

Health communication inquiry and health outcomes

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Abstract: This article examines the applications of health communication research to enhancing the delivery of care and the promotion of health. Health communication scholars have the opportunity to inform the work of health care providers and health promotion practitioners to help them accomplish their complex health goals. There are many complex health promotion efforts that might benefit from definitive health communication research, yet are more often guided by good intentions, precedent, and expedience than by strong evidence. The complexity of achieving desired health communication goals, such as influencing health behaviors and guiding health-related decision making, demand strategic guidance from relevant and rigorous research. This article examines strategies for promoting the application of the best health communication research to guide development, implementation, and institutionalization of evidence-based health communication programs, policies, and practices.

Keywords: health communication, inquiry, health promotion, health care.

The current status of health communication inquiry

Health communication has developed rapidly since the 1970s as an exciting applied social scientific research and application field of study, examining the powerful influences of human and mediated communication on health care and health promotion (Kreps, in-press; Kreps & Bonaguro, 2009). By its very nature, health communication research is an inherently applied area of inquiry. Health communication inquiry is typically problem-based, focused on explicating, examining, and addressing important and troubling health care and health promotion problems and issues. These issues often include difficulties in: promoting active coordination and collaboration in the delivery

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of health care, challenges in promoting adoption of health behaviors with at-risk populations, demands to reduce and ultimately eliminate inadvertent errors made that jeopardize the quality of health care, attempts to meet unmet health information needs for supporting informed health decision making, and the quest to overcome serious inequities in care that lead to health disparities and poor health outcomes (Kreps, 2011a; Neuhauser & Kreps, 2010). These are serious issues that demand attention from health communication scholars to help refine health promotion activities and improve health outcomes!

The applied nature of health communication inquiry is firmly grounded in the implicitly accepted goal that by facilitating improvements in the delivery of care and the promotion of health, health communication scholars can ultimately enhance health outcomes (Kreps & Maibach, 2008, Parrott, 2008). This article examines specific research and practice areas where health communication inquiry can be fruitfully applied to spur development of informed health promotion practices and policies. It appears that many health care and health promotion practitioners have been slow to recognize and adopt health communication research to help them accomplish their complex health promotion goals. The result is that many complex health care and health promotion efforts that might benefit from relevant health communication research are guided more by good intentions, precedent, and expedience than by strong evidence (Kreps, in-press; 2011a). For example, how often is health communication research used to guide the development, implementation, and evaluation of public health education and promotion programs? How often does health communication research guide health care delivery strategies for eliciting full diagnostic information, accomplishing informed consent, or promoting adherence with health care recommendations? Too often, the answer to these questions is that these programs and practices are not guided at all by health communication research. The complexity of achieving desired health communication goals, such as influencing entrenched health behaviors (such as smoking, nutrition, exercise, and safer sexual practices) and promoting informed health-related decision making demand strategic guidance from relevant and rigorous research. This article examines strategies for promoting the application of the best health communication research to guide development, implementation, and institutionalization of evidence-based health communication programs, policies, and practices.

A large and developing body of health communication scholarship has already begun to powerfully illustrate the centrality of communication processes in achieving important health-care and health-promotion goals (for reviews of this research please see Kreps, 2011a; Kreps & Bonaguro, 2009). Kreps and O'Hair (1995), for example, report a series of seminal studies illustrating the powerful influences of communication strategies and programs on health knowledge, behaviors, and outcomes. Research by Greenfield, Kaplan, and Ware (1985) clearly demonstrates the positive influences of increased patient/provider participation in directing health care treatment on achieving desired health outcomes. Kreps and Chapelsky Massimilla (2002) also report a number of studies that illustrate the positive effects of communication interventions on cancer-related health outcomes. (Also please see the 100th anniversary issue of the scholarly

journal, *Health Communication* (2010), for extended reviews of the major contributions of health communication research to health outcomes).

Communication research has been increasingly used to inform the development of public health policies and legislation, including policies to prevent and respond to serious health risks, promote equity in health care, and improve media coverage of important health issues (Atkin & Smith, 2010; Guttman, 2010; Kunkel, 2010; National Cancer Institute, 2008, Noar et al., 2009; Siu, 2010). Yet, there is so much more that can be done by health communication scholars to improve public health and wellness. While health communication scholarship has already made important contributions to improving health care and health promotion, health communication inquiry has the potential to make even more important and wide-ranging contributions to improving public health.

