

A Hard Pill to Swallow: Meeting the Needs of Modern Consumers



Confronted with the 'patent cliff', dwindling drug discovery success and a host of other challenges, pharmaceutical companies are being forced to reconsider how they can remain profitable. This includes looking to external experts to foster innovation and a move towards actively placing every need of the modern patient at the centre of their strategy. A recent survey conducted by Hermes Pharma in collaboration with the impartial and renowned market research agency, SPIEGEL INSTITUT Mannheim, has further highlighted the need for a fresh approach. The survey revealed that over 50% of people, independent of age, gender and nationality, have experienced various problems swallowing traditional solid tablets and capsules. This highlights a significant opportunity for pharmaceutical companies: by formulating medicines as user-friendly dosage forms that are easier and more pleasant to take, they can increase market share, boost revenues, revitalise ageing products and better meet the needs of modern patients and consumers.

Reversing an Uphill Struggle

Pharmaceutical companies have been facing mounting challenges over the past decade. For example, the so-called 'patent cliff' continues to claim billions of dollars in revenue: in 2014 Sanofi will lose Renagel, Fabrazyme, Multaq and Actonel to the patent cliff, amounting to \$8.1 billion¹. The use of generic medicines is also becoming increasingly common, accounting for 75% of all prescription medicine sales during 2014 in the US². In addition to this, the R&D costs associated with medicine development continue to rise, while the return on R&D investment continues to fall: the number of medicines approved per billion US dollars spent on R&D has halved roughly every nine years since 1950, falling around 80-fold in inflation-adjusted terms³.

Currently, pharma is responding to this in a number of ways. Firstly, large pharmaceutical companies now look to acquire smaller, more innovative

companies, rather than going through the risky and expensive process of developing new medicines from scratch themselves. Another strategy that has gained momentum over the last fifteen years is how pharma looks to external sources of innovation via outsourced suppliers. This can serve to eliminate the costs of developing innovative solutions in-house and allows pharma to tap into dedicated expertise in specific areas.

Over-the-counter Medicines

The pharmaceutical market is also changing. Life expectancy in developed countries continues to rise, increasing the burden placed upon healthcare systems across the globe by ageing populations. This has seen healthcare providers explore multiple avenues to try to reduce healthcare costs. One possible solution involves making more medicines available over-the-counter (OTC), by switching them from prescription (Rx)-only to OTC, thus reducing the need to visit a doctor simply to obtain a well-known medicine for a potentially mild disease. Thanks to the internet, patients are also better informed than ever before, either requesting specific medicines from their doctors or making the choice themselves when purchasing medicines from pharmacies and supermarkets. This trend has the power to influence how pharma sells its products and could

provide forward-thinking companies with an opportunity to capture market share by better meeting the needs of patients and consumers.

To account for these changes, pharmaceutical companies are beginning to put patients at the centre of everything they do. This means paying more attention to factors beyond novel API development and embracing characteristics such as ease-of-use, convenience and others that could improve user experience, while breeding brand loyalty and increasing compliance at the same time.

At this point the opportunity is no longer hypothetical, as a recent survey carried out by Hermes Pharma and the SPIEGEL INSTITUT Mannheim has shown. Out of approximately 2000 people surveyed in the US and Germany, over half found it hard to swallow traditional tablets and capsules. The survey also revealed a host of other insights about how modern consumers view solid dosage forms, as well as their awareness, experience and preferences for using alternative dosage forms such as effervescent and chewable tablets, instant drinks, orally disintegrating granules (ODGs) and lozenges (see Figure 1 for more information on these forms).



Figure 1. There are several types of user-friendly dosage forms available, providing customers with a range of alternatives to traditional dosage forms like tablets and capsules.

A Bitter Pill to Swallow

As mentioned, over half of the people in the survey reported difficulties when swallowing tablets or capsules. Interestingly, none of these people recounted difficulties when swallowing food or drink, suggesting that this trend is specific to tablets and capsules. A broad range of reasons were cited, but most frequently the difficulties were due to the tablet or capsule being too large, becoming stuck in the throat and having an unpleasant taste or odour. In some cases, these responses were extreme: approximately 6% of people reported feeling nauseated and around 3% had trouble breathing or experienced a suffocating feeling (Figure 2).

In order to overcome these difficulties, people primarily reported consuming more water. Worryingly, many have gone much further, with over a third compromising the effectiveness of their treatment: 32% have broken tablets up to swallow them, 17% have crushed them (before trying to dissolve them in water), and 9% have tried chewing them. Interfering with a medication like this can compromise API release profile, bioavailability and medical efficacy. Most worryingly of all, 8% of people have simply stopped taking their medication altogether, rather than face the difficulties associated with swallowing tablets or capsules.

