FROM ABSTRACT

PURPOSE
American television viewers see as many as 16 hours of prescription drug advertisements (ads) each year, yet no research has examined how television ads attempt to influence consumers.

This information is important, because ads may not meet their educational potential, possibly prompting consumers to request prescriptions that are clinically inappropriate or more expensive than equally effective alternatives.

METHODS
We coded ads shown during evening news and prime time hours for factual claims they make about the target condition, how they attempt to appeal to consumers, and how they portray the medication and lifestyle behaviors in the lives of ad characters.

RESULTS
Most ads (82%) made some factual claims and made rational arguments (86%) for product use, but few described condition causes (26%), risk factors (26%), or prevalence (25%).

Emotional appeals were almost universal (95%).

No ads mentioned lifestyle change as an alternative to products.

Some ads (18%) portrayed lifestyle changes as insufficient for controlling a condition.

The ads often framed medication use in terms of losing (58%) and regaining control (85%) over some aspect of life and as engendering social approval (78%).

Products were frequently (58%) portrayed as a medical breakthrough.

CONCLUSIONS
Despite claims that ads serve an educational purpose, they provide limited information about the causes of a disease or who may be at risk; they show
characters that have lost control over their social, emotional, or physical lives without the medication; and they minimize the value of health promotion through lifestyle changes.

The ads have limited educational value and may oversell the benefits of drugs in ways that might conflict with promoting population health.

THESE AUTHORS ALSO NOTE:

“The United States and New Zealand are the only developed countries that permit direct-to-consumer advertising (DTCA) of prescription drugs.”

Average American television viewers see as many as 16 hours of prescription drug advertisements (ads) per year.

The Food and Drug Administration (FDA) relaxed DTCA regulations in 1997.

“Opponents argue that ads mislead consumers and prompt requests for products that are unneeded or more expensive than other equally effective drugs or nonpharmacologic treatment options.”

“Proponents counter that DTCA educates people about health conditions and available treatments and empowers them to become more active participants in their own care, thereby strengthening the health care system.”

“Television advertising now comprises most of the consumer-directed prescription pharmaceutical marketing expenditures.”

“Television pharmaceutical ads are among the most common forms of mediated health communication in the United States.”

Drug companies use the following strategies for their ad to appeal to consumers:

1) Rational appeals: providing information about product use, features, or comparison with similar products.

2) Positive emotional appeals: evoking favorable affect, for example, by showing happiness.

3) Negative emotional appeals: evoking negative affect by portraying fear, regret, or other negative emotions.

4) Humor appeals: using puns, jokes, or satire.

5) Fantasy appeals: depicting an unrealistic or surreal scene.
6) Sex appeals: showing characters in an intimate encounter, scantily clad, or using provocative gestures.

7) Nostalgic appeals: using images from an earlier time, or black-and-white or sepia tone visuals.

Some of the drugs ads reviewed in this study include:

<table>
<thead>
<tr>
<th>Drug</th>
<th>Indication</th>
</tr>
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<tbody>
<tr>
<td>Actonel</td>
<td>for Osteoporosis</td>
</tr>
<tr>
<td>Allegra</td>
<td>for Allergy</td>
</tr>
<tr>
<td>Ambien</td>
<td>for Insomnia</td>
</tr>
<tr>
<td>Celebrex</td>
<td>for Osteoarthritis, rheumatoid arthritis</td>
</tr>
<tr>
<td>Cialis</td>
<td>for Erectile dysfunction</td>
</tr>
<tr>
<td>Crestor</td>
<td>for Hypercholesterolemia</td>
</tr>
<tr>
<td>Detrol LA</td>
<td>for Overactive bladder</td>
</tr>
<tr>
<td>Enbrel</td>
<td>for Rheumatoid arthritis</td>
</tr>
<tr>
<td>Fosamax</td>
<td>for Osteoporosis</td>
</tr>
<tr>
<td>Lamisil</td>
<td>for Onychomycosis</td>
</tr>
<tr>
<td>Levitra</td>
<td>for Erectile dysfunction</td>
</tr>
<tr>
<td>Lipitor</td>
<td>for Hypercholesterolemia</td>
</tr>
<tr>
<td>Nexium</td>
<td>for Gastroesophageal reflux disease</td>
</tr>
<tr>
<td>Diovan</td>
<td>for Hypertension</td>
</tr>
<tr>
<td>Plavix</td>
<td>for Acute coronary syndrome</td>
</tr>
<tr>
<td>Prevacid</td>
<td>for Gastroesophageal reflux disease</td>
</tr>
<tr>
<td>Procrit</td>
<td>for Chemotherapy-related anemia</td>
</tr>
<tr>
<td>Singulair</td>
<td>for Allergy</td>
</tr>
<tr>
<td>Valtrex</td>
<td>for Genital herpes</td>
</tr>
<tr>
<td>Zelnorm</td>
<td>for Irritable bowel syndrome with constipation</td>
</tr>
<tr>
<td>Zocor</td>
<td>for Hypercholesterolemia</td>
</tr>
<tr>
<td>Zoloft</td>
<td>for Social anxiety disorder</td>
</tr>
</tbody>
</table>

