

# Common Cold And Frequently Used Home Remedies Versus OTC Products

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## Abstract

Typically, people with infections of the upper respiratory tract treat themselves with over-the-counter synthetic and natural remedies. The objective of the research was to figure out why people were buying certain medicines. We used a questionnaire to assess 413 participants (70.5% of whom were females) aged 18 and above. The results show that seventy-six percent of respondents utilised oral synthetic medications and thirty percent used herbal treatments. People in the workforce, students, and those with a high level of education (those younger than 65) were the most likely to use synthetic items. The elderly were the most common consumers of herbal remedies. In conclusion, synthetic anti-cold remedies have a better reputation among consumers. Users of these drugs often have a strong motivation to speed up their recovery and go back to work. They are a prime population to educate about the dangers of drug interactions since they take more prescriptions than the average person.

**Keywords:** Herbal products, Common cold, Consumer survey, Over-the-counter

## Introduction:

The typical cold affects your nasal passages, sinuses, vocal cords, and trachea. The flu and colds spread rapidly, particularly in close quarters like homes, schools, and offices. There are more than 200 known cold-causing viruses. A common cold might be annoying, but it typically clears up on its own within a week or so. For the most part, rhinoviruses, coronaviruses, influenza viruses, viruses such as a and occasionally other viruses (both human parainfluenza infectious agents, human respiratory syncytial virus, enteroviruses, and metapneumovirus) are to blame for the common cold, which affects the upper respiratory tract. Children are disproportionately affected by respiratory tract illnesses. Adults may have anywhere from between two and five colds year, while children may experience anywhere from seven to ten (Eccles, 2005).

Since a common cold's diagnosis is straightforward and based on clinical signs and symptoms, most patients end up diagnosing themselves (Raal et al., 2013). In most cases, infections of the upper respiratory tract clear up on their own with little chance of consequences. Consequently, self-care and symptom alleviation are often cited as the preferred methods of treatment. Anti-inflammatory and antipyretic medicines are often used to bring about the ameliorating effects. The majority are easily accessible OTC medications (Ballengee and Turner, 2014; ACPM, 2011; Eccles, 2006).

Products sold "over the counter" (OTC) do not need a prescription from a doctor and may be purchased from any retailer, including drugstores, grocery stores, convenience stores, and online vendors. In order to be approved as an over-the-counter (OTC) medication, a medicine must be safe for use for a certain

period of time (often 3-5 days) in the treatment of a self-diagnosable clinical disease, such as the common cold, gastrointestinal problems, or pain (Woniak-Holecka et al., 2012). The U.S. Food and Drug Administration, along with many other medical organisations, has deemed these medications to be safe and effective for treating a wide range of common medical issues (FDA, 2014). Over-the-counter (OTC) drugs are becoming more significant in the treatment of the world's most prevalent ailments, and their prevalence is on the rise in the health care system as a whole (Ballengee and Turner, 2014; Eccles, 2006).

The American College of Physicians and Surgeons estimates that 35% of all persons in the United States routinely use OTC products. The current laws have a significant impact on sales outside of pharmacies. The most current list of drugs allowed for sale outside of pharmacies in Poland was issued in October 2010, and it is shorter than prior lists. Using over-the-counter (OTC) drugs may have several benefits, such as quick access to treatment and fewer doctor's appointments. When people have a health problem, they take better care of it. Cost savings and improved healthcare system organisation are further advantages (ACPM, 2011). Over-the-counter medications often have a lower potential for adverse effects since their therapeutic index is greater than those of prescription medications. However, it is important to note that self-diagnosis errors and medication combinations might make OTC medicine usage risky (ACPM 2011; WHO 2002). Over-the-counter drugs might hide significant signs as well. Some populations' (e.g., teenagers and students; medical students in particular) excessive use of OTC pharmaceuticals is a result of their easy availability and the extensive marketing of these drugs (Ford, 2009). Consumers have unrestricted access to a vast array of drugs

thanks to the profit-driven pharmaceutical industry's control over the OTC market for goods and consumption pattern. Due to these concerns, it is imperative that OTC product use be strictly regulated.

