Packaging for People

Everyone should be able to handle medicines safely, correctly and efficiently and packaging plays an important role in ensuring this. In order to optimise this, it is necessary to consider not only the legal and economical requirements, but also the expectations of users

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Developments in Europe since the first EU legislation in 1992 have led to a substantial standardisation of medicinal packaging. The law demands a combination of outer packaging, an inner container and a leaflet, and most drugs across Europe are now packed in a very similar way. This, of course, has major benefits for the pharmaceutical trade and for regulatory controls, because it is relatively easy to compare prices and to check legal compliance.

However, the perspective of the actual user is rarely considered. One reason might be that this point of view is more difficult to quantify and control. There are different ways in which drugs can be obtained (with or without a prescription) and numerous situations in which they are used (home, hospital, emergency). They are handled by several different people (healthcare professionals, carers, patients), all of whom differ in age, experience, language and reading abilities. Until now, this variety has been almost completely ignored in the packaging designs – there is only a 'one-size-fits-all' standard.

A second reason that the user perspective has not attracted much attention might be that production developments and continuous modifications to the regulations about packaging and leaflets has demanded most of the time and effort. There is rarely any time to consider what the consequences of legal compliance are on the people who handle medicines in care situations.

Figure 1: Hard blister packs are sometimes in conflict with the expectations of patients. When a push-through fails, the instructions on how to get to the medicine are not prominent enough and the type is too small to read. Observations showed that patients will use more force – such as scissors or a knife – or give up completely as a consequence

Observing People

In order to find out how people really handle medicine packaging in

practice, patients, nurses, pharmacists and doctors have been observed and interviewed in their everyday contexts. When people talk about pharmaceutical packaging, it becomes clear that they sometimes encounter fairly severe obstacles. The combined experience of many of these simple experiments and interviews indicate that some of the regulatory requirements hamper the actual use of medicines by patients. The following two activities provide examples of how they are affected by regulations.

1. Opening a Package

From 2019 onwards, the packaging of medicines must be tamper-resistant, making it possible to check if an outer package has been opened before and guaranteeing that its contents are genuine. Transparent seals, perforated tears and strong adhesives are all recommended and are certainly effective. However, they also make it a lot more difficult for patients to open.

Observations have shown that the elderly in particular have difficulties seeing transparent seals and often do not expect them. Other dialogue participants have also indicated that tearing cardboard immediately gives the impression of 'a cheap and old box', which is disliked; and strong adhesives prevent opening because of a fear of damaging the contents. These comments also reconfirmed the substantial differences between patients – some could see a seal and open a package without any problems, while others simply gave up.

The inner packaging – frequently a blister pack – might provide another obstacle. Most are push-through, but some are not. Users might have to tear away the foil by carefully trying to push a fingernail in between it and the plastic. Figure 1 shows two examples of Dutch blister packs. It is very frustrating to peel these foils with a slight tremor, reduced dexterity or without reading glasses.

Both of these examples demonstrate practical problems for some people who need to access their medicines. The packaging designs make it more difficult for able patients and impossible for others.

2. Asking for More Information

Obtaining access to information about a specific medicine is becoming more difficult, too. The amount of information in package leaflets has increased substantially over the past 25 years, which has led to very large sheets of paper that need to be folded several times. Many are also now sealed or glued together in order to include them in production lines (see Figure 2). A transparent seal or adhesive makes it difficult to open and unfold these leaflets.

Furthermore, there is still no legal obligation to make it easy for patients to obtain additional information about a medicine in a different format. Some boxes mention phone numbers and email addresses but this is still rare, and a reference to a website is simply not allowed at the moment. Although there is a justifiable fear that patients might trust unreliable information on the internet, this cannot be used as an argument to renounce the web anymore. In the past 20 years or so, there has been plenty of time to develop websites with relevant information that patients can trust. Patients are now obliged to ask pharmacists and doctors for oral advice, because there are no visual alternatives.

A Design Approach

If it is necessary for patients to open medicines and if asking for more information is important, then these activities should be used as starting points for the development of the next generation of packaging. As a start, we need to observe people and ask how they handle their medicines at the moment. Four or five 10-minute interviews will confirm the severity of the practical difficulties and indicate ways that will better fit user expectations. Based on the responses, prototypes can be designed and made,

