-

examination. Furthermore, the analysis showed that attention-focused transportation was strongly associated with attitudes and behavioral intentions toward performing self-exams, whereas the level of identification with the protagonist could not predict these outcomes.

Focusing on the role of cultural factors, Walter, Murphy, Frank and Baezconde-Garbanati examine the role of acculturation in their article "Who Cares What Others Think? The Role of Latinas' Acculturation in the Processing of HPV Vaccination Narrative Messages." Although accounting for the cultural background of the target audience is necessary to examine effects in narrative health communication, these types of studies are still scarce. Walter and colleagues conducted an experiment with a random sample of Mexican American females, who watched either a narrative or a nonnarrative version of a film on HPV vaccination. The analyses showed that participants' level of acculturation influenced the processing of the health message. A lower level of acculturation was associated with a higher level of descriptive and injunctive norms compared to other levels. The authors found that information regarding the prevalence of health-related behaviors and their social approval appears to be more important for less acculturated individuals compared to those who are more acculturated. These findings have important implications for health communication practices and raising awareness of cultural factors.

In "'She Died of a Mother's Broken Heart': Media and Audiences' Framing of Health Narratives of Heart-Related Celebrity Deaths," Van den Bulck presents the findings of a qualitative analysis of online news and audience reactions to the heart-related deaths of three celebrities. The analysis identified several frames through which celebrity deaths are narrated, which are affected not only by knowledge of cardiovascular conditions but also by anecdotal information on the celebrity's life and the audience members' personal experiences. Van den Bulck's study points to the fact that online discussion of celebrity health issues is an important source of information for a wide range of audiences. Investigating the reactions to celebrity deaths can give insight into the mental constructs people use to create certain causal links in health issues.

Four articles present experiments in which formal, content, or presentational features of the message were manipulated. The findings of these studies are of high relevance for theory building, but also carry important practical implications for message design. In "Engaging Doctors and Depressed Patients: Effects of Referential Viewpoint and Role Similarity in Health Narratives," Van Krieken and Sanders focus on the relative effect of linguistic viewpoint markers and role similarity on identification in narratives presenting doctor-patient consultation to art and medical students. The analysis showed that patients (overall) evoked higher levels of identification than did the doctors, with a higher level of identification among medical students compared to arts students. There was evidence that viewpoint manipulation influenced readers' emotional and cognitive identification (with the doctor, not with the patient), and it had an impact on thought attribution. This study is an important step forward in the systematic investigation of linguistic markers in narrative health communication.

Two of these feature-related articles focus on the narrative content of effective health communication. In "Risk Versus Planning Health Narratives Targeting Dutch Truck Drivers: Obtaining Impact Via Different Routes?," Boeijinga, Hoeken, and Sanders present the findings of a study investigating the effect of content and modality of narrative health messages on Dutch truck drivers'

intentions to exercise. The results showed that risk perception—focused and planning strategy—focused interventions are similarly effective in strengthening intentions to exercise. Risk-focused narratives exert this effect by eliciting negative emotions, whereas the effect of plan-focused narratives on intentions is mediated by an increase in concrete action strategies. Additionally, there was no evidence found for the effect of modality, meaning that written and auditory content can be similarly effective in persuasion. By manipulating narrative content, Sukalla, Wagner, and Rackow examine fears and myths related to organ donation in their article "Dispelling Fears and Myths of Organ Donation: How Narratives That Include Information Reduce Ambivalence and Reactance." By embedding in a narrative text information that directly addresses fears and myths specific to organ donation, Sukalla and colleagues successfully reduced attitudinal ambivalence and increased intentions toward organ donation in participants. Moreover, the results show that including fear-related information in the narrative had no effect on the readers' narrative engagement. Their results have clear implications for interventions that are aimed at decreasing negative attitudes and increasing organ donation intentions.

In "The Narrative within the Narrative: The Effectiveness of Narrative HIV Prevention Ads Depends on Their Placement Within a Context Narrative," Kalch and Bilandzic report the findings of an experiment in which high- and low-narrativity HIV prevention ads were placed in high- or low-narrativity scenes in a movie. Results of analyses showed that placing the ad in a high-narrativity scene increased negative attitudes toward the ad. Further, interaction effects of ad and scene narrativity showed that placement of a high-narrativity ad in a low-narrativity scene increased engagement and positive attitudes toward both the ad and HIV prevention. Implications are that presenting a high-narrativity ad at the right moment in a fiction film can effectively improve attitudes toward health prevention topics.

Taken together, these 10 original empirical studies provide a synthesis of knowledge and direction in the field of narrative health communication. They indicate the significant trends that are taking place in narrative health communication research and point out directions for future study. All ten studies reported here have important implications for the theory of narrative processing, and they are also instrumental to the practice of designing effective health communication messages.

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