The Food and Drug Administration (FDA) monitors new pharmaceuticals entering the market in the United States, and its Compliance Policy Guide has taken several products off the shelves owing to questions about their safety and effectiveness (Fashner et al., 2012). It's important to note that OTC medications are not encouraged or permitted for use with certain patient age groups. For instance, the Food and Drug Administration (2014) suggests not giving cold medicines to children younger than 2, whereas the American College of Paediatrics (AAP, 1997) suggests not giving them to children younger than 6. It is the responsibility of physicians to educate their patients about the risks and advantages of overusing over-the-counter medications (Fashner et al., 2012).

#### **Combatting the Common Cold Across Lines**

**of Defence :** Due to the high prevalence of the common cold and flu in Poland, over-the-counter (OTC) cold and flu medications have become more popular. However, there has not been a comprehensive look into how Polish consumers feel about the OTC industry or the demographics of OTC drug users in Poland. The purpose of this research was to determine what factors influence people to utilise over-the-counter cold remedies. The purpose of the study was to identify any correlations between demographic characteristics and OTC medicine purchases, such as level of education, gender, and region of residence. We also made an effort to assess the value of health education about the secure administration of these medications.

Symptoms of the common cold usually manifest themselves in waves. Early, active,

and late phases characterise the typical course of a cold.

**(i) Stage 1: Early (Days 1 to 3) :** A tickling in the throat is a common symptom of catching a cold and may appear within a day or two. About half of those who have a cold initially notice a tickling or scratchy throat. During this first stage of a cold, you may also encounter other typical symptoms, such as:

- a) Sneezing
- b) Sinus drainage
- c) Inflammation in the nasal passages.
- d) A cough
- e) A hoarse

**(ii) Stage 2: Active (Days 4 to 7):** During this phase, symptoms usually become the worst they can go. Additional symptoms beyond those of stage 1 include:

- i. Soreness throughout the body
- ii. Headaches
- iii. Sinus and ocular discharge
- iv. Tiredness
- v. Fever (more prevalent among young people)

**(iii) Stage 3: Late (Days 8 to 10):** This is the point at which most colds start to improve. You may be in the clear now. Although certain symptoms may linger on. Following a respiratory illness, some patients have a persistent cough that may linger for up to two months.

Visit a doctor if you experience a worsening of your symptoms or a recurrence of your fever. A secondary infection or complication, including bronchitis, sinusitis, or pneumonia, might have set in.

### **Methodology**

The research was done in an empirical manner using a mixed methodology. All of the participants in the research provided written permission. They were sought out during the months of December 2013 and April 2014.

Minimum age of 18 was the primary qualification for participation.

Self-reporting survey data was used for this investigation. The 20-question survey asked about the usage of over-the-counter drugs, herbal remedies, and other nutritional aids for the common cold. Questions focused on factors such as where and how often the product was purchased, whether or not a doctor was informed about the product's use in conjunction with other prescriptions, and where the respondent obtained information about the product. Participants were also questioned whether the product's accompanying brochure adequately addressed the subject of side effects and probable health danger.

### **The Study Finding**

Seventy-six percent of respondents used oral synthetic OTC medications against the common cold, whereas thirty percent used herbal remedies, mostly teas, in the year before to the research, with some, fairly slight overlap in the usage of both items. People with post-secondary education used oral OTCs more often than those with just a high school diploma or less. Students and working adults utilised these items more often than the jobless and the elderly. A pharmacy was the most common source for these medications. The suggestion of a doctor and consideration of the preparation's ingredients were the primary factors in the selection process.

In comparison to those under 35, older adults were more likely to drink herbal teas. Herb stores were the most common source for these preparations. People who used them did not employ any other synthetic pills and relied on the advice of their chemists and the cost of different brands when deciding which one to purchase.

Women were more likely than males to read the information provided on the container or in the accompanying pamphlets before making a

purchase of a pharmaceutical treatment, and to report that they understood and could interpret the information provided. Those with a college degree or above were more likely to read the leaflet than those with a high school diploma or less, as were those under the age of 65 and those who said they learned about the preparation via periodicals.

