Television Advertising and Drug Use

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Introduction

The role of television advertising in promoting widespread drug use is an issue of grave public concern. While the degree to which advertising of nonprescription over-the-counter (OTC) drugs contributes to drug use and abuse has not been clearly established scientifically, it is generally agreed that such promotion contributes to public misconceptions as to the utility and need for drugs, reinforces values, attitudes, and behaviors that encourage drug use, and thereby exacerbates this major public health problem.[1-3] In promoting OTC drugs for the relief of everyday symptoms such as pain, nervousness, or lethargy, drug companies may deceive the public into thinking that drugs are an easy way out of everyday discomfort.[4]

The potential impact of the use of television for drug advertising is suggested by a 1973 Roper survey finding that television is considered by Americans to be the most believable of all mass media.[2] Many children learn about drug taking from newspapers and television.[5, 6] Drug manufacturers apparently are convinced of the power of TV in drug promotion since four out of the top five TV advertisers are drug companies, and one out of every eight commercials is for a drug or remedy.[1]

In response to various investigations into misleading and deceptive drug-advertising practices,* the Code Authority of the National Association of Broadcasters (NAB) devised a set of guidelines for the voluntary self-regulation of drug advertising by the drug and television industries. These guidelines became effective on September 1, 1973.

In the spring of 1973 the Subcommittee on Drugs and Other Toxic Substances of the Scientists' Committee for Public Information (SCPI) undertook to study TV drug advertising as a factor in encouraging the abuse of legitimate and illegitimate drugs. Since it was judged that widespread conformity to the NAB guidelines might appreciably reduce the possible tendency of drug commercials to encourage drug misuse, the subcommittee decided to focus its study on the guidelines, using before-and-after evaluations of drug commercials to determine the effect of the guidelines on drug advertising. At the same time, we decided to make further evaluations of the commercials in terms of two other important criteria proposed by the Consumers Union, as well as subjective overall ratings of the effect of the ads on the use of OTC drugs.

The drug subcommittee's study provides an independent monitoring and evaluation of the effectiveness of the guidelines in minimizing encouragement of the use of drugs for other than specified medical needs. It compares compliance to specific criteria by a sample of TV drug ads aired before the guidelines went into effect and a sample of ads aired after the guidelines went into effect.

Method

A commercial television monitoring service was employed to monitor drug commercials on the three major New York City stations: Channel 2 (CBS), Channel 4 (NBC), and Channel 7 (ABC). The term "drug commercial" was defined for the monitoring service as "any commercial for a substance to be ingested or inhaled for relief of symptoms." Two time periods were monitored—before the NAB guidelines went into effect (Phase I), and after the guidelines went into effect (Phase II). Phase I was a seven-day week in June 1973; Phase II was a seven-day week in March 1974.

The monitoring service supplied a photoboard summary of each different drug commercial shown on the three stations during the seven-day time periods of Phases I and II. These photoboards were prepared from off-the-air videotape recordings of the monitored programs. Each photoboard shows a sequence of photographs depicting key scenes from the commercial, with the complete text of the commercial as captions. Photoboards were provided for 43 different commercials shown during Phase I and for 90 different commercials shown during Phase II.‡

The content of each commercial, as represented by its photoboard summary, was rated by the eight members of the subcommittee. Each commercial was rated individually according to the following criteria:

1. Compliance with or violation of each of 16 guidelines promulgated by the Code Authority of the National

*Notably the hearings of the National Council of Churches Drug Advertising Project, 1973.

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‡A separate check of the number of drug commercials shown during corresponding weeks of March 1973 and June 1974 indicates that the increase in the number of drug commercials from Phase I to Phase II is purely seasonal and is not correlated with the introduction of the NAB guidelines.

TABLE 1—Per Cent of Guideline Violations by Drug Category

Drug Category	Number of Ads		Per cent Violations*		
	Phase I	Phase II	Phase I	Phase II	Significance level**
			%	%	
Analgesics	19	23	18	9	$p < .01$
Digestive Aids	6	11	24	10	$p < .02$
Decongestants	5	21	23	9	$p < .01$
Laxatives	7	10	23	10	$p < .01$
Vitamins	4	11	21	28	N.S.
Sleep Aids	2	3	22	12	N.S.
Total	43	79	20	12	$p < .01$

*Mean number of violations per ad divided by number of guidelines (16).
**Determined by comparing numbers of violations per ad in Phase I and Phase II groups using Mann-Whitney U Test.
N.S. indicates no significant change.

