Drug Information and Drug Actions:

Examples of How Literature Evaluation and Drug Detailing can Influence Prescribing

Reading


Written Alchemy

Definition:
The process whereby the base is transmuted into the noble; the equal (or inferior) into the superior.

In other words, it is...

Advertising!
Miracle Drugs or Media Drugs?

6 Psychological Objectives of Advertising

1. To convince consumers that the product will provide a certain reward more effectively than the competition.
6 Psychological Objectives of Advertising (continued)

1. To convince consumers that the product will provide a certain reward more effectively than the competition.

2. To teach a new use for the product.
6 Psychological Objectives of Advertising (continued)

1. To convince consumers that the product will provide a certain reward more effectively than the competition.
2. To teach a new use for the product.
3. To convince consumers that they can avoid something distasteful with the product.
6 Psychological Objectives of Advertising (continued)

4. To associate the product with a desirable symbol.
Psychological Objectives of Advertising

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5. To remind consumers of a slogan they already know.
Psychological Objectives of Advertising

4. To associate the product with a desirable symbol.

5. To remind consumers of a slogan they already know.

6. To show how the product will satisfy some subconscious desire.
2 Major Goals of Advertising

1. Make sameness appear unique.
2. Make the non-advantage seem like the advantage.

In Terms of Competition...

- The first product to reach the market will nearly always sell the best.
- Drugs of lesser benefit require more advertising than those whose benefit is known.
- In general, a new drug must make back the money spent on its R&D in the first 6 months that it is on the market or it will never make a profit for the company.
6 Principles of Influence

<table>
<thead>
<tr>
<th>Principle</th>
<th>Tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reciprocation</td>
<td>To give back</td>
</tr>
<tr>
<td>Scarcity</td>
<td>To desire rare things</td>
</tr>
<tr>
<td>Authority</td>
<td>To follow the lead of experts</td>
</tr>
</tbody>
</table>

6 Principles of Influence (continued)

<table>
<thead>
<tr>
<th>Principle</th>
<th>Tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment-Consistency</td>
<td>To be logically consistent</td>
</tr>
<tr>
<td>Consensus</td>
<td>To not to be left behind (i.e., to follow the crowd)</td>
</tr>
<tr>
<td>Liking</td>
<td>To prefer to say yes to people we know and like</td>
</tr>
</tbody>
</table>

Professional people believe they are beyond influence.

If you demonstrate to professional people that they are vulnerable to “deceptive” messages, they are less apt to be influenced from that point forward.
Techniques of Advertising

Use of Words

- "Helps"
  Provides no information as to how much, how little, or how; avoids a direct statement of the degree of the "assistance" provided.

Example: Helps prevent cavities.

- "Like"
  Means "similar to" but implies the "same as..."
Techniques of Advertising

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   Provides no information as to how much, how little, or how; avoids a direct statement of the degree of the "assistance" provided.
   Example: Helps prevent cavities.

2) "Like"
   Means "similar to" but implies the "same as..."
   Example: Dismiss (a 3-oz douche) cleans like a quart.

Techniques of Advertising

Use of Words (continued)

c) "Up to, As Much As"
   Most people tend to ignore the lower limit of the range that up to implies (zero), and want to believe that they will only experience the upper limit of the range; tells nothing about the conditions under which the upper figure was achieved.
   Example: Up to 8 hours of relief.
Techniques of Advertising

Use of Words (continued)

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Example: Up to 8 hours of relief.

d) “Fight”, “Fortified”, “Enriched”
Powerful words which imply something extraordinary. Fight: “passive process of being rendered more resistant”; Fortified, Enriched: simply means “contains”
Example: Fortified with iron.

A new molecule is forged.
A laminate emerges.
Techniques of Advertising

- **Word Assembly Techniques**
  - **Word Omission**
    - Example: “Of America’s best tasting gums, Trident is sugar-free.”
    - (Of America’s best tasting gums, only Trident is sugar-free.)
Techniques of Advertising

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  - **Insertion of a Qualifier**
    Example: "Clean make-up, cover Girl's the one for you." (Are others dirty?)

