

**EFFECTS OF AGE SEGMENTATION IN DIRECT-  
TO-CONSUMER ADVERTISING**

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Direct-to-Consumer Advertising (DTCA) has recently become one of the “fastest growing categories in consumer advertising” (Soontae & Muturi, 2011, p. 242). The United States is one of two countries in the world, with New Zealand falling second, to allow pharmaceutical companies to market directly to consumers (Mogull, 2008, p. 106). In the U.S., the Food and Drug Administration (FDA) is the government agency that has authority to regulate DTCA (Mogull, 2008, p. 106). Traditionally, prescription drugs were marketed primarily to physicians, who decided which drugs to prescribe to their patients. FDA regulatory authority dates back to 1907 where many rules have affected DTCA such as the Fair Packaging and Labeling Act, mandated manufacturers to provide information to consumers (Mogull, 2008, p. 107). Prior to the 1997 FDA’s regulation changes, drug advertisements were required to include extensive detail on the drug’s side effects, effectiveness and contraindications known as a “brief summary” (“Direct to Consumer,” 2010). This information was difficult to condense and present in a 30-second TV ad, for instance.

In 1997, the FDA published preliminary guidelines for DTCA, in *Guidance to Industry: Consumer Directed Broadcast Advertising*, permitting promotional ads on broadcast media, TV and radio (Mogull, 2008, p. 109). The FDA relaxed its drug-advertising rule whereby ads only needed to include risks and side effects and refer consumers to another source to find full information about the drug (“Direct-to-Consumer,” 2010). Toll-free

numbers, website URLs, or health contact information could easily fulfill this rule. Since this change, DTCA advertising expenditures have skyrocketed (Soontae & Muturi, 2011, p. 242). Pharmaceutical companies spent about \$4 billion in 2009 to advertise to consumers (Liang & Mackey, 2011, p. 824). This is a significant increase from 1996 when \$1.07 billion was spent (DeLorme, Huh, & Reid, 2006, p. 254).

DTCA provides consumers of all ages benefits such as increased awareness of drugs, alternative ways to seek health information and knowledge of when to contact a physician. Studies suggest that consumers in general “have positive attitudes toward advertising” and find DTCA as a valuable source of pharmaceutical product and services information (Baca, Holguin, & Stratemeyer, 2005, p. 381). However college-aged (18-22), young (23-49) and older (50-70) consumers may have behavioral responses about DTCA ads that may affect how they seek health information, perceive benefits and risks in and purchase intentions.

Previous research has amplified the importance of targeting older segments such as baby boomers who become heavier users of prescription drugs and medical services as they age (Soontae & Muturi, 2011, p. 242). Little research examined the younger and college-aged segments, with a few studies comparing the differences in these age segments. The findings of these studies indicate that older consumers are “less efficient in information-processing” meaning that their level of understanding the DTCA is much

lower than that of younger and college-aged consumers, posing a potential problem in how marketers are reaching this target (DeLorme, Huh, & Reid, 2006, p. 257). This paper examines whether DTC advertising appears to be an important source of health information for each target market. This paper also compares and contrasts how young and older consumers seek health information, whether through broadcast media (TV or radio) or the Internet. Similarities and differences in the behavioral responses to DTCA among younger and older consumers are also compared, such as whether they trust ads or find the information in ads useful.

Research studies show that all age segments showed high awareness of DTCA, meaning all age segments attend to DTC advertisements. The differences were found in trust levels, degree of involvement (or attention to DTCA) and exposure of the ads. A different study found that younger consumers have a tendency to visit with friends and relatives after DTCA exposure while older consumers tend to consult with a physician after viewing an ad. Therefore, it is important to examine whether younger adults rely on DTCA for medical advice rather than consulting a physician. This raises the question of whether marketers are targeting the correct age segments or should create different ads for different target markets. Studies should also examine which media the different age segments utilize the most (e.g. television, newspaper, online, etc.) and whether pharmaceutical marketers are targeting the correct age segments via each medium. Further

research should also analyze innovative ways of reaching age segments via mobile and developing digital platforms. Advertisers will need to conduct pilot studies for each age segment to further understand the differences in their learning and retention of the DTC drug ads.

### **FDA Regulations and Categories of DTCA**

According to the FDA:

The Food and Drug Administration (FDA) protects public health by assuring the safety, effectiveness, and security of a wide range of products, including human prescription drugs. [We] also advance public health by helping people get the accurate, science-based information they need to use medicines appropriately and improve their health (FDA, 2012).

While the Federal Trade Commission (FTC) regulates OTC (over-the-counter) drugs, the CDER (Center for Drug Evaluation and Research; a division of the FDA) oversees prescription drug advertisements (Mogull, 2008, p. 106).

Currently there are three categories of DTC ads: product claim ads, reminder ads, and help-seeking ads (Ventola, 2011, p. 669). A product claim ad names the drug and the indication(s). A reminder ad names the drug, dosage form and possibly the cost. The help-seeking ad describes a disease or condition but does not mention a specific drug that treats it (Ventola, 2011, p. 669). It may also encourage consumers to visit with their doctor.