RESULTS

The average ad length was 44.9 seconds.

45% of the ads showed characters before and after taking the drug.

40% of the ads showed characters only after taking the drug.

8% of the ads showed characters only before taking the drug.

“Consistent with FDA regulations, all product claim ads, but none of the reminder ads, included information about major risks and side-effects [of the drug]. This information was never presented at the end of the ad, “always leaving the final frames for a promotional message.”
95% - 100% of the ads used positive emotional appeals, often by depicting a happy character after taking a drug.

These authors inductively identified 7 themes related to drug portrayals in the ads:
1) Loss of control: the characters have lost control of some biological process or function.
2) Regaining control: the characters have resumed control of some biological process function by using the advertised drug.
3) Social approval: the characters are viewed favorably by others because they used the drug.
4) Distress: the ad shows a character in physical, emotional, or social distress.
5) Breakthrough: the ad suggests the product represents a breakthrough in medical science or progress in treating or curing a disease.
6) Endurance: the ad suggests the product could increase endurance for some activity.
7) Protection: the ad suggests the product could protect individuals from some health risk.

“Many ads framed their products around loss of control, which often had a profound detrimental effect on the character’s life. Further, most ads suggested that characters can regain control of lost functions or abilities by using the product.”

“Nearly 78% of the ads showed characters who received social approval for using and benefiting from the product.”

“More than 58% of the ads claimed that the advertised products represented a medical or scientific breakthrough.”

Sample Television Ad:

The ad narrative provides a complete transcript of the spoken content, except for the statement of risks. For each frame, we note the codes we applied. Using black humor, the first 2 frames show “Joe” running through the “Land of No,” a grim and deserted urban setting. Joe has lost control over his cholesterol, and the narrator suggests that lifestyle changes alone are not enough to keep him healthy. In the next 2 frames, Joe visits his doctor, who welcomes him approvingly and encourages him to take rosuvastatin. In the final 2 frames, Joe leaves the doctor’s office and enters into sunny suburbia, or the “Land of Success,” where his smiling neighbor waves as he walks home to enjoy a picnic with his smiling family.

DISCUSSION

Television ads are often “ambiguous about whether viewers might legitimately need the product.”

“By ambiguously defining who might need or benefit from the products,
DTCA implicitly focuses on convincing people that they may be at risk for a wide array of health conditions that product consumption might ameliorate, rather than providing education about who may truly benefit from treatment.”

“Several ads for cholesterol-lowering drugs appeared to suggest that nonpharmacological approaches were almost futile.”

“Drug ad “characters typically regained complete control over their lives after using the product, whereupon they also received social approval from friends or family.”

“The emotional appeals used in these drug ads “may prompt viewers to discount information about risks and benefits that are important when considering medication use, while they sway consumers in favor of a product.”

“Several ads for sleep medicines appeared to suggest that nonpharmacological approaches were almost futile.”

“Pharmaceutical spending on television commercials nearly doubled from $654 million in 2001 to a staggering $1.19 billion in 2005.”

“Nearly one third of the 2005 spending was on only 1 category: sleep medicines. Yet, sleep disorders, however problematic and serious they may be, are almost inconsequential when compared with the major causes of the death in the United States: cardiovascular disease, cancer, and unintentional injuries.”
“No matter how much the [drug] industry claims its advertising provides public health benefits, the amount spent promoting drugs for conditions of varying severity begs the question of whether the industry truly is acting for the public benefit.”