Techniques of Advertising

- **The Question**
  Example: "Are you taking regular aspirin for arthritis minor pain? Isn't it time you tried Excedrin?" (By saying nothing the advertiser makes you supply the answer. Zero claims made! Zero information presented!)

Techniques of Advertising

- **Word Assembly Techniques** (continued)
  - **The Unequal Comparison**
    Example: "No aspirin or antacid alone relieves you in as many ways as AlkaSeltzer?" (Aspirin does not equal antacid.)
Techniques of Advertising

- **Word Assembly Techniques (continued)**
  - **The Unequal Comparison**
    Example: "No aspirin or antacid alone relieves you in as many ways as AlkaSeltzer." (Aspirin does not equal antacid.)
  - **Relativity Ignored**
    Example: "... and Anacin relieves pain fast." (In comparison to what?)
  - **Unpaired Comparisons**
    Example: "Pampers for drier, happier babies." (In comparison to what?)

- **Word Substitution**
  Example: "Wisk puts its strength where the dirt is." (Wisk's strength is its detergent. Therefore, Wisk's detergents come in contact with the dirt... A characteristic shared by all cleaning products has been made unique!)
Techniques of Advertising

- **Word Assembly Techniques (continued)**
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    - Example: "Wisk puts its strength where the dirt is." (Wisk's strength is its detergent. Therefore, Wisk's detergents come in contact with the dirt… A characteristic shared by all cleaning products has been made unique!)
  - **The Mysterious Ingredient**
    - Example: "Anacin contains twice as much of the pain reliever doctors recommend most." (Does Anacin contain something special?)
      - Unknowns: Twice as much (In comparison to what?); Of the pain reliever (What is the pain reliever?); Doctors (What kind of doctors?); Recommend Most (Recommend most for what?)

Techniques of Advertising

- **Visual Images**
  - **Beautiful People**: Beautiful people are portrayed in ads for beautiful products. Homely people are portrayed in ads for non-sexy ailments such as constipation, back pain, indigestion, psychoses.
Techniques of Advertising

- Visual Images (continued)
  
  - *Extraneous Demonstrations* Demonstrations which have nothing to do with the product under conditions of actual use, but which lead you to assume that the same thing will happen when you use the product.
Techniques of Advertising

- Visual Images (continued)
  - Extraneous Demonstrations: Demonstrations which have nothing to do with the product under conditions of actual use, but which lead you to assume that the same thing will happen when you use the product.
  
  Example: Pepto-Bismol is shown coating the sides of a glass container implying the coating of your stomach when swallowed.

Techniques of Advertising

- Visual Images (continued)
  - Colors:
Techniques of Advertising

- Visual Images (continued)
  - Colors:
    - Blue: Warm, appealing, easy to read.
    - Red: Generally used only for antibiotic ads directed at surgeons.
    - Green: Generally not considered acceptable for advertisements.
Techniques of Advertising

• Visual Images (continued)

  • Colors:
    Blue: Warm, appealing, easy to read.
    Red: Generally used only for antibiotic ads directed at surgeons.
    Green: Generally not considered acceptable for advertisements.
    Trendy: Silver, Gold

An exclusive indication
Persantine
(dipyridamole) Premica® Pharmaceuticals Inc.