Association of Broadcasters (NAB), effective September 1, 1973;**

2. Whether the commercial mentions (a) the conditions for which the product is intended and (b) contraindications for use;
3. A subjective rating, on a scale from one to four, of the degree to which the overall tone of the commercial appeared to promote and encourage general use and abuse of OTC drugs.

For the first criterion, raters were asked whether the ad violated the NAB guidelines and for the second whether the ad failed to provide the information required. They chose among four answers: "yes", "no", "maybe", and "can't judge".*** To determine whether an ad violated an individual guideline, "yes" answers were assigned a value of 2; "maybe" answers, 1; and "no" answers, 0. These values were totaled and the sum divided by the number of raters who answered "yes", "no", or "maybe". If the quotient was greater than 1, the ad was judged to violate the guideline. Responses to criterion 3 were tabulated directly.

Results

Table 1 shows the average per cent of violations of the NAB guidelines that the raters attributed to the commercials in Phase I and Phase II. The commercials are grouped into six general categories, according to the intended major use of the advertised products: analgesics—including all painkillers; digestive aids—including all antacids; decongestants; laxatives; sleeping aids; and vitamins—including minerals, tonics, and other food or diet supplements.* The number of ads in each category is also given in Table 1. There is an overall trend toward a decrease in violations of the guidelines from Phase I to Phase II. These decreases are statistically significant in the case of analgesics, digestive aids, decongestants, laxatives, and in the population as a whole. In the case of vitamins, the per cent of violations showed a slight increase over time. In Phase I, the commercials as a whole violated 20 per cent of the guidelines, while in Phase II they still violated 12 per cent of the guidelines.

Table 2 gives the average per cent of violations of each of the 16 guidelines by all of the commercials as a group. The results show that in both Phases the violations were heavily concentrated on the same three individual guidelines, e.g., those requiring:

- that the drug be presented for occasional use only;
- that the ad not suggest casual use of the drug; and
- notice that the drug be used only as directed.

TABLE 2—Per Cent of Violations of the 16 Guidelines by Ads in Phase I and Phase II

Guideline: Ad must:	Per cent Violations		
	Phase I	Phase II	Significance level*
	%	%	
Indicate "use as directed"	84	37	$p < .01$
Present drug for occasional use only	79	77	N.S.
Not imply casual use	56	46	N.S.
Represent product's capabilities	16	6	$p < .025$
Not suggest drug is other than medicine	9	10	N.S.
Not suggest drug for other than conditions on label	0	1	N.S.
Not suggest drug as solution to interpersonal problems	19	1	$p < .01$
Not suggest drug culture	2	0	N.S.
Reflect time required for relief	23	6	$p < .01$
Have adult supervision of children's drugs	0	3	N.S.
Not use children in adult drug ads	19	0	$p < .01$
Not use children to promote drug	2	1	N.S.
Not aim at child's attention	0	4	N.S.
Not use phrase "non habit-forming"	0	0	N.S.
Not use personal testimonies of authorities	7	1	N.S.
Not depict pill-taking	9	1	N.S.

*Determined by χ^2 test.
N.S. indicates no significant change.

**The Code Authority's September 1, 1973 guidelines actually number 13. Two of them were complex, however, and to facilitate rating each was broken down into four separate guidelines, making a total of 19. Of the 19, three were not rated. One non-rated item required substantiation for claims of product effectiveness and was not rated because the subcommittee—after a diligent effort—was unable to obtain access to substantiating data through the NAB, the Federal Communications Commission, the Federal Trade Commission, or the Food and Drug Administration. Another guideline which proscribes video overemphasis of the color of the product, could not be rated because the photoboards were in black and white. A third guideline, which forbids placement of drug commercials in or adjacent to programs designed primarily for children, could not be rated by our content-analysis procedure but will be dealt with in a subsequent report.