Asking the right research questions

To really make a positive difference in health outcomes, health communication scholars must carefully identify and examine the critical issues confronting at-risk populations, health care providers, family caregivers, and others participating in the modern health care system and then design studies to address these important health problems. We need studies that will examine the key communication factors that influence these critical health issues. It is not difficult to identify major health issues in modern society. These issues are covered regularly by the popular media (radio, television, magazines, and newspapers), reported by independent agencies in major reports and news conferences (such as the major reports prepared by the Institute of Medicine), and studied by important federal health agencies like the NIH and CDC. A sampling of these issues include serious problems such as poor access to care, low quality of health care services provided for many consumers, medical errors in the delivery of care, inequities in health outcomes between privileged and less privileged populations, limited availability and access to relevant health information, lack of sensitivity in the delivery of care, ineffective health education and health promotion programs, poor consumer adherence with health recommendations, and failure to engage in recommended behaviors to help detect and avoid health risks. Health communication scholars would be well advised to design studies to examine the communication factors that are related to these important public health issues.

Current evidence suggests that most, if not all, of these important health issues are directly related to the effectiveness of health communication. For example, some of the serious issues that threaten the delivery of high quality care, including the insidious recurrence of medical errors, lack of consumer adherence with treatment recommendations, and poor levels of active consumer participation in health care decision-making have all been linked to the effectiveness of health communication (Greenfield, Kaplan, & Ware, 1985, Kreps & Bonaguro, 2009). Evidence suggests that these health care delivery issues are closely related to miscommunication and misinformation, lack of provider-consumer cooperation, and poor health information sharing (DiMatteo, &

Lepper, 1998; Kreps, Villagran, Zhao, McHorney, Ledford, Weathers, & Keefe, 2011). Similarly, serious disparities in health outcomes for poor, at-risk, vulnerable, and minority populations have also been related to the effectiveness of health communication. Evidence suggests that disparities in health outcomes are closely related to poor consumer access to relevant health information, lack of consumer understanding about prevention and treatment opportunities, ineffective communication relationships between health care providers and consumers, as well as mistrust and intercultural communication barriers within the modern health care system (Eysenbach & Kohnler, 2002; Kreps, 2006). Challenges with achieving health promotion goals have also been connected to the effectiveness of public health communication education, campaign, and intervention programs designed to influence health behaviors (Dutta-Bergman, 2005; Hornik, 2002; Kreps, 2011a; 2007). These are all critical communication issues that deserve close attention by health communication researchers. Ambitious health communication studies need to be designed to directly address the serious communication problems that limit the effectiveness of health care and health promotion. Such studies should focus in on examining the critical communication processes at play in the delivery of care and promotion of health, while also examining the larger societal, institutional, and cultural communication influences on health and health care.

Rigorous health communication inquiry

To improve health care and health promotion, health communication scholars must take their work seriously and go the extra mile to translate health communication research into practice (Kreps, Viswanath, & Harris, 2002). Taking health communication scholarship seriously means not only asking important health communication research questions, but also conducting relevant, rigorous, and far-reaching studies that generate valid, reliable, and generalizable data that can effectively inform health care and health promotion practices (Kreps, 2001; Kreps, 2011b). Serious health communication researchers take great care to meticulously design studies and carefully operationalize research variables to accurately measure key health communication concepts, processes, and outcomes with both precision and depth. This often includes designing new and innovative measures and measurement tools. It also often means using multiple research methods and measurement tools, including triangulating qualitative and quantitative measures, to generate robust and revealing data (Kreps, 2011b; 2008). Serious health communication scholars work to actively translate and transform raw health communication research findings into practical and usable health care/promotion interventions and policies. They carefully test the efficacy of interventions by monitoring the outcomes (both positive and negative outcomes) of implemented health communication programs within representative health care systems with at-risk populations.

