

Communicating Health Assessment Information

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Introduction

As the number and types of health assessment (HA) tools increase, the amount of health-related data collected, analyzed, communicated, and stored grows daily. Health care clinicians, researchers, educators, and managed care organizations assess the health of individuals and groups for many different reasons and use this data in diverse ways. Administered to either individuals or large groups, these instruments yield potentially beneficial information. Health professionals use the data from these instruments to assist individual patients in improving their health status or to target at risk populations for programmatic risk reduction interventions.

However, as with any information, the potential for misuse of the data also exists. Regardless of the setting or instrument administered, health care and health education professionals are bound by their ethical and professional standards to consider the individual as the primary beneficiary of these assessments. The reduction of preventable morbidity and mortality, and the health and welfare of the individual are of paramount value.

Ethical Considerations in

Communication

Since the act of participating in any health assessment process allows for an invasion of the individual's physical and psychological integrity, the participant has the right to control this private information about him/herself. The participant also has a right to expect that privacy will be maintained, even when only grouped or summary data is disseminated. Unless the assessed individual signs a written release, the administrator treats all data as confidential. Furthermore, the individual has the right to a) receive

information necessary to give informed consent before completion of the questionnaire, b) refuse to participate in the HRA or HA without fear of negative consequences, and c) obtain complete and current information concerning his or her health status and risks in terms the individual can reasonably be expected to understand.¹ The Society of Prospective Medicine (SPM) supports the ethical use of health assessment information and the safeguarding of confidentiality of this data. Those professional, administrative, and clerical personnel responsible for administering, scoring, documenting, communicating, and/or storing the appraisal and assessment data are referred to the chapter *Guidelines and Ethical Considerations for HRA and HA Users*. In the best spirit of preventive medicine and health promotion, users, administrators, and developers of HRAs and HAs are invited to work together to ensure the maintenance of ethical and professional standards of practice and to avoid potential abuses.

Communication: Purpose and Process

The purpose of communicating any health information, personal or general, is two-fold—to inform and to influence. The first task is to communicate technical data to the recipients in a clear and accurate way. With accurate and comprehensible information people can understand their current health status and future risks and, if they desire, choose the best options available to enhance their well being. Professionals in the health care field also communicate health information with the expectation that risk prevention or reduction actions will result. Therefore, the second task is to communicate information that serves as a stimulus to further action, i.e., subsequent change in personal lifestyle behaviors or in one's physical or sociocultural environment. Long-term

health benefits can often be realized when individuals, couples, families, and whole communities are persuaded to act voluntarily to reduce their risks and improve their health status. The field of health communication and related research addresses the question of how communicators can develop and deliver health information messages that empower the recipients to take preventive actions.

The *systems view* of communicating health information,² in Figure 1, illustrates that health communication is a long-term process whereby health assessment information is encoded or translated into a message and transmitted through a particular medium by a health provider to a recipient. The final consequences of this process are ideally risk prevention actions and positive health outcomes. The health provider can use feedback to measure and improve future outcomes by reassessing health risks and status, encoding new messages, and developing different mediums for transmission, i.e., changing the process of communication, to motivate behavior and environmental change more effectively.

Communication of health information in reality occurs on multiple levels and between individuals often outside of the medical setting.³ Messages about health risks, in particular, are crafted and disseminated by a wide range of organizations and a diverse group of health-related personnel. As research in the etiology of disease and injury has proliferated, as the concern for cost containment has escalated, and as computer technology has advanced, a profusion of health risk messages from sources of varying credibility has resulted. The truth is that today health messages are disseminated extensively in a variety of formal and informal, medical/clinical, educational, occupational, public health, and community settings and by a wide range of health professionals and non-professionals alike. The health status of most Americans is a consequence of behaviors formed and influenced by the sum total of communication processes occurring over time in many social contexts.⁴

Individuals in a Western democratic society are constantly exposed to a constellation of often contradictory health influences. From family members, friends, co-workers, and even acquaintances to the entertainment, news, documentary, and electronic media, people are bombarded with a diversity of graphical, textual, audio, and video messages, many of

which are powerful in molding behavior.⁵ Much of this information is delivered through non-human or *impersonal* channels of communication.

Impersonal Health Communication

Impersonal modes of communication are characterized by the interposing of non-human mechanisms between the source of the message and the recipient (Figure 2). Whether print, audiovisual, or electronic in nature, these tailored messages are usually delivered to a targeted segment of a population and designed to reach the typical or average individual within this target group.