These data have important implications for healthcare providers, governments and reimbursers. It also opens up strategic opportunities for pharma companies to capture market share by better serving the needs of patients and consumers.

A Diverse Difficulty

Difficulty swallowing, known as dysphagia, is a condition prevalent in the elderly population⁴ and this is a trend that was also reflected in the survey results: around 44% of participants 65 years or older reported swallowing difficulties when taking tablets/capsules. Somewhat surprisingly, 70% of younger people aged 16–34 also reported having the same problem (Figure 3). Tablet size was an issue across all age groups, but younger people also reported disliking the taste or odour of tablets/capsules. This is not entirely unexpected, since those in the younger age group have grown up in the 'era of choice', where displeasing experiences are frequently

QUESTION: Do you have or have you had problems or discomfort prior to or while swallowing tablets/capsules? If so, how did/did they occur?
(Multiple responses were possible.)

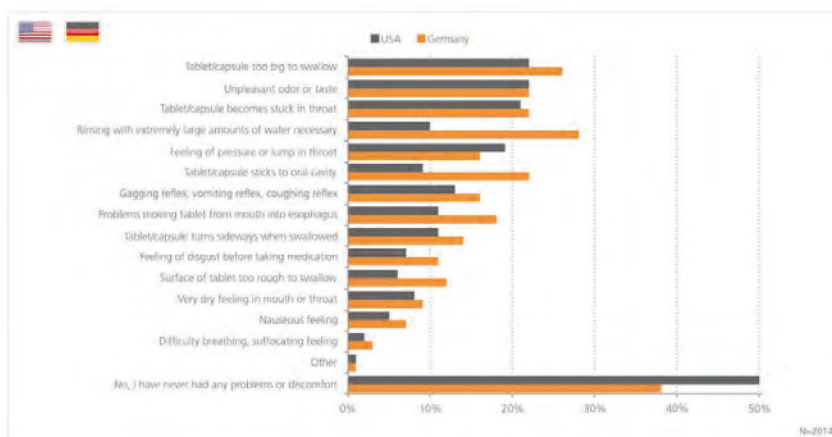


Figure 2: There is a wide variety of reasons why people have difficulties swallowing tablets

challenged and expectations around choice and ease-of-use tend to be higher.

People Expect More

Modern consumers expect more from their medicines (Figure 4). When asked about important product characteristics, survey participants reported a large number of preferred features. In addition to the 64% of participants who indicated that products should be easy and comfortable to swallow, 41% said that a pleasant taste or odour was important and 38% wanted a product that integrated easily into their lives. Around 30% of participants said they wanted packaging that was easy to open. A clear emerging trend among modern consumers is that they want access to convenient products that taste and smell pleasant and are easy to swallow.

Alternate Dosage Forms as a Solution

How can we make medicines easier and more pleasant to take? One possible solution is provided by user-friendly

dosage forms, which offer a more positive experience because they are easy to swallow, taste pleasantly and feel good in the mouth. From a more technical standpoint, user-friendly dosage forms also allow a greater concentration of API to be encapsulated within a single dose, or even the combination of multiple APIs, as they are not constrained by size in the same way traditional tablets and capsules are. This works to simplify dosing regimens, further highlighting how user-friendly dosage forms integrate effectively with daily life to make administration easier and more convenient.

In order to choose an alternate dosage form, consumers must know that it exists. The survey data revealed that awareness of many of these user-friendly dosage forms is high, especially in Germany, where chewable tablets, lozenges and instant drinks were known by over 90% of German participants. Furthermore, effervescent tablets and lozenges had been used by 90% and 88% of German

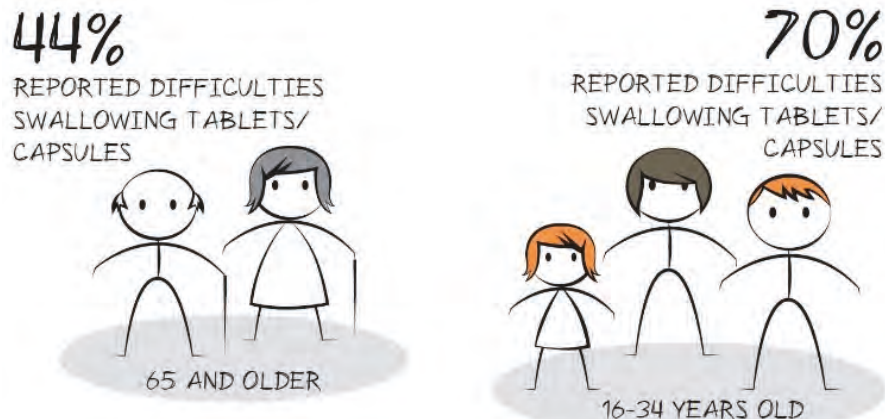


Figure 3. Difficulties swallowing tablets or capsules are not problems limited to the elderly, but affect all age groups.

