

MEETING OF THE ASSOCIATION OF MILITARY SURGEONS

The 88th convention of the Association of Military Surgeons of the United States will be held at the Convention Center in San Antonio, Tex., November 1-5.

Contact T. A. Glasgow, HQ, Aerospace Medical Div., Brooks Air Force Base, TX 78235; or call (512) 536-3656.

CYTOLOGY

The 29th annual scientific meeting of the American Society of Cytology will be held at the Chase-Park Plaza Hotel in St. Louis, November 2-7. Contact Dr. Warren R. Lang, 130 S. 9th St., Ste. 810, Philadelphia, PA 19107; or call (215) 922-3880.

GYNECOLOGIC ENDOSCOPY AND MICROSURGERY

The 10th annual meeting of the International Congress on Gynecologic Endoscopy and Microsurgery will be held at the Hyatt Regency in Phoenix, November 4-8.

Contact Dr. Jordan M. Phillips, 11239 S. Lakewood Blvd., Downey, CA 90241; or call (213) 862-8181.

WOMEN IN MEDICINE

Leadership mini-workshops for women in medicine will be held at the University of California-Los Angeles Conference Center on November 3 and 4. The fee is \$25.

Contact Sue Lopez, 2302 E. Speedway, Suite 206A, Tucson, AZ 85719; or call (602) 795-2677.

TUBERCULOSIS CHEMOTHERAPY

The Seventh Asia-Pacific Congress on Diseases of the Chest will be held at the Regent Hotel in Hong Kong on November 3. The topic will be "Tuberculosis Chemotherapy in the 1980's."

Contact HealthScan Inc., Valley Rd. at Cooper Ave., Upper Montclair, NJ 07043; or call (201) 744-4755.

"COMPUTER TOMOGRAPHY SCANNING OF THE BRAIN"

A conference entitled "Computer Tomography Scanning of the Brain" will be held at the National Institutes of Health in Bethesda, Md., November 4-6.

Contact Dr. Michael D. Walker, Stroke and Trauma Program, National Institute of Neurological and Communicative Disorders and Stroke, Federal Bldg., Rm. 8A08, 7550 Wisconsin Ave., Bethesda, MD 20205; or call (301) 496-2581.

VASCULAR SURGERY

The Eighth Annual Symposium on Current Critical Problems in Vascular Surgery will be held at the Grand Hyatt Hotel in New York, November 5-7.

Contact the Office of Professional Education, Montefiore Hospital and Medical Ctr. and Albert Einstein College of Medicine, 111 E. 210th St., Bronx, NY 10467; or call (212) 920-6676.

ENDOCRINOLOGY

The Ninth New England Endocrinology Conference will be held at the Gilman Biomedical Center, Dartmouth Medical School, in Hanover, N.H., on October 31.

Contact Prof. Thomas B. Roos, Department of Biological Sciences, Dartmouth College, Hanover, NH 03755; or call (603) 646-3850.

ALCOHOL-INDUCED LIVER DISEASE

A course entitled "Alcoholism and Alcohol-Induced Liver Disease" will be held at the Hyatt Regency in Chicago on November 5 and 6.

Contact Charles B. Slack, 6900 Grove Rd., Thorofare, NJ 08086; or call (609) 848-1000.

SPECIAL REPORT**HEALTH AND MEDICINE ON TELEVISION**

In recent years, the medical community has become increasingly aware of the role of sociocultural influences — "life-style factors" — in shaping health-related conceptions and behavior. Our ongoing research project, called Cultural Indicators, has investigated the role of television in this process. The results indicate that television has become the mainstream of culture in the United States, bringing otherwise disparate and divergent styles of life closer together. The conceptions, values, and behavior that television cultivates in viewers appear to reflect the most recurrent patterns of representation found in its dramatic entertainment programs.

Americans spend more time watching television than doing anything else except sleeping, and television has cut into that too. Apart from the effects of the number of hours spent viewing — inactivity and lack of exercise — television's incidental health-related images and messages (i.e., those embedded in entertainment programs) may make critical contributions to health-related conceptions and behavior.