The FDA regulatory requirements vary among each ad category. Product claims are made in product claim ads therefore, “fair balance” dos apply and risks are required to be included in a “brief summary” (Ventola, 2011, p. 669). According to the FDA, “fair balance” means “that the content and presentation of a drug's most important risks must be reasonably similar to the content and presentation of its benefits” (FDA, 2012).

Reminder ads do not make product claims. “Fair balance” does not apply to these ads and a “brief summary” is not required (Ventola, 2011, p. 669). The FDA, however, does not allow this type of ad to be used for drugs with serious risks. Lastly, help-seeking ads do not mention the drug and also do not make any claims. As the previous category, “fair balance” does not apply and a “brief summary” is not required (Ventola, 2011, p. 669).

### **Communication Effects and Behavioral Responses**

Exposure to the different categories of DTC ads triggers three communication effects: cognitive, affective, and behavioral effects (DeLorme, Huh, & Reid, 2006). Cognitive effects are the awareness and knowledge the consumer has about the DTCA such as the perception of a drug ad. Affective effects include attitudes, trust and moods towards the DTCA such as the emotions towards the drug ad. Behavioral effects are the intentions, information seeking and trial related to the purchase of the prescription drug (DeLorme et al., 2006).

DTCA typically encourage consumers to engage in six brand-specific behaviors, rather than attempting to persuade the consumer to buy the drug (DeLorme et al., 2006). These behaviors include: a) to seek additional information about advertised drugs from media and interpersonal sources, such as friends and family, the Internet or toll-free numbers, b) to talk with doctors about advertised drugs, c) to talk with doctors about ad-conveyed health conditions and treatments, d) to ask doctors to prescribe or continue prescribing advertised drugs, e) to ask doctors to change existing prescription to advertised brands, and f) to ask pharmacists about advertised drugs (DeLorme et al., 2006).

### **DTCA Spending**

Total health care spending reached \$320 billion in 2011, which is an increase of about \$50 billion since 2006 and \$125 billion since 2002 (Bartholomew, 2011). Although seniors continue to be the largest consumers of prescription medications, prescription use increased among younger adults (ages 19-25) due in part to the Affordable Care Act (ACA) passed in 2010, which allows individuals under 26 years to remain on their parents' health insurance plan (Bartholomew, 2011).

Regardless of the ACA passing, the use of branded medications continued to decline, whereas the use of generic alternatives increased totaling 80% of prescriptions dispensed. 73% of total spending on advertising was allocated to branded medication in the U.S (Bartholomew,

2011). The top five earning brand drugs for 2011 included Lipitor, Plavix, Nexium, Abilify, and Advair Diskus. These drugs accounted for more than \$30.1 billion of the total sales of the top 200 drugs in 2011 (Bartholomew 2011).

Pharmaceutical and biotech companies have reported 14% more revenue after using DTC ads rather than opting out of using DTCA ("Direct to consumer advertising," 2012). "Direct to consumer advertising represents the fastest way to reach a wide audience," said Jeremy Spivey, senior research analyst at Cutting Edge Information ("Direct to consumer advertising," 2012).

### **Age Segments**

The population of older adults (or adults ages 65 or older) is rapidly expanding with baby boomers reaching retirement age and facing continuous changes in technology, nutrition and lifestyles (Soontae & Muturi, 2011, p. 242). Older adults are typically the intended audience for DTCA due to their heavy usage of prescription drugs and medical services (Soontate & Muturi, 2011, p. 242). For this reason, older adults also face challenges in navigating and understanding the vast amount of health information.

"Health literacy is a key element in health promotion and protection, disease prevention and early screening, health care maintenance, and policy making" (Soontae & Muturi, 2011, p. 243). Soontae and Muturi (2011) conducted a study examining how effectively DTCA convey useful medical

information to this age segment, in particular those with limited health literacy (p. 242). The study surveyed 170 older adults, ages 66 to 95, with 69% female and 31% male subjects and the majority well educated. The subjects reported the drug ads were relatively easy to understand. This may be a result of their high level of education, with the majority (or 79%) of the subjects having a college degree or higher level (Soontae & Muturi, 2011, p. 246). The older adults believed that DTCA were better at promoting the drug and the condition it treated, its benefits and side effects including instructions and knowledge about who should take the drug, questions to ask your doctor and directions for using the drug (Soontae & Muturi, 2011, p. 248). Older adults having low subjective health literacy (or below the median of 3.14) were more "critical about the informational content" found in the drug ads (Soontae & Mutui, 2011, p. 248). They considered the DTC ads less effective in terms of communicating the necessary medical information (Soontae & Muturi, 2011, p. 251).

"The results revealed that subjective health literacy was the strongest factor in predicting the assessment of information in DTC ads, while education was not" (Soontae & Muturi, 2011, p. 251). The younger the participants were, the higher they evaluated the information found in the drug ads. As elderly consumers age, they face challenges in understanding DTC drug ads, regardless of their educational level.

