Interface of drug use

N.O. Ludescher[a,*], R.R. Vergilio[a], C.C. Lucio[a,b], J.E.G. Santos[b]

[a]*Design and Fashion Department, Technology Center, UEM - Maringa State University, Dom Pedro II St, s/n, Cianorte, Paraná, Brazil*

[b]*Postgraduate Program in Design, School of Architecture, Arts and Communication, UNESP - São Paulo State University, Eng. Luiz Edmundo Carrijo Coube Ave, 14-01, Bauru, São Paulo, Brazil*

Abstract. Packaging and labeling play a crucial role awhile protecting medicaments and transmitting a range of crucial information to the users. Taking into account the scarcity of specific studies in this area, it was considered great the need for a comprehensive survey about customers' satisfaction when handling these containers.

Keywords: Packaging, drug, handling, ergonomics, usability

1. Introduction

Medicaments are essential goods in healthcare and an important therapeutic tool in the hands of doctors and professionals, are greatly responsible for a significant part of the increase in life expectancy [4], their increased consumption follows the trend of aging population, constituting polypharmacy a normal situation in clinical medicine [5].

However, scientific studies show that many errors in the administration of drugs are due to a multiplicity of factors, and many are related to the design of packaging, as staded Meier et al [1] on the dispensation of drugs and evaluation of errors in the stages of the process: the packages of pills or injectables are not always preserved after the handling to remove the drug, making the expiration dates and lot numbers no longer identifiable. Another problem related to the non-preservation of the pack is the possibility of loss of pharmacological efficacy, considering the air intake and with it the possible by microorganisms contamination.

2. The Interviews

Interviews were conducted so far with 60 people. They were divided into a total of seven age groups: the first contains the ones between 18 and 29 years old; in the second are people between 30 and 39 years old, and so on, until the last track, where respondents are 80 years old or more. A sum of questions were posed to them, all about the general use of medication, and each one answered according to their perception and / or previous experience.

Respondents were able to manipulate the packagings on which questions were posed, so that answers are the most faithful to the reality of users, not depending only on their experience, memory and habits acquired by use.

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*Ludescher, Naira O. e-mail: naira.osti@gmail.com.

3. Results

It was found that average of the daily drug usage is among 1.4 per person. In the age of 60 and olders, the average enhances to 1.52 medications per day, confirming the studies of Monane et al [3], which testifies that the elderly are the main consumers and the greatest beneficiaries of modern pharmacotherapy.
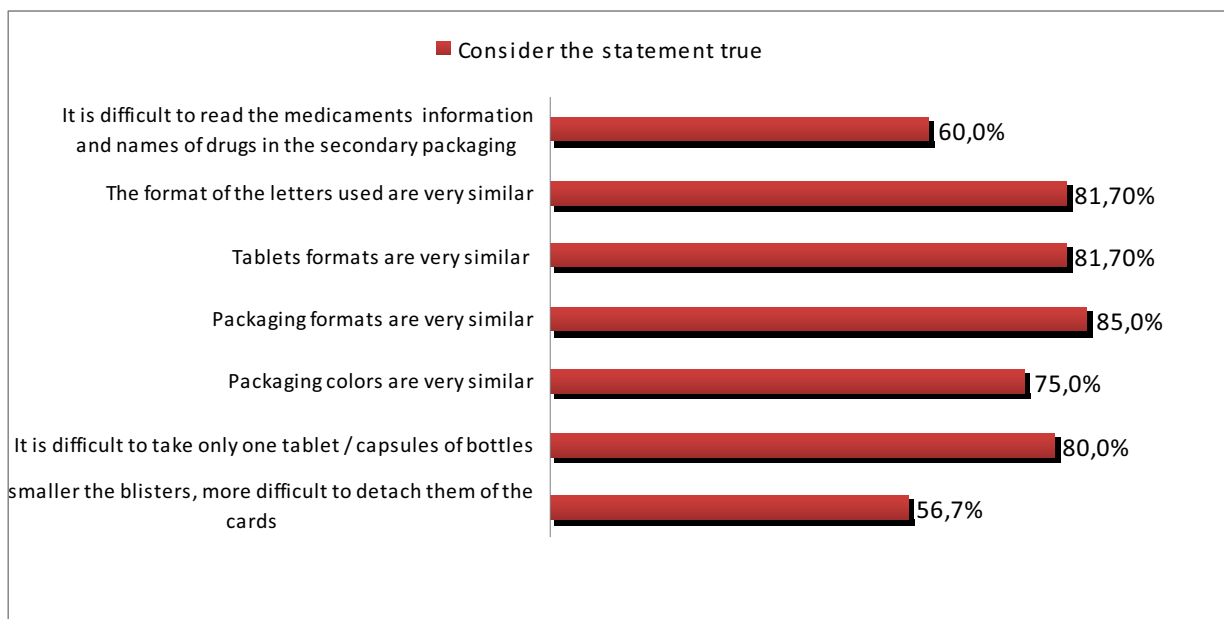
The overall majority of respondents (63%) took drugs in a single daily dose and / or 2 times a day (21.7%). Still, 91.7% make use of allopathic and industrialized drug therapy; compounded that the drugs users represent 46% of respondents.