Based on extensive marketplace research, this approach is called *social marketing* and is a growing specialization in health promotion and communication. Where the need is to reach a homogenous audience with a carefully crafted message to promote awareness and change, this strategy uses modern marketing principles and methods to increase the adoption of socially beneficial practices.⁶

Health promoters are currently expanding their use of interactive, multimedia, computerized technology as a powerful channel for delivering health messages.⁷ This impersonal channel allows the presentation of general health information through a continuous stream of individual choices and allows recipients to become active participants in the communication process. Recipients can request clarification of information and more detailed, personally relevant messages from a menu of previously developed options.⁸ Text, graphics, sound, still images, animation, and full motion video are combined in software programs which mirror the structure of human thinking by branching from one thought to another and linking related information instantly through *hyperlinks*. *Hot buttons* connect the user to further content in any media form. This computerized phenomenon has spawned a new generation of health assessments available over the Internet or on CD-ROM. No health care provider is directly involved in the administration, scoring, or interpretation of these instruments. The communication process is an impersonal one and frequently one-way. The efficacy of these new tools for promoting preventive health actions or the problems associated with misinterpretation or misapplication of the information by the individual recipient has yet to be fully explored. Certainly ethical issues arise and

Figure 1. Systems View of Health Communication

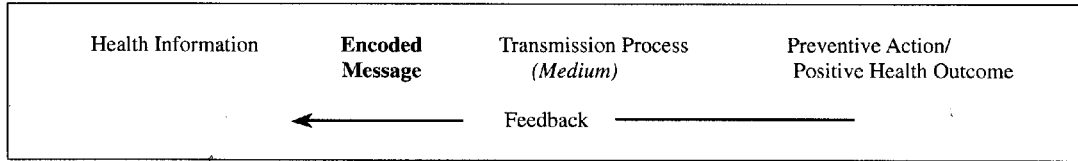


Figure 2. Impersonal Communications: Message-focused Strategies

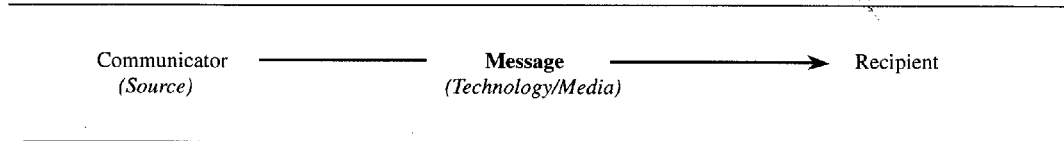


Figure 3. Impersonal Communications: Process-focused Strategies

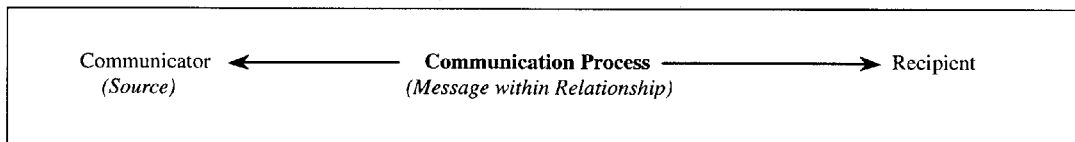
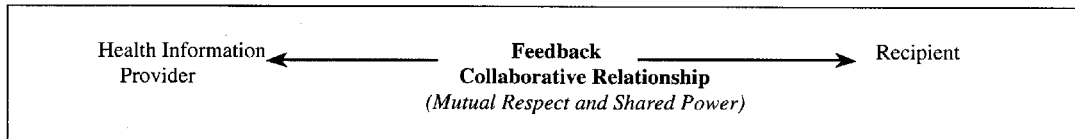


Figure 4. Mutual Participation Model



will need to be addressed as the availability and use of these Internet assessment instruments increases. One current issue is the level of privacy protection for

information disclosed by individuals online. Some businesses already develop *cookies* or packages of information about online consumers to target individuals for future marketing efforts. If self-regulation by developers of online health Websites fails, government regulations are likely to follow.⁹

Interpersonal Health Communication

Whereas social marketing and use of the media are appropriate for delivering one or more messages to a

large audience, providing and interpreting scores from HRA or HA instruments for individuals requires different skills, knowledge, and ethical considerations. Traditionally a health care provider interacts personally with the recipient of this assessment information and, as depicted in Figure 3, not only shares information but is receptive to questions and responses from the recipient.

In this *interpersonal* communication process, human to human interaction allows not only the

sharing of health information or the content, but also the simultaneous experiencing of a human relationship. Within a human relationship, emotion, empathy, and personal values are also communicated via non-verbal as well as verbal messages. Furthermore, this process allows for continuous feedback and the opportunity for the recipient to ask questions and even challenge the accuracy of the information. The content and relationship dimensions of interpersonal communication comprise interdependent components of a complex, multidimensional, dynamic process wherein both the provider of information and the recipient participate in a transactional or two-way dialogue.¹⁰

Regardless of how it is delivered to the recipient, the influence of any health information on human behavior is also complex and difficult to predict. Consumer Information Processing Theory¹¹ supports the principle that messages alone do not control behavior because communicators are active interpreting beings who apply their own past experiences, beliefs, and cultural norms to understanding and evaluating information. Since individuals possess a unique cognitive schemata of reality, they interpret the same message in idiosyncratic ways. Both family systems and current cross-cultural communication theorists also affirm that understanding the relationship between individuals is essential to knowing what is being communicated; the nature of this relationship is as significant as the content in influencing one's reaction to the message.¹² Studies in human decision-making show that our decisions are influenced by the emotions personally experienced and those expressed by significant others. Fear, suspicion, frustration, apathy, and a wide array of other feelings profoundly influence an individual's response to any information.

