

THE ROLE OF MASS MEDIA COMMUNICATION ON HEALTH PROMOTION OF CARDIOVASCULAR DISEASES

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ABSTRACT

The health of populations throughout the world is seriously compromised by the ubiquitous occurrence of Cardiovascular diseases (CVD). Most important are the atherosclerotic and hypertensive diseases, mainly ischemic heart disease and cerebrovascular disease. These 2 conditions have been projected for the year 2020 to rank first and second in frequency among causes of death, first and third among causes of years of life lost, and first and fourth among causes of disability-adjusted years of life lost. Together, they dominate all other contributors to the global burden of death and disability. The “established” or “traditional” CVD risk factors—high blood pressure, adverse blood lipid profile, diabetes mellitus and obesity and

smoking—have been addressed in recommendations, policies, and guidelines beginning a half-century ago. The Global burden of disease study has demonstrated that the commonly recognized risk factors jointly account for 80% of the burden of ischemic heart disease and 65% of the burden of stroke globally. Public health professionals have begun to explore the use of mass media as a means for health promotion. The framework encompasses four distinct levels of audience such as individuals, networks, organisations, communities. Media can be used as educator, supporter, program promoter, supplement for health promotion. Bridging the gap between micro level interventions and macro level is one of the greatest challenges facing health promotion. simultaneous intervention across multiple levels is needed to harness the strengths of both micro and macro approaches. The movement called “civic journalism” or “the new public journalism” seeks a different role for the media that commit them more explicitly to seeking the public through proactive partnerships with

community groups. There by explore partnerships as the basis for empowering media, public, community in the cause of CVD prevention, health promotion.

KEYWORDS: Mass Media Communication, Cardiovascular Diseases (CVD), Civic Journalism, Stroke and Public Health.

INTRODUCTION

Heart disease describes a range of conditions that affect the heart. Diseases under the heart disease umbrella include blood vessel diseases, such as coronary artery disease; heart rhythm problems (arrhythmias); and heart defects by birth (congenital heart defects), among others.

Cardiovascular disease generally refers to conditions that involve narrowed or blocked blood vessels that can lead to a heart attack, chest pain (angina) or stroke. Other heart conditions, such as those that effect your hearts muscle, valve or rhythm, also are considered forms of heart disease (<https://www.mayoclinic.org/diseases>).

There is an urgent need to improve monitoring and management of risk factors through community-wide, primary care-linked initiatives, increase the evidence base for community-based prevention strategies, further develop and evaluate promising program components, and develop new approaches to support healthy lifestyle behaviors in diverse age, socioeconomic, and ethnocultural groups (Tina Karwalajtys and Janusz Kaczorowski, 2010).

Mass media roles in promoting cardiovascular health in the context of learnt learned from major U.S. community studies, changing media technology, and emergent models of media-community partnerships are discussed. Three principal issues are explored: (1) implications of the current expansion, convergence, and harmonization of mass media technology;(2) recent trends in media coverage of heart disease and population practices; and (3) implications for the future relationship between the media and public health in cardiovascular health promotion (John *et al.*, 1999).

It is common clinical knowledge that stroke and certain dementing illnesses (e.g., Alzheimer's disease, vascular or mmmulti-infract dementia), which are the most frequent causes of acquired cognitive and communicative disorders are regularly predated by cardiovascular disease (CVD). (Laura Murray (solr / searchresults.aspx? author = Laura + Murray).

CVD comprises a variety of medical conditions that compromise the well-being of the cardiac and/or circulatory systems. According to the American Heart Association (AHA, 2006), CVD is the most frequent cause of death in the U.S., killing more than 2,500 individuals each day.

Although the prevalence of most CVD risk factors has been decreasing over the past few decades, there is significant concern over escalating rates of diabetes (AHA, 2006). For example, the prevalence of diabetes has increased 60% since 1990. Approximately 171 million Americans are now living with the disease (Mokdad *et al.*, 2003).

