

Reported Likelihood of Reading Over-the-Counter (OTC) Medication Labeling and Contacting a Physician

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Overview

- Increased use and number of over-the-counter (OTC) meds
- Supposed to enable: self medicate w/o supervision of physician
 - need good information to make decisions
 - Drug info needs to be accessible
- A lot of information in limited space

Labeling Practices

- Primary haz-com method is via packaging (box) and container
- Some info only on the packaging
 - Assumes consumers will save and have packaging available later
 - NCPIE: Only 7% of OTC consumers read OTC labels for warnings

Labeling Practices

- Info known to the medical community may not be in consumer labeling
- Consumers directed to contact a physician
 - NCPIE survey: Less than 50% of consumers get info about OTC drugs from physician

Objectives

- Do consumers read information on OTC packaging and labels?
- Do they keep exterior packaging after use?
- Do they contact physicians with questions?

Method

- **Two surveys (Studies 1 & 2)**
- Study 1:
 - 309 participants
 - 169 males and 140 females
 - 221 students and 88 nonstudents
 - Mean age
 - Students = 21 years
 - Nonstudents = 37.2 years

Method

Survey 1

- Section I: Demographics
- Section II: OTC behaviors
 - Percentage of times Ps would:
 - » contact a physician with OTC questions
 - » expect to actually talk to a physician
 - » saved medication box after opening the package

Method

- **Study 2:**

- 343 participants

- 212 males and 131 females
 - 197 students and 145 nonstudents

- Mean age

- Students = 20.7 years
 - Nonstudents = 38.3 years

Method

- Same Method as Study 1, but added:
 - Percentage of times Ps:
 - saved the packaging
 - read the *label before* opening the package
 - read the *label after* opening the package
 - read the *box before* opening the package
 - read the *box after* opening the package

Method

- **Survey 2**

- Section III:

- Reported the likelihood that they would contact a physician
 - Estimate the percentage of times they would expect to talk to a physician if they would call.

Study 1 Results

- **Would try to contact a physician: 20.3%**
- **Expect to talk to physician: 27.5%**
- **Save box after opening: 15.7%**

Study 1 Results

- **Demographic variables**
 - Significant effects of student/nonstudent and age group:
 - Students (22.4%) and younger Ps (23.2%) more likely to contact a physician than nonstudents (15.1%) and older Ps (14.9%)
 - Students (31.5%) and younger Ps (31%) expect to talk to a physician than nonstudents (17.4%) and older Ps (20.9%)

Study 2 Results

- **Contact a physician: M=1.9 (Between “Never” and “Rarely”)**
- **Expect to talk to physician: 24.2%**
- **Save medication box after opening: 15.2%**

- **Demographics**

- Significant effects of student/nonstudent and age group:

- Students and younger Ps (26.3% / 26.6%) reported higher likelihood of talking to physician than nonstudents / older Ps (20.8% / 20.7%)

Study 2 Results

- 2 (Time: before vs. after use) x 2 (Info placement: box vs. container label)

ANOVA

- Analysis conducted on % reading estimates for the 4 time/information placement questions
- Both main effects significant

% Reported Reading as a Function of Before vs. After Use and Placement

	<i>Before</i>	<i>After</i>	<i>Mean</i>
<i>Label</i>	65.6%	29.6%	47.4%
<i>Box</i>	62.1%	25.5%	43.6%
<i>Mean</i>	63.5%	27.4%	

Study 2 Results

- Individually added demographic variables to 2 (time) x 2 (information placement) ANOVA
- Main effect of gender
 - Females (49.3%) report reading more than males (43.2%)
- Main effect of age
 - Younger Ps (47.8%) report reading more often than older Ps (42.6%)

Results

- Age group X time (before/after use) interaction
- Age group X information placement

% Reported Reading as a Function of Before vs. After Use and Age

	Before	After	Mean
Younger	63.7%	31.8%	47.8%
Older	63.3%	21.9%	42.6%
Mean	63.5%	27.4%	

% Reported Reading as a Function of Information on Box vs. Label and Age

	Box	Label	Mean
Younger	44.1%	51.4%	47.8%
Older	42.9%	42.2%	42.6%
Mean	43.6%	47.4%	

Discussion

- Low likelihood that consumers report being willing to contact a physician
 - Belief that they will rarely speak to physician
 - Cost of compliance
 - Access to physician
- However, the directive to contact a physician is often used in lieu of more complete warnings

Discussion

- 24 hour toll-free number to answer questions (independent/trained medical staff)
- WWW / Internet address

Discussion

- Much more likely to read material **before** using the medication
- Consumers discard packaging
 - Info on packaging not available on subsequent uses
 - Need important information on container

Discussion

- Warnings must be prominent / conspicuous
 - Considerable HF/E research on ways to enhance salience
 - e.g., color, symbols, etc.
- OTC drugs often in small containers
- Large amount of information to be communicated
- Existing HF/E research on enhancing surface area
 - Better use of existing surface area
 - Expandable label attached to the bottle
 - Tag
 - Fold-out
 - Wings

Discussion

- Self-reports
 - Testing behavioral compliance to OTC drug warnings is difficult
- Implication:
 - Current labeling practices do not suffice