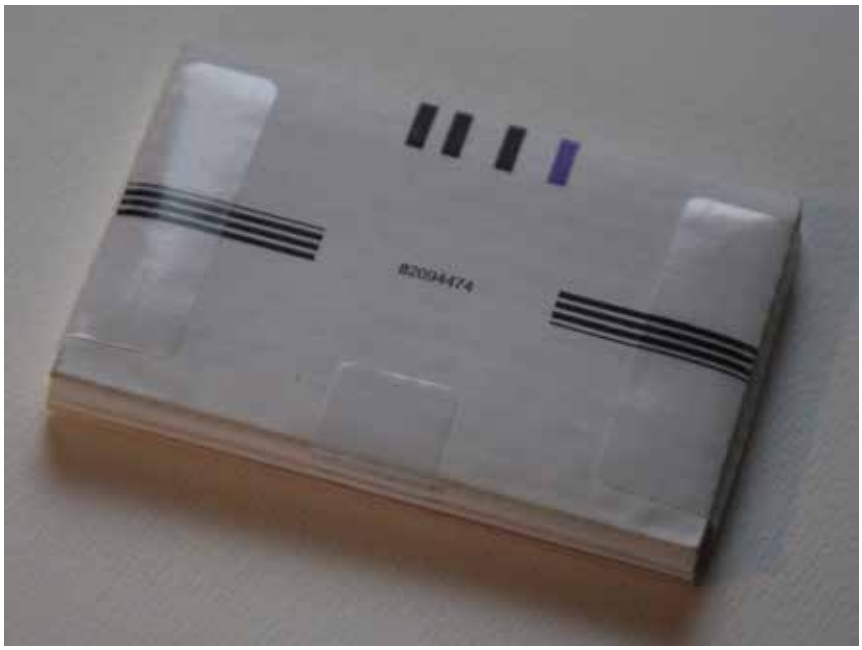
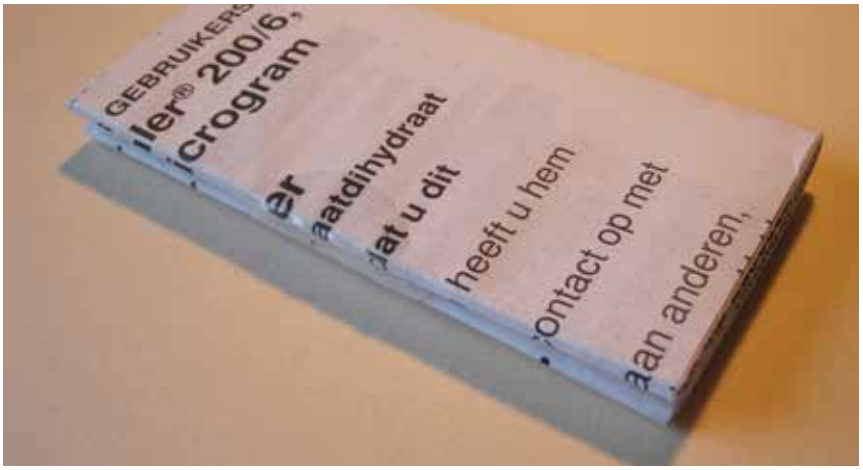


Figure 2: Sealing or glueing a patient package leaflet might be easier during the production, but it makes it very difficult for patients to access the information. Most simply give up when they encounter something that requires too much effort



which can then be tested and redesigned.

It is clear from the start that these activities are not the same for all drugs. Packaging for oral contraceptives, HIV medicines and emergency glucagen and epinefrine injections must be very different since they are used in specific situations. Using standardised packs and information does not help all patients, but any short series of interviews will highlight these differences and provide suggestions for improvements.

Changing Tack

Current legislation does not prevent alternative approaches that stem from the idea that it is essential to enable people to act appropriately. The examples above indicate that the standardised 'one-size-fits-all' approach does not help all patients in all circumstances. It is clear that leaflets will not be read if they are glued together, and that packaging does not enable people to open, take, check and find information if the design does not make this as easy as possible.

A way forward is to consider the actual situation in which a medicine is used; cooperate with people who have to use it; set benchmark standards for performance levels; and design-test-redesign-test-redesign until the required performance is achieved. At the same time, this method will indicate groups that are excluded and alternative solutions can be found.

This is not a new approach – having been in European legislation since 2004 – but it is currently only related to package leaflets. Article 63 (Directive 2004/27) states that "information in package leaflets must enable the users to act appropriately". It would be beneficial if this statement would be applied to the packaging as well: 'Packaging of medicines must enable the users to act appropriately.'

About the author

Dr Karel van der Waarde is a researcher and consultant for Graphic Design-Research, a company that writes, designs and tests packaging, package inserts and visual information about medicines. The focus is on a direct cooperation with people to develop digital formats and tangible instructions on labels, packaging and inserts. He holds a PhD from Reading University, UK, and has worked in the pharmaceutical industry ever since.
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