Findings from a growing literature indicate an intimate relationship between the integrity of the central nervous system and cardiovascular well-being (Lim *et al.*, 2004 and Verhaegen *et al.*, 2003).

Literature increasingly documents a variety of cognitive and communicative consequences of CVD. Furthermore, even prior to a CVD diagnosis, having more than one risk factor can jeopardize an individual's cognitive and communicative abilities (Hassing *et al.*, 2004 and Pavlik *et al.*, 2005). Few investigators have explored whether CVD might negatively affect communication abilities, initial research suggests that hearing and language might be vulnerable. For example, reduced pure tone thresholds and signs of cochlear impairment have been reported (e.g., Torre *et al.*, 2005).

Cardiovascular health programs in communities: Although community-based CVD prevention interventions have the potential to shift the burden of risk in populations, the effectiveness of directly assessing BP for elevated levels has yet to be established. In fact, although community-based BP screening programs have a long history, relatively few of them have been rigorously evaluated (Tina Karwalajtys and Janusz Kaczorowski, 2010).

Integration of community resources: Multidisciplinary teams are increasingly favored as a means of delivering comprehensive primary care. Teams might include, eg, family physicians, nurse practitioners, social workers, dietitians, pharmacists, and other allied health professionals. (Tina Karwalajtys and Janusz Kaczorowski, 2010).

Socioenvironmental approaches: The need to focus on primary and secondary prevention is important, given the preponderance of evidence for risk reduction through lifestyle modification and pharmacologic treatment (Tina Karwalajtys and Janusz Kaczorowski, 2010).

Biomedical research has produced remarkable insights into the causes, treatments, and prevention of heart disease in the past 40 years. NHLBI faced such a situation in 1972 when results from several clinical investigations provided convincing evidence that reducing high blood pressure reduced the risk of cardiovascular disease for millions of hypertensives. This new knowledge provided the rationale for establishing the National High Blood Education Program (NHBPEP) (Terry Bellicha and John McGrath., 1990).

From their inception, NHBPEP and NCEP were conceived as cooperative programs between NHLBI and national health organizations. At the core of both national education programs is a coordinating committee comprised of representatives from about 35 national professional, public, and voluntary health agencies. The coordinating committees follow a consensus building process so that when NHBPEP or NCEP adopts a position, develops a report, or sponsors education activities, the authority and prestige of 35 national organizations and NHLBI support the undertaking.

Reviews suggest the absolute risk approach may improve clinical management, patients' risk perception and patients' preventive intentions (Sheridan and Crespo Sheridan, 2008). However, many General Practitioners (GPs) do not use absolute risk consistently for CVD risk assessment and management (Sposito *et al.*, 2009).

Cardiovascular diseases, principally coronary heart disease and stroke, remain the leading causes of death and disability in industrialized countries. They are preventable and reversible through the modification of risk factors, including elevated blood lipids, elevated blood pressure, cigarette smoking, and sedentary life-style (Luepker *et al.*, 1994).

Community analysis and organization methods were used to engage community leaders and organizations as active participants in the intervention programs; this effort resulted in their active involvement, gradual environmental change to support risk reduction, and community planning for program continuation. Mass media were used to increase individual exposure to the Minnesota Heart Health Program risk factor messages, establish awareness of the program, and increase the salience of the program messages. Health professionals in the education communities were involved through their local organizations and preventive practice advisory committees, and they served as role models and opinion leaders.(Russell V. Luepker *et al.*, 1994).

NHLBI's National Education Programs: While the specific activities differ in each program, both NHBPEP and NCEP share similar program elements. Delineating the program elements shows where and how mass media fit into a national education program.