***The number of "can't judge" ratings was not significant, and never exceeded two of the eight raters on any one item.

*Cough remedies and stimulants were excluded from the present analyses because there were no commercials for these products in the Phase I period.

For the first two of these guidelines, the frequency of violations did *not* decrease significantly from Phase I to Phase II, i.e., over three out of four of the ads in Phase I (79 per cent) failed to present drugs for occasional use only, and the frequency remained at the same high level (77 per cent) in Phase II; a majority (56 per cent) of the ads in Phase I suggested a casual attitude towards drug use, with little change in Phase II. Eighty-four per cent of the commercials in Phase I failed to warn viewers to take their products as directed; in Phase II the frequency of this violation *did* decrease considerably, but 37 per cent of the ads still failed to comply with this precise guideline.

There were significant decreases in violations of several other guidelines. In Phase II, after the guidelines went into effect, e.g., only a few ads continued to use children in ads for drugs intended for adults (compared to 19% such usage in Phase 1); more accurate representations were given of the time required for relief and of the products' capabilities; and there was an outstanding decrease in suggestions that drugs would solve interpersonal problems. Nevertheless, about 10 per cent of the ads in Phase II were still rated as suggesting that the advertised drugs were other than a medicine.

Several guidelines were rarely violated in either Phase, even before the self-regulating attempts of the NAB. As a whole, the ads were not seen as suggesting a "drug culture" through dress or words; did not advertise products as "non-habit forming"; and did not use children to promote drugs. Only a few ads in Phase II, notably vitamins, aimed at attracting children's attention.

Table 3 shows how often ads for drugs in each category failed to mention the exact conditions for which the drug was appropriate, a guideline recommended by Consumers Union. The ratings in Table 3 suggest a general trend from Phase I to Phase II towards better informing the public of the exact conditions under which use of the drugs are appropriate. Because of the relatively small sample sizes, however, none of the changes were statistically significant. It is noteworthy that ads for digestive aids and decongestants were consistently clear about the uses of their products. In sharp contrast, and notwithstanding an improvement in specifying their appropriate uses, vitamin commercials were uninformative and misleading about the conditions for their use. For all the drugs as a whole, 23 per cent of the Phase I commercials failed to spell out the exact conditions or symptoms for which the drug is intended, and 15 per cent of the Phase II commercials still failed to adequately inform the public. The ads surveyed in both Phases of this study did far less well on the second Consumers Union guideline: that the ad must specify contraindications for the drug's use. The majority of the rating panel found that every ad in both Phase I and Phase II failed to comply with this guideline.*

TABLE 3—Per Cent of Ads Not Specifying Exact Conditions for Product's Use

Drug Category*	Per cent of Ads Not Specifying Use	
	Phase I	Phase II
	%	%
Analgesics	16	4
Digestive Aids	0	9
Decongestants	0	0
Laxatives	29	20
Vitamins	100	73
Sleep Aids	50	0
Total	23	15

*Number of ads in each category same as in Table 1. None of the differences were significant when tested by χ^2 or Fisher exact tests.

TABLE 4—Effect of Ads on Indiscriminate Use of OTC Drugs

Drug Category*	Effect	Per cent effect on use of OTC drugs	
		Phase I	Phase II
		%	%
Analgestics	None	20	19
	Mild	30	37
	Moderate-severe	50	44
Digestive Aids	None	15	15
	Mild	40	41
	Moderate-severe	45	44
Decongestants	None	13	17
	Mild	45	51
	Moderate-severe	42	32
Laxatives	None	34	17
	Mild	32	41
	Moderate-severe	34	42
Vitamins	None	19	16
	Mild	39	35
	Moderate-severe	42	49
Sleep Aids	None	0	4
	Mild	19	21
	Moderate-severe	81	75
Total	None	20	17
	Mild	33	41
	Moderate-severe	47	42

*Number of ads in each category same as in Table 1.

Table 4 presents the raters' judgments as to whether the overall impression left by the commercials would tend to encourage indiscriminate use of OTC drugs. The 4-point scale has been collapsed into 3 levels of severity of effect: none, mild, and moderate-severe. As a whole, the results revealed no significant decrease from Phase I to Phase II in the amount of effect the commercials rated might have on encouraging pill taking. In Phase II, over 80 per cent of the commercials were still felt to stimulate general use of OTC drugs at least to a mild degree, and nearly one-half of those were thought to support this behavior from a moderate to severe extent. This was the case for all individual categories of drugs, and in the case of sleeping aids the amount of encouragement of use of OTC drug use was adjudged to be even more severe.