Recent "fear appeals" research is a good example of this phenomenon. The Extended Parallel Process Model (EPPM) provides a credible explanation of how the level of fear affects a response to a health threat message.¹³ The basic premise of the EPPM, a derivative of former fear appeal theories, is that when faced with a health threat, people try either to control the danger or threat itself (take action to reduce the threat) or to modify their emotion of fear about the danger (deny, dismiss, or ignore the danger).¹⁴ Important variables in predicting an individual's

response to danger are *perceived threat*, i.e., susceptibility to and severity of the threat, and *perceived efficacy*, i.e., effectiveness of the recommended response to lower risk and the ability to act or *self-efficacy*. Thus if perceived threat and perceived efficacy are both high, people's motivation to control danger and take action are high. If perceived threat is high and perceived efficacy is low, people attempt to control fear by rejecting or ignoring a recommended response. If perceived efficacy is high and perceived threat is low, people feel invulnerable and have little motivation to act.

HRA and HA messages frequently make people feel susceptible to a serious health threat, but don't necessarily address their level of perceived efficacy to control that threat. Recipients with low perceived efficacy will react by controlling their fear. These individuals need health risk messages that also raise their level of perceived efficacy. On the other hand, recipients with high levels of perceived efficacy and low perceived threat need messages to raise their perception of threat as well as reinforce perceived efficacy. Health professionals who communicate threatening information need to assess the recipient's level of perceived threat and perceived efficacy and then tailor their message accordingly. A simple 12-item diagnostic tool, Risk Behavior Diagnosis Scale¹⁵ is currently available to help health practitioners make an accurate assessment. Through adjusting the message to fit the perceptions of the recipient, the probability increases that action to control danger will occur. Communicators of health risk messages need to recognize that a fear appeal is likely to backfire unless the recipient's sense of efficacy to control the danger is as great or greater than the perceived threat itself.

Effective Interpersonal Communication: The Mutual Participation Model

Communication problems have primarily centered on the credibility of the source and message, comprehension of complex and technically difficult concepts and language, and focusing of recipient's attention on the message.¹⁶ To overcome these and other problems, health professionals can accurately and ethically communicate health information by using one of their greatest resources, interpersonal

communication skills. As credible sources of expertise with a primary code of ethics to "do no harm," health professionals are in a central position to positively inform recipients of their current health status and future risks and to influence them to take health enhancing actions.

Despite the growing popularity of interactive, electronic technology to deliver health information, interpersonal communication will continue to be a vital and significant process by which health professionals deliver critical health risk and assessment messages. Persuasively communicating technical information requires that the health professional recognize the Western philosophical tradition of the ethical means of persuasion which is found in the field of classical *rhetoric*, i.e., the persuasive use of language where voluntary agreement is required.¹⁷

Rhetoric, an ancient and honored art of reasonable discourse, implies mutuality, autonomy, and ethical concern.¹⁸ The concept of mutuality encompasses reciprocity of understanding, appreciation, and concern for maximizing the other's welfare, full engagement of both parties in the decision-making process, and mutuality of influence within the context of a respectful and caring relationship. Rhetoric also honors the importance of self-determination and free choice within a democratic society and the responsibility of persuaders to avoid deceptive, manipulative, and self-serving arguments. This type of interpersonal communication includes the transmission and interpretation of both rational/factual information as well as emotions and values within a relationship based on trust, authenticity, and openness to change.

In 1956 Szasz and Hollender¹⁹ identified three models of physician-patient relationship and, of those three, *mutual participation* as illustrated in Figure 4, is most closely aligned with the tradition of rhetoric.