Developing programs and products

The most prominent products of the national education programs are the guidelines developed for health professionals for detecting, evaluating, and treating patients who have either high blood pressure or high blood cholesterol, or both. The guidelines form the medical foundation of the programs, and are developed through the consensus process by a panel of experts. The guidelines are distributed widely to health professionals and form the basis for developing a variety of other products targeted to patients and the general public. Guidelines have been developed for NHBPEP and NCEP.

Fostering local programs

While national education programs can provide overall guidance, State, local, and community programs actually carry out activities that reach individuals on a one-to-one basis and reinforce national messages. The national programs provide materials, programmatic ideas, and models that support the education efforts which are conducted by local organizations.

Sponsoring national conferences: National conferences provide a way to maintain and cultivate a network of people throughout the country who are involved in and committed to the goals of the national programs. National program representatives help plan and play key roles in regional conferences on high blood pressure and cholesterol. The conferences encourage an ongoing interchange about the needs of the local program providers and the plans for the national programs to meet those needs.

Providing news media with current information

Within the last 12 months, several articles in national newspapers were devoted to high blood pressure and cholesterol, such as the New York Times (Bennett, 1989), the Washington Post health section (Russell, 1990), and USA Today (Friend, 1990). Articles in national publications either citing NCEP or reflecting key education messages of NCEP were written virtually every week, sometimes more often. In most cases, staff of the national programs provided information media representatives with information for their stories and often helped them outline the issues. The national news media, particularly the New York Times and the Washington Post, are at the top of a hierarchy of imitation that influences the news

agenda for broadcast and reporting around the country (Meyer, 1988). Extensive coverage helped keep high blood pressure and cholesterol on the media agenda and in the public eye, and reinforced the other thrusts of the education programs.

Developing products for the mass media

The mass media products of NHBPEP and NCEP are radio and television PSAs distributed to nearly all radio and TV stations through the country three times a year; print advertisements distributed to 150 national publications twice a year; posters distributed in the tens of thousands to State and county health departments; airport advertisements placed in airports around the country as a public service; a half-hour TV program on the three cardiovascular risk factors, high blood pressure, high blood cholesterol, and smoking, which TV stations can localize for their communities.

Influence of Communication Research

For more than 50 years, communication campaigns have been used to influence peoples' attitudes and behaviors on a wide variety of subjects including the environment, safety, health, and policy issues. During this period, research has helped practitioners develop more sophisticated and effective campaigns. And the paradigm of campaign effects has evolved from an expectation of limited effects to an expectation of specific effects for well designed and executed campaigns.

In a review of research literature on communication campaigns, Rogers and Storey (Rogers and Storey, 1987) observed that communication campaigns in the 1940s and 1950s were thought to have limited effects. One of the earliest and best known communication campaigns that incorporated the growing body of campaign research was the Stanford Three Community Study (Farquhar, *et al.*, 1977). Other risk-reduction behaviors, such as smoking cessation, required mass media supplemented with skills training, face-to-face communication, social support, and other interventions, to be successful (Flora, *et al.*, 1989).

Campaign Development

The campaign development process is based on the fundamentals of social marketing. NHLBI's approach is a systematic means of defining communications issues and solving communications problems. The process begins by considering the perspective of the intended audience and designing strategies that contribute to behavior change.

Data review

The first step is a review of data on the prevalence of the problem and the knowledge, awareness, attitudes and behavior of the proposed target audience. From this review, the definition of the target audience is refined, audience segments may be selected, and major issues and messages are determined. In the case of a mature campaign, such as the high blood pressure effort, available new data are used to refine the ongoing campaign strategy and determine the need for incorporating new messages or audience segments.

Concept development

The next step is to develop concepts, themes, and specific messages for the campaign. Consistent with NHLBI's objectives of using the campaign to support overall public education goals and involving its partner organizations, the concept development stage draws on the advice of outside experts.