Discussion

The results show the usefulness of independent monitoring and content analyses of television drug ads. The findings

*This rating does not take into account whether or not there are medically-proven contraindications for use.

show that current self-regulation by the broadcasting industry appears to have resulted in a reduction in certain serious types of drug advertising abuses—such as the use of children in ads for adult drugs and the failure to instruct users to follow package instructions. However, even such an unambiguous guideline as the latter was still being violated by a large number of ads monitored in Phase II. Such clear violations, found by the raters in a significant proportion of ads, suggest that the broadcasting industry's self-regulation procedures are not effective enough in preventing violations of guidelines. All ads in general, and vitamin ads in particular, still failed to fully and consistently instruct the public in an objective way as to the need for, uses, and effects of the products. As a result, ads were adjudged by the raters as encouraging general use of OTC drugs. The most notable violations were of the two related requirements that drugs be presented for occasional use only and that ads do not suggest casual use of drugs. If these two guidelines were followed, a significant decrease in the tendency of ads to promote indiscriminate drug use might result.

The current NAB guidelines appear to serve as a good foundation for more honest representation of products advertised, but careful analysis reveals the need for revision and improvement. The language of the criteria is often unclear, leaving leeway, for example, for the production of ads that appear to represent the products' uses but actually invite casual use. Criteria requiring exact specification of indications and contraindications for advertised drugs must be included. Current use of voice-overs or visual overlays stating "take as directed," are helpful but not sufficient.

In the case of one of the most important guidelines, the subcommittee was unable to determine whether advertisers had attempted compliance. This guideline requires that "Claims of product effectiveness, including comparative efficacy claims, must be substantiated by clinical, other scientific evidence, or responsible medical opinion." The potential value of the guideline can be seen in the fact that a National Academy of Science-National Research Council study indicates that only one-quarter of the OTC drugs were effective for the conditions described in their promotional literature.[7] However, the SCPI subcommittee's investigation found that no central machinery available to the public had been established either to vouch for the existence of adequate substantiation of particular claims or to provide ready access to such documentation as may have been compiled in substantiation of claims. Apparently at this time TV viewers can obtain documentation of a particular claim—if they can obtain it at all—only by writing directly to the manufacturer of the drug in question. This cumbersome procedure is surely guaranteed to discourage viewers from seeking documentation for questionable claims of product effectiveness.

The simplest, most effective, and most quickly available remedy for this situation would be to require drug advertisers to limit their claims for product effectiveness to those claims approved by the FDA for inclusion on the product's label. The FDA is in the process of issuing standards for the labeling of 27 classes of OTC drugs. The standards are being formulated by 17 panels of drug experts convened by the National Academy of Science-National Research Council on behalf of the FDA.[8] Policing of drug advertising, to assure conformity to FDA-approved claims, should be performed by the Federal Trade Commission (FTC).*

Our findings do not establish a causal link between drug advertising and drug abuse. However, they suggest that drug promotion on television tends to encourage favorable attitudes towards drug use through exaggerated claims and through failure to point out the need to exercise appropriate caution in drug taking. Other studies have implied a relation between the susceptibility of drug-using individuals to advertising and their tendencies toward drug abuse.[9] Considering these factors, the prevalence of drug advertising, and the high degree of credibility television has among viewers,[2] we must conclude that ads should be assumed to influence the public toward heavier use of drugs unless proved otherwise. As such, these issues demand the serious attention of media, the drug industry, legislators, and consumers alike.

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*A proposed rule to accomplish this end was announced in November 1975 by the FTC. Following notice in the Federal Register of a hearing on the adoption of the proposed rule, all interested parties are invited to submit written comments and supporting documents and/or to testify orally for or against the rule. While adoption and enforcement of the proposed rule would lead to compliance with the NAB's product effectiveness guideline, compliance with other guidelines presently being violated would have to be brought about by other means.