Grenard, Uy, Pagan, and Frosch (2011) interviewed 15 seniors ages 65 or older showing them nine television advertisements, recorded from network and cable television (p. 79). The results indicated increased awareness of the DTC drug ad, lack of educational content in drug ads, misinterpretation in content and skepticism towards the drug ads. Although older adults in the study are aware of DTCA, they do not understand and do not trust drug ads. For instance, one of the subjects was asked about the Lipitor drug ad and responded by saying, "they're trying to sell me something, that's the first thing. And it makes me a little suspicious" (Grenard et al., 2011, p. 82).

A different study by DeLorme, Huh and Reid (2006) examined responses to DTCA between older adults ages 65 or older, mature adults ages 45 to 64 and younger adults ages 18 to 44 (p. 256). Younger consumers have a tendency to talk with their friends and/or family after exposure to a drug ad. Most young consumers likely still live at home with their parents, relatives or spouse (DeLorme et al., 2006). Mature consumers, however, are more likely to visit with their physician because of confidence and experience in health decision-making. Older consumers prefer to discuss questions about drugs with a pharmacist rather than a doctor. Older consumers also reported they ask for immediate feedback from health care professionals (DeLorme et al., 2006).

Although many studies focused on older adults, the college age segment has become an increasingly viable target for DTCA. Several health conditions (e.g. allergies, depression, anxiety) are prominent among college age and older adults, meaning there is a positive correlation between these two age segments in terms of drugs used (Ball, Manika, & Stout, 2011). College students typically have low-cost or free health care access via their university or institution providing a unique opportunity for marketers (Ball et al., 2011, p. 338).

Ball et al. (2011) conducted an online survey with over 300 participants who ranged from college students to older adults to determine media consumption, health information seeking methods, behavioral responses and DTCA exposure. "College age adults indicate the highest rate of prescription drug abuse, usually to enhance social activities and improve academic performance" (Ball et al., 2011, p. 339).

Ball et al. (2011) found that college students were significantly more likely than younger or older adults to know someone taking a prescription drug (p. 342). College students have closer contacts with friends and family than working adults because of their large networks and everyday interactions with students on-campus (Ball et al., 2011, p. 342). Younger adults spent more time reading magazines and listening to the radio in comparison to college students. College students were less likely to see and pay attention to a DTC ad on a daily basis versus a younger adult. The DTC

drug ads were not reaching the college students, due to their lower consumption of television resulting in fewer medications targeted to them.

There were no significant differences between the age groups in behavioral intentions. All three age groups responded fairly neutral towards the DTC drug ads in terms of their trust and attitude towards the drug (Ball et al., 2011, p. 343). However, college students may be more comfortable trusting DTCA as a supplementary health information source in comparison to older adults because of their social connections with others that are taking the drug and/or their usage of the Internet for research prior or after watching the DTC ad (Ball et al., 2011, p. 350). Perceived usefulness of the ad information was the only significant predictor of trust among college students (Ball et al., 2011, p. 347). However, it was also a predictor of trust among the younger and older adults. The age segments were more likely to trust the ad if they liked it and if it offered benefits (Ball et al., 2011, p. 347).

### **Conclusion and Recommendations**

All age segments are important target markets for DTC pharmaceutical companies. Older segments are in more urgent need due to their frequent use of prescription drugs and medication. College students and younger consumers tend to share and discuss DTC drug ads with family or friends. College students spend less time watching drug ads on television; therefore other media such as the Internet, should be used to target this age

segment. Younger consumers are more likely to become caregivers of children and parents in the near future, if they are not already. Marketers will need to find innovative ways to reach them and not just the older segment. Marketers should consider using online and mobile mediums to engage the college-aged and younger consumers.

Research supports that all age segments are exposed to DTCA but trust varies within the age segments. College students are more likely to trust the ads versus the younger and older segments, which have more skepticism towards the ads. Therefore, marketers should consider a different approach in advertising towards the younger and older adults.

Further research should examine how marketers will use developing digital advertising methods to target each age segment. Further studies should conduct a subjective health literacy exam for younger consumers and make a comparison between the younger and older age segments. This would be beneficial to pharmaceutical marketers in understanding how to present the information in DTC drug ads for these age segments.

An improvement towards advertising to these age segments is key for marketers to continue to engage the consumers and empower them to make a buying decision. Marketers will need to build brand value through the DTC drug ads in order to establish brand loyalty with the consumers beyond the drug's patent expiration. Therefore, understanding the differences in these age segmentations is key.

For instance, college-aged adults spend a significant amount of time on the Internet, mobile platforms and social media. Younger adults are still using a majority of traditional media. Therefore, it would be appropriate to continue to target them via television networks and magazines. Older adults should be targeted in all types of media (e.g. Internet, television, magazines, etc.) with ads that are easy to understand and communicate the message effectively. Each age segment is distinct and unique, therefore, different mediums should be used in targeting them.

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