Message testing and field review

Material for all campaigns undergoes message testing using various techniques appropriate for the issue, product, and audience in question. Testing helps measure audience attention and recall of the material, and whether or not it is understandable, believable, credible, and relevant. The campaigns employ standard pretesting techniques typical of those used by commercial advertisers and other social marketing campaigns. These include focus groups, as well as central location intercept interviews. Focus groups are groups of 8 to 10 persons, guided by a trained moderator, discussing predetermined issues or questions. Focus group results are used to gain insights into beliefs, motivations, and use of language. Responses cannot be considered representative of the public or projectable to the general population.

Central location intercept interviews are used to obtain more quantitative information than can be obtained in focus groups, since the number of respondents is larger, typically about 60 to 100 persons in each location. However, even these results are not projectable to a larger population. In this technique, interviewers are stationed at high-traffic places, such as shopping malls, and conduct brief interviews with passers-by, who are screened to ensure that they meet the criteria for the intended audience.

Gatekeeper review, while not strictly a pretesting technique, is another opportunity to gain advice on messages and to involve NHLBI's program partners in the campaigns. Members of the cholesterol and high blood pressure coordinating committees are asked to review concepts

and scripts. While care is taken not to create materials by committees, the views of those in the field are considered important in developing the final campaign. Since the materials reach the intended audience through these intermediaries, they must find the campaign acceptable, relevant, and credible. If those in the field find a campaign inappropriate, even if it tests well with the intended audience, it loses some of its effectiveness and utility.

Production and distribution

Following field review, campaign materials are revised if necessary and put into final production. A typical year's campaign consists of a series of television and radio public service announcements, print advertisements, posters, and collateral print materials. Distribution is another key area in which NHLBI involves the field in the campaign process. The campaign materials are distributed through a network based in State departments of health, typically in the chronic disease, health education, or public affairs units. The system, begun in 1984, provides for each State to appoint a person to manage the campaign information distribution process on the local level. Spots are tagged with local identification as specified by the State. Thus, the campaigns give visibility to State and local programs and their release can be coordinated with ongoing education efforts in each State. The campaign then is used as it was intended, that is, as one element in broader community education programs. The identification with a local agency increases the likelihood that broadcast station public service directors will air the spots, since they typically prefer locally sponsored causes to national ones.

As in the high blood pressure campaigns, the qualitative results of target audience research and national projectable survey data follow similar trends. In both sources, general awareness is high, but consumers lack specific knowledge that can lead to behavior change, especially concerning a cholesterol-lowering diet. In light of this, future efforts to educate the public about cholesterol levels will continue to focus on detection and will begin to deal with dietary issues (Terry bellicha and John McGrath., 1990).

The Symptoms of heart disease: Common symptoms include chest pain, breathlessness and palpitations. The chest pain common to many types of heart disease is known as angina, or angina pectoris Heart attacks can also occur as a result of different types of heart disease. The signs of a heart attack are similar to angina except that they can occur during rest and to be more severe. The symptoms of a heart attack can sometimes resemble indigestion (<https://www.medicalnewstoday.com/articles/237191.php>).

Other symptoms of a heart attack include

- Pain that travels through the body, for example from the chest to the arms, neck, back, abdomen, or jaw
- Lightheadedness and dizzy iness
- Profuse sweating
- Nausea and vomiting
- Heart failure is also an outcome of heart disease, and breathlessness can occur when the heart becomes too weak to circulate blood.

Some heart conditions occur with no symptoms at all, especially in older adults and individuals with diabetes. The term 'congenital heart disease' covers a range of conditions, but the general symptoms include

- Sweating
- High levels of fatigue
- Fast heartbeat and breathing
- Breathlessness
- Chest pain
- A bluish tint to the skin
- Clubbed fingernails

In severe cases, symptoms can occur from birth. However, these symptoms might not develop until a person is older than 13 years.

Causes

Heart disease is caused by damage to all or part of the heart, damage to the coronary arteries, or a poor supply of nutrients and oxygen to the organ.