Our long-range project received its major support 10 years ago from the National Institute of Mental Health and the Surgeon General's Scientific Advisory Committee on Television and Social Behavior. The Surgeon General's recent emphasis on prevention of disease and on the need for a better understanding of culturally sustained health concepts and practices¹ prompted us to undertake a pilot study to investigate certain aspects of television's messages about health and their possible impact on viewers.

This is a brief summary of the results of that study, supplemented by relevant findings of other investigators. A more detailed report of our investigations will be released by the U.S. Public Health Service later this year.²

METHODS

The study used our 10-year cumulative Cultural Indicators data bank on the content of dramatic television and our three-year data bank on commercials; it included a special analysis of portrayals of selected aspects of medicine, illness, nutrition, drinking, smoking, body weight, and safety in one week of dramatic programs. Trained monitors coded videotaped samples of programs and commercials. The methodology of the content analysis, described elsewhere in detail,³ included tests of the monitors' reliability. Suggestions about effects on viewers' concepts and behavior came from our analyses of viewers' responses to questions about health and medicine.⁴

PRIME-TIME MAYHEM

The world of prime-time (8 to 11 p.m.) and of children's weekend daytime (8 a.m. to 2:30 p.m.) net-

work dramatic programming is by and large a man's world of action, power, and danger. Our analysis of nearly 5000 major characters and some 14,000 minor ones in over 1600 programs reveals consistent patterns: men outnumber women by at least three to one; young people make up one third of their actual proportion in the population; characters over 65 make up 2 per cent of the television population but 11 per cent of the actual population; professionals, lawbreakers, law enforcers, and entertainers greatly outnumber all other working people; crime is at least 10 times as frequent as in the real world; and an average of five acts of violence per hour of prime-time and 18 acts per hour in children's weekend daytime programs victimize half of prime-time and over two thirds of daytime major characters.

Pain, suffering, or medical help rarely follow this mayhem. On the average, only 6 to 7 per cent of major characters have problems that require any treatment. In children's programs, despite the greater violence, only 3 per cent of characters are injured or sick enough to require treatment.

Physical illness and injury seem to affect heroes and villains, males and females, and other groups of characters alike. Physically handicapped characters are few and tend to be older, less positively presented, and more likely to be victimized. However, the most peculiar dramatic functions characterize those who are presented as mentally ill.

MENTAL ILLNESS

To the extent that the behavior of mentally ill persons violates some social norms, they suffer the fate of all those whom a culture labels as deviant. But the cultural image of mental illness has some additional components. Among these are unpredictability, danger, and sin. Earlier studies of mental illness in popular fiction, news reports, and other means of communication suggested that the image of the mentally ill in the mass media was further removed from the characteristics described by mental-health professionals than was the image held by the general public.⁵ In other words, instead of mediating between the experts and the public, the media may pull the public image away from the image of the experts, in the direction of traditional prejudice.

Our pilot study found that about 17 per cent of prime-time programs involve some important depiction or theme of mental illness. About 3 per cent of major characters are identified as mentally ill, as mental patients, or as former mental patients. In the late evening, which has more violent programs, the percentage doubles.

Although relatively few in number, mentally ill characters are the most likely both to commit violent acts and to be victimized. Among all prime-time dramatic characters, 40 per cent of those characterized as "normal" are violent, but 73 per cent of those characterized as mentally ill are violent. Forty-four per cent

of the normal characters, but 81 per cent of the mentally ill, are victims of violence.

Ten per cent of the normal characters are killers and 5 per cent are killed. But 23 per cent of the mentally ill are killers and 23 per cent are killed. The approach is "a tooth for a tooth"; no group other than the mentally ill suffers (and is shown to deserve) such a fate.

Although only 24 per cent of all prime-time female characters are violent, 71 per cent of mentally ill prime-time female characters are violent. The label of mental illness not only makes women almost as violent as men but also makes women more vulnerable to victimization. For every 10 normal male victims of violence there are 17 mentally ill male victims; for every 10 normal female victims of violence there are 25 mentally ill female victims.

DOCTORS, NURSES, AND PATIENTS

Health professionals dominate the ranks of television professionals, numbering almost five times their actual proportions. The typical viewer sees about 12 doctors and six nurses each week during prime time alone, including three doctors and one nurse in major roles. However, these characters are virtually absent from weekend daytime (children's) programs.