“As Frosch et al show in this issue, nearly all pharmaceutical ads are based on emotional appeals, not facts, and few provide necessary details about the causes of a medical condition, risk factors, or lifestyle changes that may be appropriate alternatives to pharmaceutical intervention.”

“Patients walk in the door having just seen a television ad showing a miserable allergy sufferer dancing through a weed-filled field, they expect that a simple stroke of a pen onto a prescription pad will solve whatever their problems may be.”

“Patients learn for the first time about conditions they never worried about before and ask physicians for new medicines by trade name because they saw it on television.”

“Patients have always expected simple answers to complex questions, but direct-to-consumer (DTC) advertising has elevated this problem to new heights, because patients in some ways now rely on Madison Avenue as a provider of health information.”

“Consumers who make health decisions based on what they learn from television commercials ultimately take medicines they may not need, spend money on brand medicines that may be no better than alternatives, or avoid healthy behaviors because they falsely think a medicine is all they need.”

“In general, the ads that consumers see do not contain the right balance of information to provide any meaningful health education. The facts gleaned from DTC ads are minimal at best.”

The drug companies “have done a skillful job of portraying complex medicines in the simplest terms—even if doing so creates inaccurate perceptions in the minds of our patients.”

“One fact is unquestionable: DTC ads do not effectively or consistently convey important information about product risks and benefits.”

“Physicians, consumers, and policy makers must take further action so that the facts about medicines are not lost in the advertising fog. As Frosch et al correctly point out, the consequences of poor judgments are quite different for drugs than they are for soap.”

KEY POINTS FROM DAN MURPHY
1) American television viewers see as many as 16 hours of prescription drug advertisements (ads) each year. Notice that this does not include over-the-counter television drug advertisements.

2) Nearly all television drug ads use the “emotional appeals” approach to promote their products, the ads never mentioned lifestyle change as an alternative to drugs, 18% of ads portrayed lifestyle changes as insufficient for controlling a condition.

3) Despite the claims by drug companies that their television ads serve an educational purpose, they provide limited information about the causes of a disease or who may be at risk and they minimize the value of health promotion through lifestyle changes.

4) Television drug ads “have limited educational value and may oversell the benefits of drugs in ways that might conflict with promoting population health.”

5) “The United States and New Zealand are the only developed countries that permit direct-to-consumer advertising of prescription drugs.”


7) Direct-to-consumer advertising misleads consumers and “prompt requests for products that are unneeded or more expensive than other equally effective drugs or nonpharmacologic treatment options.”

8) “Television advertising now comprises most of the consumer-directed prescription pharmaceutical marketing expenditures.” “Television pharmaceutical ads are among the most common forms of mediated health communication in the United States.”

9) The average television drug ad length is 45 seconds.

10) Television drug ads are often “ambiguous about whether viewers might legitimately need the product.”

11) “By ambiguously defining who might need or benefit from the products, DTCA implicitly focuses on convincing people that they may be at risk for a wide array of health conditions that product consumption might ameliorate, rather than providing education about who may truly benefit from treatment.”

12) “Direct-to-consumer drug advertising contributes to the medicalization of what was previously considered part of the normal range of human experience.”
13) “Several ads for cholesterol-lowering drugs appeared to suggest that nonpharmacological approaches were almost futile.”

14) Drug ad “characters typically regained complete control over their lives after using the product, whereupon they also received social approval from friends or family.”

15) “DTCA often presents best-case scenarios that can distort and inflate consumers’ expectations about what prescription drugs can accomplish.”

16) “Pharmaceutical spending on television commercials nearly doubled from $654 million in 2001 to a staggering $1.19 billion in 2005.”

17) “Nearly all pharmaceutical ads are based on emotional appeals, not facts, and few provide necessary details about the causes of a medical condition, risk factors, or lifestyle changes that may be appropriate alternatives to pharmaceutical intervention.”

18) “Patients have always expected simple answers to complex questions, but direct-to-consumer (DTC) advertising has elevated this problem to new heights, because patients in some ways now rely on Madison Avenue as a provider of health information.”

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22) “Physicians, consumers, and policy makers must take further action so that the facts about medicines are not lost in the advertising fog. As Frosch et al correctly point out, the consequences of poor judgments are quite different for drugs than they are for soap.”