To really make a difference, health communication scholarship must provide important insights into best practices for delivering health care and promoting health. Research must chronicle what works well and what is causing problems in the delivery

of care and promotion of health. The quality of the research that health communication scholars conduct is directly related to the potential of this research to inform health policies and practices. Care must be taken to rigorously design and conduct health communication studies to generate the most accurate, valid, and revealing data to demystify the many complexities of health care and health promotion. New models and theories should be developed, tested, and refined to help describe and predict the intricate influences of communication within the health system. Innovative methods should be employed to study the complex communication processes that enable the effective delivery of care and the promotion of health.

While there is a plethora of cross-sectional, one point in time studies that have been conducted, there is a tremendous need for health communication studies that collect data over time to avoid myopia and reflect the emergent nature of health practices. It is also imperative for health communication scholars to study the most relevant research populations involved in health care and health promotion to collect meaningful and usable data. In the past, too many health communication studies depended on data gathered from convenient samples that often did not reflect very well the actual experiences of the health care providers and consumers that the studies purported to generalize to. If we do not study the specific populations we want to help, we will not generate data that will result in useful interventions, practices, and policies. This is stated quite clearly, “While it is reasonable to and even legitimate to use small or convenient sample-based studies, the applied nature of health communication, and other applied areas of focus, forces us to confront the reality of the field. This reality raises many questions. First are population issues. Who are we studying? Do the samples of humans we use have the background, knowledge, and orientation to really answer the big questions we are asking? Do the samples we use provide representative data?” (Kreps, Viswanath, & Harris, 2002, pp. 371-372). To gather data that will inform health policies and practices, we need to study patients, providers, and administrators who have the in-depth experiences and insights to guide evidence-based interventions.

Many studies have also used unrealistic conditions and artificial questions that do not fully represent the complexities of health care and health promotion situations. The “law of the hammer” can encourage scholars to use popular and easy to administer research tools that may not accurately measure the key issues under investigation in health communication studies. These research practices pose serious threats to the ecological validity of health communication studies (Kreps, 2001). “Ecological validity refers to research that describes what actually occurs in real-life circumstances. To the extent that research procedures reflect what people do in the contexts in which their behavior normally occurs, confidence in the generalizability of findings to other people and situations is increased” (Frey, Botan, & Kreps, 2000, p. 133). It is imperative that health communication researchers design and conduct studies that provide valid, reliable, and generalizable data for guiding solutions to the problems that health care consumers and providers face.

Establishing relevant research partnerships

A major strategy for translating health communication research into practice depends on developing meaningful interdisciplinary, interprofessional, and community-based partnerships with scholars, health care providers, consumers, administrators, government agency representatives, support organization members, and public policy makers. These collaborative partnerships are instrumental in helping health communication researchers effectively design, implement, and institutionalize the best evidence-based health communication interventions within society. It is clear that although health communication scholars have important expertise concerning the process of communication, they certainly do not have many of the answers needed about how health care systems work, how consumers behave, and how to influence institutional and public health policies. Establishing collaborations with key research partners can help provide needed expertise and answers for addressing these important translational issues effectively.

A good first step for developing meaningful health communication research partnerships is to establish research collaborations with other scholars from related disciplines, such as public health, health education, epidemiology, the social sciences, and health professional fields. For example, Kreps and Maibach (2008) make a strong case for the synergistic opportunities that can derive from collaborations between health communication and public health scholars, citing complementary, yet distinct, areas of expertise, theoretical grounding, methodological orientation, and intervention strategies. Major federal funding agencies have begun requesting grant applications from transdisciplinary research teams for conducting large health research programs (Kreps, in-press-A). These funding agencies recognize the unique contributions, benefits, and insights that transdisciplinary research cooperation can provide.

Community-based collaborations are also critically important for supporting the translation of health communication research into practice. It is time for health communication scholars to move out of their ivory academic towers and develop meaningful collaborations with relevant community partners from government agencies, health care delivery systems, non-profit associations, social service agencies, advocacy organizations, consumer groups, at-risk populations, and even corporations. It is only through these community-based collaborations that we can effectively translate compelling research findings into products, programs, policies, and practices that will be adopted within the modern health care system. Community partners have the embedded health system expertise that scholars desperately need to collaboratively introduce new health communication programs into health systems and help to refine these programs so they will work effectively.