In this model, neither compliance with orders, which implies a dominant-submissive relationship, nor adherence to recommendations, based on the assumption that the expert knows best, are the goals. Instead the provider and recipient together pursue a common goal, share equal power, and are mutually interdependent. They work in an open partnership based on mutual dignity and respect. This *patient-centered* model emphasizes the relational or affective dimension of interaction and is related to both patient satisfaction and compliance.²⁰ Research

demonstrates a low rate of compliance with physician's directives, especially when these necessitate major changes in habits or lifestyle.²¹ However, a significant positive correlation exists between physicians' expression of care and concern for the patient and the patient's satisfaction with the medical encounter and, to a lesser degree, compliance with recommended treatment.²²

While the recommendations of health professionals are only one variable influencing the health behaviors of individuals, the mutual participation model empowers both the providers and recipients of HRA and HA information to achieve *communication competence*. This competence allows participants to advance their health-related goals and to understand and appropriately accommodate each other's goals.²³

According to Friedman and Dimatteo,²⁴ the "greatest influence on people's health behaviors are the societal structures over which physicians (and other health professionals) may have little direct control." The mutual participation model at least recognizes the limits of health care providers' influence on the habits of recipients. At the same time, this model describes the best conditions under which the recipient can take an active role and assume more personal responsibility in the design, implementation, and evaluation of behavior or environmental change. Through participation in mutual decision-making processes, recipients of health assessment information can gain a psychological sense of personal control. By perceiving themselves as causal agents in achieving solutions, and by perceiving the power structure as amenable to influence, the recipient becomes empowered to create real change in his or her life.^{25,26} Addressed in most health behavior change models, *self-efficacy*, a crucial psychological characteristic needed to move toward and sustain action, is enhanced in this process.²⁷

By adopting a mutual participation orientation, health professionals in diverse settings can become more effective in helping people develop the capacity to gain reasonable control over their health and lives. In working from this model, a health professional does the following:

1. Listens to, understands, and respects a recipient's definition of the problem and possible solutions.
2. Identifies and builds upon existing strengths of the recipient.

3. Engages in a mutual decision-making process and is receptive to influence by the recipient.
4. Works as a collaborative partner and shares power or control with the recipient.
5. Teaches the recipient the skills necessary to navigate the system.
6. Mobilizes resources and advocates for and with the recipient within specific situations, e.g., the family, worksite, community.
7. Respects and shows sensitivity toward the recipient's unique personal characteristics, e.g., cultural norms and values; level of cognitive, affective, and social development; stage of readiness for change; and levels of perceived efficacy vs. perceived threat.²⁸⁻³⁴

Of particular importance is *cultural sensitivity*. Since we are becoming an increasingly diverse society, different perceptions, symbols, meanings, rules, habits, values, and patterns of communication co-exist and may contribute to a lack of shared meaning, especially when one attempts to communicate technical health assessment information. The most effective communicators of health information are those who understand the history, culture, current needs, and perceptions shared by their recipients, without at the same time reducing individuals to stereotypes. No matter how familiar health providers are with the culture and characteristics of those with whom they work, they should not underestimate the complexity of each person and the unique situations s/he faces.

It is also important for communicators of health information to realize that every interpersonal communication episode can be viewed as *intercultural*. Participants in any communication process bring to it their own language, norms, sanctions, and values from their professional and personal subcultures.³⁵ Differences based on race, ethnic background, family traditions, age, religion, region, gender, or other demographic variables can create misunderstanding. Listening carefully and asking for clarification of meaning throughout the communication process is essential for lowering the risk of misinterpretation.

Effective communication occurs when two or more people create a mutual and shared cultural environment, which is respected and understood by all parties involved. Awareness of one's own biases, stereotypes, and lack of knowledge, and the willingness to ask questions, listen, and choose flexible

goals and processes most appropriate for the recipient of HRA and HA information are factors which encourage mutual participation.

Conclusion

In facing the challenges of promoting health through the use of health assessment instruments, health professionals need to remember that the effective communication of the information depends on the quality of their interpersonal communication skills. More than just presenting data, communicators need to ask open-ended questions, listen carefully to the answers, respond in a clear and culturally sensitive way to inquiries, and build a relationship based on trust. Also assessing levels of development, stage of readiness for change, and levels of perceived threat and perceived efficacy of the recipients, and subsequently adapting the health information to best match their needs will increase the probability that recipients will become empowered to take action to enhance their health status. No one standard message is most effective. To really speak to the recipient, health information must be customized on an individual basis.

As health professionals increase their skill and knowledge of interpersonal communication, and build more genuine, empathic, and empowering relationships, they will have a more profound and positive impact on the health and lives of their patients. The essence of the quality of care is the nature of the relationship between the caregiver and the recipient. What characterizes this unique relationship is the full engagement of both participants in the decision-making process along with mutual trust, respect, appreciation, and genuine concern for the other.

Finally, as important as health risk and status assessment messages are for the recipient, health professionals must be clear that they are not just transmitters of information and promoters of health-oriented lifestyles, but human beings in relationship with other human beings attempting to maximize the realization of their own values. The ethical communication of health information does not permit professionals to view the recipient as a means to their own utilitarian ends, no matter how noble.³⁶ Ideally, effective and ethical communication is a two-way dialogue between people of equal worth who actively participate in a mutual process to reach a

decision by consensus which benefits all participants involved.

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