Visual information about medicines for patients:

Designing for Don Quixote?

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1 Some examples: Medicines information
2 Motivations for current practice
3 What’s wrong?
4 An alternative approach?
5 Windmills?
6 Closing remarks
Example 1:

A persona: a lady with asthma.

She has just returned from the pharmacy.

What does she see?
Example 1: front box a
Example 1: front box b
Example 1: inhaler
Example 1: leaflets

**Adults and Elderly:**
For the relief of symptoms of acute asthma attack and intermittent asthma the starting dose is one puff (100mcg) that may be increased to two puffs (200mcg). To prevent symptoms before exercise or contact with whatever triggers your asthma attack the starting dose is two puffs (200mcg) that may be increased to four puffs (400mcg).
Example 2: syringe
Example 2: label

FOR INTRAVENOUS USE ONLY
FATAL IF GIVEN INTRATHECALLY
KEEP IN A REFRIGERATOR (2° - 8° C)
Example 3
Pharmacy
Example 4: medicines for children

- JARDIFEN (siddakeer)
- LYMPHOMYSOT
  3 x 5 gtt = 2 mois
- NASONEX
  1 x = 1 mois
- ZYRTEC
  2 x 10 ml = 1 sem.
- VENTOCIL
  3 x 5 ml = 3 j.
- CIPROFLOX
  2 x 3 ml = 3 j.
- COPE homéopathique
  2 x 3 ml, à jum. 10 ml dacaps
- ÉCZEMA PROTOPIC (2 x)
Example 5: hospital
3 x 1 par jour.
3 x 1 (per day)

3 x (1 per day)

per jour.
example 7: Pictograms
example 7: Pictograms

What does single-use mean?

Do not reuse. A single-use device is used on an individual patient during a single procedure and then discarded. It is not intended to be reprocessed and used again, even on the same patient.
Not entirely satisfactory?

Patients, pharmacists, doctors, and nurses have problems using information because it is:
- inappropriate,
- confusing,
- poorly designed,
- incomprehensible.
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DG3: Enterprise and industry

DG3 priority:

‘To regulate the pharmaceutical sector in the dual interest of protecting public health while completing the single market for pharmaceuticals.’
Current priority: single market

Aims:

• Free movement of medicines across Europe
• All Europeans must have complete access to ‘full and comprehensible’ information about medicines.
Regulations and guidelines

- Directives: 92/27/EC - 2004/27/EC
- Readability guideline 1998 – 2009
- Range of advice, templates, guidance, glossaries

also about visual design ...
2. The package leaflet must be written and designed to be clear and understandable, enabling the users to act appropriately, when necessary with the help of health professionals. The package leaflet must be clearly legible in the official language or languages of the Member State in which the medicinal product is placed on the market.
GENERAL CONSIDERATIONS

The package leaflet is intended for the patient/user. If the package leaflet is well designed and clearly worded, this maximises the number of people who can use the information, including older children and adolescents, those with poor literacy skills and those with some degree of sight loss. Companies are encouraged to seek advice from specialists in information design when devising their house style for the package leaflet to ensure that the design facilitates navigation and access to information.
In this leaflet:

1. What X is and what it is used for
2. Before you <take> <use> X
3. How to <take> <use> X
4. Possible side effects
5. How to store X
6. Further information

1. WHAT X IS AND WHAT IT IS USED FOR

[Pharmacotherapeutic group.]
[The pharmacotherapeutic group or type of activity should be stated here using patient understandable language.]

[Therapeutic indications.]
[The therapeutic indications should be stated here, using patient understandable language. If appropriate, specify that:]

<This medicine is for diagnostic use only.>
In this leaflet:

1. What Lisinopril tablets are and what they are used for
2. Before you take
3. How to take
4. Possible side effects
5. How to store
6. Further information

1. What Lisinopril tablets are and what they are used for

Lisinopril belongs to a group of medicines called ACE inhibitors. These cause the blood vessels to relax, making it easier for the blood to pass through them.
Results after 18 years

• Free movement of medicines across Europe

• All Europeans have more access to ‘full and comprehensible’ information about medicines

but from a visual point ...
Information for patients?
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Motivations for involvement:

• High error rates (1 fatality per million per day)
• Increasing costs (+ 10% per year)
• Poor effectiveness (around 50%)
• Increasing use: more medicines, more elderly
More cracks in the system

- patients, pharmacists, nurses: problems using information
- industry: problems with following guidance
- regulatory authorities: problems with controlling
6. **Style**

When writing, an active style should be used, instead of passive. For example:

- 'take 2 tablets' instead of '2 tablet should be taken,'

- 'you must....' is better than 'it is necessary ...'

<Medicines should not be disposed of via wastewater or household waste. Ask your pharmacist how to dispose of medicines no longer required. These measures will help to protect the environment.>
Industry problem: Pictogram-use?

Vinercyd is given to you through a drip in a vein (an infusion).
2. **Design and layout of the information**

The use of “justified” text (that is text aligned to both left hand and right hand margins) should in principle not be used.