Community participative research and intervention programs have shown great potential to facilitate applications of research results into health care practices (Minkler, 2000; Minkler & Wallerstein, 2002). Community partners can help health communication scholars learn the best inside strategies for gathering meaningful data from respondents, for interpreting research results within the framework of cultural contexts, for designing usable and effective communication interventions, for testing these interventions in action within real health settings, and for implementing and sustaining these

interventions within social systems (Neuhauser, 2001, Neuhauser & Kreps, in-press). Actively engaging community partners in the applied research process can impart a strong sense of ownership in the research and intervention processes among these community partners, that can have major influences on minimizing potential community resistance to accepting the interventions and encouraging cooperation in the implementation and institutionalization of health communication programs, tools, and policies (Kreps, 2007).

Developing and sustaining effective health communication intervention programs

It is imperative that health communication scholars not only conduct relevant health communication research, but also take concerted efforts to use their research findings to guide the development of evidence-based health communication intervention programs to enhance the delivery of care and promotion of health. The goals for health communication research must go well beyond just asking relevant questions, designing and conducting rigorous research, and reporting the research in scholarly venues, to also translating research into programs and policies that can make a difference for health care consumers and providers. Exemplar health communication intervention programs can include evidence based policies and practices for the delivery of care (such as protocols for conducting patient interviews, guidelines for making decisions about triaging patients for treatment priority in emergency rooms, and forms for guiding and recording informed consent for treatment), health education tools and media (such as interactive tailored websites for helping smokers learn about strategies for smoking cessation, video games for sensitizing adolescents about the importance of good nutrition, and online training programs for helping health care providers develop skills for communicating with patients from diverse backgrounds), strategic health communication campaigns (such as media campaigns that encourage parents to get their children vaccinated, school-based programs to educate children about the dangers of drug abuse, and comprehensive multimedia education programs to help new parents care for their children). Not only can health communication scholars provide relevant data for guiding the development of these health care and health promotion programs, they can also gather formative evaluation data for refining these programs and summative evaluation data for assessing program impact and value (Abbatangelo-Gray, et al., 2007; Kreps, 2002; Maibach, et al., 1993).

Too often health communication interventions that are developed and tested as parts of research programs only last as long as they are needed for the studies being conducted. This happens because researchers often do not have the time, resources, inclination, or institutional influence to sustain successful interventions over time. Institutionalization of effective interventions is not strongly encouraged by many academic and research organizations, where recognition and rewards are typically provided to scholars for acquiring research funding and publishing their research results more often than for their implementation and maintenance of health communication tools, program, and policies. Efforts need to be directed toward sustaining the best health communication

interventions over time to make long-term improvements in the delivery of care and the promotion of health. To accomplish this, collaborative partnerships with health care providers, administrators, government agency representatives, consumers, and caregivers can help provide researchers with information and resources needed to implement, institutionalize, and sustain evidence-based health communication interventions. These health care system participants are motivated to make improvements in the delivery of care and the promotion of health, often have access to slack resources for supporting these interventions, and have insights into the operation of health systems that can be used to successfully implement health communication interventions. Health communication scholars need to recognize the benefits of such collaborations for sustaining interventions and to leverage relevant community partnerships to promote health.

Disseminating health communication knowledge

It is important to develop new and effective strategies for disseminating relevant health communication knowledge to health care system participants who can use this information for accessing needed care, guiding health-related decision making, and promoting health and well being. Unfortunately, health communication scholars have not done a very good job communicating with key publics. Most health communication research is reported rather narrowly to other health communication scholars at academic conferences and in scholarly journals. These dissemination channels have helped to spur rapid growth of the health communication field, the development of new health communication educational programs, and encouraged students and faculty to conduct health communication research, but they have not made great inroads into improving the health care system. New strategies for disseminating health communication research findings and their implications for health policy and practice need to be utilized.