To prevent thromboembolism in cardiac valve replacement, as adjunct to coumarin anticoagulants

Pharmacist vs. Pharmaceutical Industry-Provided
Drug Information in Organized Health Care Settings
Pharmacist-Provided Drug Information

Goal = Rational, Cost-effective Prescribing

- Drug Formulary Considerations
- Drug Budget Considerations/Purchasing Considerations
- Development of Drug Use Policies
- Clinical Pharmacy Services: The role of the Drug Expert

Pharmaceutical Industry-Provided Drug Information

Goal = Brand-loyal Prescribing

In organized health care settings, the two forces are often in opposition
Organizational Structure of Pharmaceutical Companies

- Research & Development Branch
  - Basic Scientists responsible for the longevity of the company
    - Biologists
    - Formulation Chemists
    - Toxicologists
    - Pharmacologists
    - Clinical Research Coordinators

- Sales/Marketing Branch
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- Sales/Marketing Branch
  - Business people responsible for the immediate viability of the company
  - Manufacturing Personnel
  - Market Research Personnel
  - Product Managers
  - Medical Information Personnel
  - Adverse Drug Reaction Reporting
  - Service Representatives

Implications -

Organizational Structure of Pharmaceutical Companies

Implications -

For Pharmacist-initiated requests for information from a Pharmaceutical Company:
Organizational Structure of Pharmaceutical Companies

Implications -

- For Pharmacist-initiated requests for information from a Pharmaceutical Company:
  - Need to understand which branch of the company is being accessed.

- Implications for Drug Detailing in Organized Health Care Settings:
  - Need to understand that ultimate responsibility is to sales.
Representative Pharmaceutical Companies (circa 1985-1992)

<table>
<thead>
<tr>
<th>Inc.</th>
<th>Eli Lilly</th>
<th>Syntex</th>
<th>Cetus</th>
<th>Centocor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>37,000</td>
<td>8,000</td>
<td>800</td>
<td>–</td>
</tr>
<tr>
<td># Products</td>
<td>&gt;153</td>
<td>16</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td># Reps</td>
<td>1,000</td>
<td>200</td>
<td>8</td>
<td>200</td>
</tr>
<tr>
<td># Products Trained</td>
<td>7-10</td>
<td>5-7</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td># Products Actively Marketed</td>
<td>3</td>
<td>2-3</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

HA-1A Story: A Timeless Example Illustrating the Challenges and Opportunities for Pharmacy

- Investigational antibody against endotoxin which is known to be important in Gm(-) sepsis (a type of infection associated with a very high mortality)
Investigational antibody against endotoxin which is known to be important in Gm(-) sepsis (a type of infection associated with a very high mortality)

Expensive: Projection ~ $3,500/dose; Exceeded DRG (cap that the government will reimburse for a given diagnosis)

Basic Problem: Patient Selection
- Must be given early in the course of the illness
- ~1/2 recover without the drug
- There is no rapid test to diagnose Gm(-) sepsis

General sense: Organized health care settings were expected to place some type of restriction on prescribing.
HA-1A Story (continued): A Timeless Example
Illustrating the Challenges and Opportunities for Pharmacy

- General sense: Organized health care settings were expected to place some type of restriction on prescribing.
- Response of the Industry: A sales force of 200 representatives were quickly assembled to promote the product.

Postscripts:
- Centocor withdrew rehazumab (Cenoxin®) from all European markets in 1994 and from further investigation in the United States.

HA-1A Story (continued): Long-term fallout....

- Drotrecogin alpha (activated protein C) XIGRIS™
  Eli Lilly’s $7,000/dose sepsis drug (FDA approved in 2001)
Drotrecogin alfa (activated protein C) XIGRIS™: Eli Lilly’s $7,000/dose sepsis drug (FDA approved in 2001)

Basis for FDA approval: Reduction in # of deaths
- 30.8% of patients given placebo vs.
- 24.7% of patients given drotrecogin

Criticism: Study design changed mid-stream to improve the outcome.

Medical Community Response: NEJM editorial suggesting insufficient evidence to justify a change in the standard of care; slow adoption by clinical practitioners.
Miracle Drugs or Media Drugs?

Further Reading:
Consumer Reports
February 1992, pg 87-94
March 1992, pg 142-146
• Techniques for Marketing to Prescribers
• Ethics of Accepting Gifts
• Influence of Industry on Research
• Direct-to-Consumer Marketing