As compared with other professionals, doctors on television are relatively good, successful, and peaceful. Less than 4 per cent of television doctors (major characters) are characterized as evil — half the percentage found in other professions. Personality ratings show doctors as a bit more fair, sociable, and warm than most characters. Doctors are also rated as smarter, more rational, more stable, and fairer than nurses.

McLaughlin found that television doctors "symbolize power, authority, and knowledge and possess the almost uncanny ability to dominate and control the lives of others."⁶ In 40 per cent of medical cases, television doctors risk status or prestige to perform an unusual or dangerous treatment; in 13 per cent they disobey a rule, convention, or advice — always succeeding, against odds — to treat or cure some disease or to settle some crisis.

The typical male doctor confronts the typical female nurse and the usually female and younger patient from a position of daring and authority. "Female patients are twice as often bedridden as male patients. A common image (46 per cent) of female patients is that of a bedridden woman with a strong man — husband, doctor, or romantic partner — at her bedside."⁶

The work of the television doctor is one of personal and almost mystical power over not only the physical but also the emotional and social life of the patient. "If he just followed the rules," concludes McLaughlin, "or left private matters to the patients themselves, or did not risk life, limb, love, or money, things would not work out."

DAYTIME SERIALS

The world of daytime serials is one of interior turbulence, both physical and psychic. Over half of the daytime weekday schedule (10:00 a.m. to 4:30 p.m.) is devoted to a dozen or more serials playing to an audience of over 55 million. A study of all daytime serials aired in 1977 found that "sickness and injury is a most important and pervasive problem."⁷ Nearly half of all characters are involved in health-related occurrences. The principal causes of death are homicides, car accidents, and heart attacks. Although men are sick and hurt more often, women are more likely to die, especially of a bad (if not broken) heart. Four times as many women (2.3 per cent) as men die of cardiovascular disease. Half the pregnancies result in miscarriages, and 16 per cent in the death of the mother.

Not only are professionals greatly overrepresented in daytime serials but as Downing found, 68 per cent of all professionals are in the field of medicine,⁸ and as Perloff observed, about 80 per cent of the men are doctors.⁹ Many of them work in hospital settings, in such long-running shows as *The Doctors* and *General Hospital*, and others come to the rescue when life is at stake and other forms of help and healing fail. Even in daytime serials presenting strong and capable women, the ultimate miraculous healer is the male doctor.

Almost all the action in daytime serials takes place indoors and consists of talk. Katzman's analysis of 844 conversations found 277 occurring in living rooms, with health as the most frequent topic.¹⁰ The second-ranking location was a doctor's office, and the fourth a hospital room (a business office was third). Overall, aside from small talk and general business or professional conversation, health was the most prevalent topic of conversation. Men talked to women more than twice as frequently as men talked to men and as women talked to women, put together.

Although it is clear that much of the talk is not strictly about health, it may well be that daytime serials are the largest source of medical advice in the United States.

FOOD AND NUTRITION

Our pilot study of a typical week's prime-time dramatic programs reveals that eating, drinking, or talking about food occur an average of nine times per hour. More than three quarters of all dramatic characters (about 25 each night) eat, drink, or talk about food, often more than once.

Grabbing a snack (39 per cent of all eating-drinking episodes) is almost as frequent as eating breakfast, lunch, and dinner combined (42 per cent). In weekend-daytime children's programs, snacks go up 45 per cent and regular meals decline to 24 per cent, with "other meals" making up the rest. The snack is fruit in only 4 to 5 per cent of these episodes.

In episodes involving drinking, the most prevalent

beverages are alcoholic. Coffee and tea are next.

Kaufman analyzed 10 top-rated prime-time programs and the commercials included in them.¹¹ She found that by far the most references to beverages (particularly alcohol) and to sweets occurred in the programs themselves. On the other hand, references to fruits and vegetables in commercials outnumbered references to these foods in programs by a ratio of more than three to one. The comparison exposed a contradiction between dramatic requirements and motivations (such as reward, punishment, or bribery) and recommended eating habits.

Our analysis of commercials aired during prime time and weekend daytime found that food advertising accounted for more than a quarter of such commercials. Sweets, snacks, and non-nutritious ("junk") foods made up nearly half the food commercials. Objective nutritional appeals were in only 9 per cent of these commercials.