Some types of heart disease, such as hypertrophic cardiomyopathy, are genetic. These, alongside congenital heart defects, can occur before a person is born.

lifestyle choices that can increase the risk of heart disease are

- High blood pressure and cholesterol
- Smoking
- Overweight and obesity
- Diabetes

- Family history
- A diet of junk food
- Age
- A history of preeclampsia during pregnancy
- Staying in a stationary position for extended periods of time, such as sitting at work

Having any of these risk factors greatly increases the risk of heart disease. Some, such as age, are unavoidable.

Treatment: There are two main lines of treatment for heart disease. Initially, a person can attempt to treat the heart condition using medications. If these do not have the desired effect, surgical options are available to help correct the issue.

Medication

A very wide range of medication is available for the majority of heart conditions.

The main medications in use are

- Statins, for lowering cholesterol
- Aspirin, clopidogrel, and warfarin, for preventing blood clots
- Beta-blockers, for treating heart attack, heart failure, and high blood pressure
- Angiotensin-converting enzyme (ACE) inhibitors, for heart failure and high blood pressure

Surgery: Surgery is an intensive option from which it can take a long time to recover. They can be effective in treating blockages and heart problems for which medications may not be effective, especially in the advanced stages of heart disease.

The most common interventions include

- Angioplasty.
- Coronary artery bypass surgery.
- Pacemakers that regulate a heartbeat.
- Heart transplant.

Prevention

Some types of heart disease, such as those that are present from birth, cannot be prevented.

Other types, however, can be prevented by taking the following measures

- Eat a balanced diet. Stick to low-fat, high-fiber foods and be sure to consume five portions of fresh fruit and vegetables each day. Increase your intake of whole grains and reduce the amount of salt and sugar in the diet. Make sure the fats in the diet are mostly unsaturated.
- Exercise regularly. This will strengthen the heart and circulatory system, reduce cholesterol, and maintain blood pressure.
- Maintain a healthy body weight for your height. Click here to calculate your current and target body mass index (BMI).
- If you smoke, quit. Smoking is a major risk factor for heart and cardiovascular conditions.
- Reduce the intake of alcohol. Do not drink more than 14 units per week.
- Control conditions that affect heart health as a complication, such as high blood pressure or diabetes.

(<https://www.medicalnewstoday.com/articles/237191.php>).

Factors for health promotion in Cardiovascular diseases

- Quit smoking.
- Control other health conditions, such as high blood pressure, high cholesterol and diabetes.
- Exercise at latest 30 minutes a day on most days of the week.
- Eat a diet that's low in salt and saturated fat
- Maintain a healthy weight
- Reduce and manage stress
- Practice good hygiene.

(<https://www.mayoclinic.org/diseases-conditions/heart-disease/symptoms-causes/syc-20353118>).

CONCLUSION

First, the campaigns are only one aspect of larger programs of professional, patient, and public education designed to reduce the risk of cardiovascular disease. However, the campaigns are an important aspect of the larger programs and are designed to play the role that communication research shows can result in the most effective contribution. GPs with different ways to explain absolute risk, in order to achieve different communication aims, may improve their use of absolute CVD risk assessment in practice.

Except for diabetes, CVD risk factors have declined considerably over the past 40 years in all BMI groups. Although obese persons still have higher risk factor levels than lean persons, the levels of these risk factors are much lower than in previous decades. Educating the public about early access to emergency services when a patient develops acute chest pain can help save lives. The goal for the treatment of heart disease is to maximize longevity and quality of life. Preventing cardiovascular disease is a lifelong commitment to control blood pressure, high cholesterol, quit smoking and diabetes.

Individuals who present with one or more forms of CVD, and even those who present with only CVD risk factors are at risk for a number of cognitive and communicative difficulties. CVD encompasses a variety of disorders that can compromise the integrity of hearing, language, and other cognitive abilities in individuals of all ages. Traditionally, clinicians have been involved only when CVD results in a neurological event such as stroke.

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