There was a statistically significant correlation between respondents' location of residence and their level of education. Those who had completed post-secondary education were more likely to dwell in large cities (with over 100,000 people), those who had completed secondary education in cities with between 50,000 and 80,000 inhabitants, and those who had completed primary and vocational school in small towns (with fewer than 20,000 residents) than those who had completed neither. There was further confirmation of an age-related correlation between respondents' level of education and their OTC medication use. People over the age of 65 tended to have just a high school diploma or a vocational certificate, while those between the ages of 26 and 35 were more likely to have a bachelor's degree. Furthermore, there was a robust correlation between level of education and likelihood of being hired. People in the workforce tended to have advanced degrees, while those without jobs tended to have just a high school diploma or GED.

Only occupational status was shown to be a statistically relevant demographic factor influencing the usage of over-the-counter cold medicines. People in the workforce (46.1% of respondents) and students were more likely to use OTCs and utilise other medications. Participants who reported not using OTCs also reported not using any prescription drugs.

We determined the effect of various factors on the use of OTCs against common cold:

- i. People in medium-sized cities (population between 50,000 and 500,000) and students placed a higher value on the cost than retirees and the jobless did.
- ii. Patients under the age of 25, those above the age of 65, those between the ages of 26 and 35, and those with a college degree or higher were more likely to value a doctor's advice than those with a high school diploma or less.
- iii. People in cities with populations between 50,000 and 80,000 put a premium on the advice of their friends.
- iv. People in cities with populations above 100,000 didn't care what a chemist thought.

Self-medication with OTC as well as herbal products was found to be prevalent in the Polish population sample surveyed, a finding not yet reported in European polls and reviews centred on the factors that motivate consumers to make purchases (Garcia-Alvarez et al., 2014; Bishop and Lewith, 2010). Self-diagnosis and self-treatment using over-the-counter (OTC) medications and herbal remedies are the norm for the common cold and flu (Mathens and Bellanger 2010; Eccles 2005). Around 18-19% of Americans use some form of dietary supplement (Wu et al., 2011), though estimates vary widely depending on the specific supplement and the source of the data, from 12% in the Slone survey (Kaufman et al., 2002) to 42% in another regional survey (Timbo et al., 2006).

Recent research out of Estonia found that 67 percent of people there had treated themselves for the typical cold or flu with things like honey, lemon balm, or other home remedies, or with a combination of herbal therapies and over-the-counter medications.

Selection bias and various survey techniques, as well as significant changes in health attitudes and health behaviour of the different

populations, have been cited as possible explanations for these discrepancies in the prevalence of OTC drugs among studies. Similarly, we think that there may be a demographic bias contributing to the greater numbers that were found in this research. Our participants skewed towards being regular pharmacy patrons, which may not be indicative of the community at large.

In particular, the usage of herbal teas was affected by age, with those over the age of 35 being more likely to drink them than those under the age of 35. In line with this conclusion, a study conducted in Estonia found that the average number of medicinal plants used per person rose with age (Raal et al., 2013). Younger individuals want quick treatment alternatives and prefer artificial OTC drugs, whereas the elderly have more time and often suffer from chronic ailments (Raal et al., 2013).

Consumers who use over-the-counter (OTC) remedies for the common cold are more likely to take additional OTC remedies, according to the current research. The results are in line with those seen in the United States, where around 50% of adults use nutritional products (Bailey et al. 2013; Picciano et al. Over 60 million Americans, according to a 2002 nationwide survey of 4263 individuals performed by the nationwide Consumers League (National Consumers League, 2003), self-medicate with analgesics and antipyretics at least multiple times a week. Consumers' attitudes and habits in the OTC market in Poland seem to be quite similar to those in the United States. On the other hand, in the United Kingdom, around 90% of customers utilise just a single supplement.

It is important to keep in mind the limitations of the current survey when interpreting its findings. Most of the people included in the demographic sample were those who had just

made a pharmacy purchase. It's possible that recall bias was introduced into the data due to the study's retrospective design, which required participants to recall information or events that occurred during the last 12 months.

### Conclusions

There is a general consensus that synthetic over-the-counter cold remedies are more effective than natural remedies. People in the workforce or at school tend to utilise OTCs since they are on the go and need a fast fix so they can go back to work or school. Multiple medications are often used by those who take these supplements. Health education programmes should focus on this population since they are more likely to have negative side effects from multiple drug interactions. Women (by employing synthetic OTC drugs) and the elderly and those with lower levels of education (using herbal items) are the primary demographics in Poland targeted by companies selling remedies for the common cold.

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