A first step for broader dissemination of health communication research findings is to expand publication and presentation of health communication research in scholarly outlets outside of the communication discipline, including at relevant conferences and in important journals from related disciplines (such as public health, health education, health psychology, health sociology, medicine, nursing, and other health professional fields), and well as at interdisciplinary conferences and health journals. These presentations and publications can help spur interdisciplinary collaborations, and many of these scholarly outlets have greater exposure to the popular media and health professionals than most communication conferences and journals. However, scholarly conferences and journals may be unfamiliar venues for those without advanced scientific training, and are not likely to reach many health care consumers, caregivers, health care administrators, public health officials, or policy makers.

Efforts need to be taken to identify appropriate communication channels for easily reaching and influencing broader audiences of consumers, caregivers, administrators, government officials, and other policy makers. For example, popular magazines, websites, blogs, radio and television programs, newspapers, and special audience presentations can have greater public reach than typical scholarly outlets. Moreover, health

communication research must be translated out of academic jargon and into language and images that are familiar and meaningful to targeted audiences (see for example, Kreps & Goldin, 2009). Health communication scholars must learn how to become public scholars and develop needed communication skills to reach and influence diverse audiences, including communicating effectively with vulnerable and at-risk populations. Participation in health fairs, media interviews, briefings for administrators and government representatives, public presentations, public forums, training programs for health care providers and consumers, and publication of popular articles in different online and print outlets can go a long way in broadening dissemination of health communication knowledge. Interactive dissemination programs can encourage the exchange of questions and answers about health communication issues that can clarify the meanings and implications of health communication research. Some fruitful interactive channels for health communication dissemination include participation in support groups (both online and in-person groups), training programs, and websites that allow information exchange. For example, the Health Resources Services Administration, a major federal government agency that supports health care services for a very large audience of underserved and vulnerable consumers, recently commissioned the development of a mandatory online health communication training program (the unified health communication course) based on the latest health communication theory and research for the thousands of health care providers that they fund, as well as for other health care providers who can obtain needed continuing education credits by taking the online course (Health Resources Services Administration, 2011). So far more than 4,000 health care professionals have taken this course to learn how to communicate effectively with a culturally diverse population of consumers.

Potential influences of translational health communication

Health communication scholars are conducting important research for enhancing the quality of health practices and outcomes. As health communication scholarship has grown in institutional credibility (within academia, government agencies, and health care systems) in recent years, we have seen expanded outreach opportunities for conducting health communication research and interventions, for building exciting new health communication collaborations and partnerships, and influencing public health policies and practices (Kreps, 2002; Kreps & Bonaguro, 2009). Health communication scholars should eagerly seek and leverage these new opportunities for applying health communication research to enhancing health care and health promotion practice.

With help from external funding, health communication scholars can focus on conducting serious large-scale health communication studies that can provide relevant and compelling research results. They can garner the resources necessary to mount ambitious, robust, and rigorous longitudinal, multi-methodological field studies with large real-world health system populations. They can develop new and improved research methods for conducting health communication research and innovative theoretical frameworks for guiding health communication inquiry. They can vigorously dissemi-

nate the findings of health communication research to scholarly audiences, health policy makers, health care delivery system administrators, health care providers and consumers, as well as to media representatives. They can also develop and implement new programs, practices, and interventions based upon strong health communication research findings, and work with community partners to institutionalize the best programs to be sustained over time.

The field of health communication is rapidly moving toward a sophisticated, multidimensional agenda for applied research that has the potential to inform enlightened health care delivery and health promotion practices. There is a powerful need to carefully evaluate the use of a broad and evolving range of communication strategies in delivering care and promoting health to assess the influences of communication on important health outcomes. Such inquiry can provide important information about the development of cooperative relationships between interdependent participants in the modern health-care system, encourage the use of sensitive and appropriate communication in health care and health promotion, empower those affected by illness to work collaboratively with caregivers to make their best health decisions, enhance the dissemination of relevant health information and the use of strategic communication campaigns to promote public health, and suggest adaptive strategies for using communication to accomplish desired health outcomes. Health communication scholars need to go the extra mile to ask important research questions, gather rigorous and insightful data, disseminate relevant findings broadly, build meaningful community research and intervention partnerships, and develop, implement and sustain important health communication programs, tools, policies, practices, and intervention to enhance health outcomes.

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