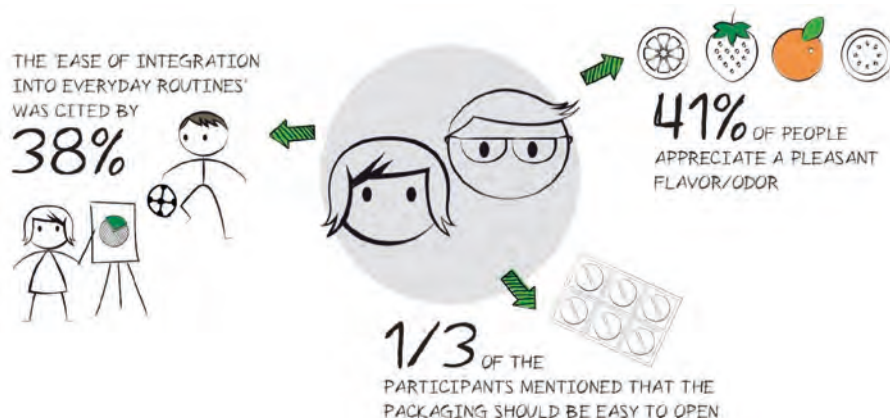


Figure 4. In the 'era of choice', modern consumers want their medication to not only be effective, but also provide a positive experience.

participants, respectively. In the US, awareness of chewable tablets, lozenges and effervescent tablets was also high, at around 85% of participants. However, fewer American participants had actually used these user-friendly dosage forms than in Germany.

Those people that had tried user-friendly dosage forms preferred them to solid tablets/capsules, consistently scoring them more favourably across a range of characteristics, including ease-of-swallowing, sensation in the mouth, package opening and ease-of-intake/ingestion. Delving into the data a little further, certain user-friendly dosage forms were found to be more popular in different locations. For example, instant drinks were the most popular form in the US, followed by ODGs, while lozenges scored the best overall in Germany, again followed by ODGs. This indicates that reformulating medicines to meet the preferences of individual nationalities might be an effective way to ensure success in these markets.

For Parent and Child

As a parent, it is important to feel confident that your child is capable of taking his or her medication with as little difficulty as possible. For this reason, the survey asked parents (a subset comprising 218 people in Germany and 294 in the US) about the dosage forms they would prefer to give to their children aged 15 years and younger. Parents ranked flavour and odour as the most important characteristics when choosing medication for their child, with 'easy and comfortable to swallow' in second. Approximately half of the parents surveyed in the US preferred to give children under the age of 11 chewable tablets.

In Germany, dissolvable forms such as effervescent tablets and instant drinks were a popular choice for parents. Depending on the age of their children, between approximately one in five and one in ten parents preferred instant drinks, and up to half preferred effervescent tablets. Regardless of child age, tablets or capsules were never the overall favoured dosage form of choice in either country.

Conclusions

The survey revealed a number of clear trends, highlighting that approximately 50% of the population have difficulties swallowing tablets and capsules. A large number of people have experienced serious issues with these dosage forms, mostly related to difficulties with swallowing, while convenience also plays a critical role. In some cases these challenges were leading patients to negatively alter their medication or even completely abstain from taking it. The survey made it very clear that people want medications that are easy to swallow, pleasant to take and fit in with their busy lives.

These findings present pharma with an excellent opportunity to win customers by further exploring user-friendly dosage forms that help keep patients both happy and compliant. This will be particularly true if pharmaceutical companies start balancing portfolios with more OTC products, as they will have to put the holistic needs of the patient at the core of their business activities. The traditional strategy of 'simply' marketing and selling products to pharmacists, doctors and other healthcare professionals will be insufficient for attracting and retaining this 'new' primary customer – the well-informed end-consumer. This means

putting the patient at the centre of the strategy, understanding their needs and challenges, and responding to them with dosage forms they want to take, not have to take.

User-friendly dosage forms are an excellent choice for providing people with the options they want. They are easy to use and swallow which can improve compliance and thus reduce the healthcare costs associated with failed treatments. Pharmaceutical companies that tap into this opportunity have the potential to differentiate their brands in the mind of the consumer, breed brand loyalty and open up new market segments by catering directly to the needs of end-consumers.

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