OBESITY, SAFETY, SMOKING, AND DRINKING

Prime-time characters are not only healthy (though often vulnerable to inflicted injury) but despite all the mayhem, eating, and drinking, are also relatively sober, safe from accidents, and slim at all ages. They hardly ever need glasses (even in old age, only one in four wears them) and rarely suffer impairment of any function.

Obesity, a problem that plagues from 25 to 45 per cent of this country's population, depending on the estimate, claims few victims on television. The dramatic functions of being fat are limited to certain characterizations, often further aggravating its prejudicial associations. Our analysis of a week's sample of dramatic programs found that fewer than 6 per cent of all males and 2 per cent of all females were obese (none of them was a leading character).

Despite all the violence on television, the leading causes of violent injury and death — industrial and highway accidents — are rare. Moreover, television characters rarely take precautions against them.

Driving and riding in cars are shown as by far the leading means of transportation. Public transportation is hardly ever used. Our study found only one instance in which a character used a seat belt; that was followed by wild stunt driving without a belt.

More than one in 10 commercials involve driving or another use of a car in which seat belts could be shown. Our analysis found 283 such situations; seat belts were shown or used in only 65 (23 per cent) of them.

The impression of some people that television characters smoke a great deal is unwarranted and may have been derived from old movies. We found that only 11 per cent of television males and 2 per cent of television females (major characters) smoked in prime time. There is less smoking in situation comedies, more in crime and adventure programs, and the most in serious drama (including movies), in which 13

per cent of men and 4 per cent of women smoke.

In contrast to the relatively limited amount of smoking, alcohol is hard to escape on television. Dillon found it shown or mentioned in 80 per cent of prime-time programs (aside from commercials).¹² In a recent review of research on alcohol use on television, Greenberg concluded:

During no hour of the evening does the alcohol usage rate on fictional television series average less than 1½ acts per program hour. And during the later hours of prime-time — 9–11 p.m. — no hour goes by with an average of less than three instances of usage. One can find no program type, save Saturday mornings, with less than one or two instances per hour, and the more heavily watched types of situation comedies and crime shows exceed four acts per hour during the most recent season analyzed. Conservatively, a youngster, too young to drink, will be exposed to 10 drinking acts on television during a day's viewing.¹³

Garlington found the world of daytime serials, turbulent and troubled as it is, even more saturated with alcohol.¹⁴ The soap operas averaged almost three one-minute periods per each 21-minute program during which an alcohol-related event occurred — a rate of about six per hour.

Who are the drinkers? Our analysis of prime-time major characters found that 36 per cent (39 per cent of men and 32 per cent of women) drink. The percentages go down slightly in situation comedies but rise in serious drama. In crime and adventure programs, the percentage of women drinkers (48 per cent) is actually higher than that of men drinkers (41 per cent). Nevertheless, only about 1 per cent of characters are portrayed as having a drinking problem or alcoholism.

HEALTH IMPLICATIONS

What are the implications for health of exposure to these messages embedded in daily television fare?

Answers to this question are scarce, and our understanding of the process of learning from television is just beginning. Although television is only one of many influences in life, it may well be the single most common and pervasive source of health information.

We know that television tends to monopolize the free time of less educated, lower-income groups. A study conducted by General Mills shows that these groups have the poorest opportunities for health and nutrition and are the most in need of valid information about health.¹⁵ The study also found that next to doctors, television was the most frequently cited source of information about health.

Our research has found that with all other factors held constant, those who watch more television are more likely to be complacent about eating, drinking,

and exercise.² We have also found that high confidence in doctors is more likely to be found among frequent viewers than infrequent viewers. Television may thus contribute to a syndrome in which high levels of confidence in the medical profession seem to justify "live-for-today" attitudes (and sales) and lack of interest in prevention; if any problem arises, the doctor will surely provide the cure.

The pattern of findings suggests that more frequent viewers share some dysfunctional concepts and practices. Characteristic features are poor nutritional knowledge and behavior, general complacency about health, and high confidence in the medical community.

The cultivation of complacency, coupled with an unrealistic belief in the "magic of medicine," is likely to perpetuate unhealthy life styles and to leave both patients and health professionals vulnerable to disappointment, frustration, and litigation.

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