**Line spaces** should be kept clear. The space between lines is an important factor influencing the clarity of the text. As a general rule the space between one line and the next should be at least 1.5 times the space between words on a line, where practical.

Contrast between the text and the background is important. Factors like paper weight, colour of the paper, size and weight of the type, colour of the type and the paper itself should be considered. Too little contrast between the text and the background adversely affects the accessibility of the information. Therefore, background images should in principle not be placed behind the text since they may interfere with the clarity of the information making it harder to read.

A **column format** for the text can help the reader navigate the information. The margin between the columns should be large enough to adequately separate the text. If space is limited a **vertical line** to separate the text may be used. Related information should be kept together so the text flows easily from one column to the next. Consideration should be given to using a **landscape layout** which can be helpful to patients. Where a multi-lingual leaflet is proposed there should be a clear demarcation between the different languages used; all the information provided in each language should be assembled.
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Conflict between template and reality

‘Keep out of the reach and sight of children.’
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IF YOU TAKE TOO MUCH
* Tell your doctor as soon as possible if you accidentally take a larger dose than you were recommended.

HOW TO USE YOUR INHALER

1 Remove the mouthpiece cover and check the mouthpiece inside and outside to see that it is clean.

2 Shake the inhaler well.

3 Hold the inhaler upright as shown above with your thumb on the base, below the mouthpiece. Breathe out as far as is comfortable and then....

4 Place the mouthpiece in your mouth between your teeth and close your lips firmly around it but do not bite it.

5 Just after starting to breathe in through your mouth press down on the top of the inhaler to release Beclotide while still breathing in steadily and deeply.

TESTING YOUR INHALER
If you have not used your inhaler for a week or more release one puff into the air to make sure it works.

These instructions have been devised in agreement with the National Asthma Campaign 300 Upper Street, London N1 2XX Tel: 071-226 2260 and The British Lung Foundation 240 Kings Road, London SW1 5UE Tel: 071-376 5735
Alternatives: Target Pharmacy 2003
Alternatives
‘2. The package leaflet must be written and designed to be clear and understandable, enabling the users to act appropriately, when necessary with the help of health professionals. The package leaflet must be clearly legible in the official language or languages of the Member State in which the medicinal product is placed on the market.
‘enabling the users to act appropriately’

- Who are the users?
- Which actions need to be enabled?
- What do we consider ‘appropriate’?
1. Who are the users?

• pharmacists, elderly, children, nurses?

• in which specific situation do they use medicines? (night shifts? several medicines at the same time, anxiety?)
2. Which actions?

- considering whether to take or not
- storing correctly
- taking at the right time

This depends on the medicine, context, user, ...

C. Insert the needle into the skin
3. What is appropriate?

- Establish current performance beforehand
- Consider if improvement is required
- Modify the information (situation)
- Measure again.
Example

<Medicines should not be disposed of via wastewater or household waste. Ask your pharmacist how to dispose of medicines no longer required. These measures will help to protect the environment.>

1. How do patients throw away their unused medicines?
2. Is this acceptable?
3. Modify information and situation
4. Test to see if modification has an effect
Context: hospital use.
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Fundamental assumptions 1

- not necessary to involve all stakeholders

pharmacists? doctors? nurses?
Fundamental assumptions 2

- not necessary to involve all stakeholders
- not necessary to look at alternatives

web-based, patient-generated?
Fundamental assumptions 3

- not necessary to involve all stakeholders
- not necessary to look at alternatives
- not necessary to differentiate

context, language, medicine, patient, ...
Fundamental assumptions 4

- not necessary to involve all stakeholders
- not necessary to look at alternatives
- not necessary to differentiate
- not necessary to look at design processes

writing, designing, testing?
Fundamental assumptions 5

- not necessary to involve all stakeholders
- not necessary to look at alternatives
- not necessary to differentiate
- not necessary to look at design processes
- not necessary to look at practical use

hospital, home, emergency?
Fundamental assumptions 6

- not necessary to involve all stakeholders
- not necessary to look at alternatives
- not necessary to differentiate
- not necessary to look at design process
- not necessary to look at practical use
- not necessary to discuss criteria
Fundamental assumptions

- focus on regulation of pharmaceutical industry
- focus on package leaflet
- focus on single template
- reduce design process to simple rules
- ignore practical use
- use only criteria ‘finding’ and ‘understanding’
Opportunities

- involve all stakeholders
- look at alternatives
- differentiate (context, language, medicine, patient, ...)
- look at design process
- look at practical use
- discuss criteria
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Conclusion 1:

If we want to optimise information, than we need to consider who we are optimising for.

At the moment, we optimise to register medicines and make information similar and accessible across Europe.

That does not really help people ...
Conclusion 2:

If we want information ‘to enable the users to act appropriately’ than we must reconsider our approach.

‘users’, ‘actions’ and ‘appropriateness’ must form the basis for the design of information about medicines.
Giants or windmills?
Thank you.

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