3.1. Difficulties in handling drugs:

About 70% of respondents ranked ampoules opening as one uphill struggle; in the same question, about the bottles with sealed caps, 30% of respondents found it difficult to open, and 43.3% classify the bottles with security caps opening as a difficult assignment too.

Was asked a evaluating by the respondents about some affirmatives about interaction problems with the medicaments packing, the results obtained were:
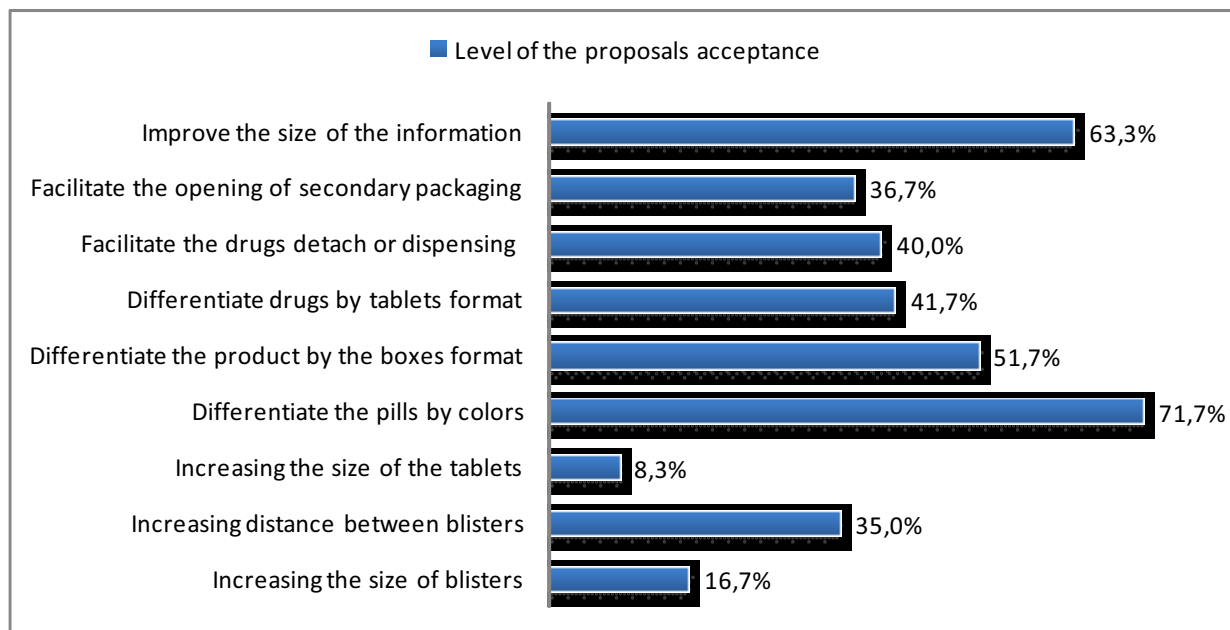
Table 1
Specific questions about problems in drug packaging

Some displeasure was noted about the parameters that allow the differentiation between the kinds of medications and dispensing of the amount waived of medication bottles or tablets.

When exposed changing possibilities in packaging, the answers were:

Table 2
Suggestions for changes in drug packaging

Again, the differentiation among types of medicaments received high attention of respondents, similarly with the results of Silva et al [2] researches, where: of the 60 respondents, 57% suggested a color differentiation. Increasing the size of the information present in packaging should also be evaluated.

4. Conclusion

From the obtained results it is noticeable the importance of a thorough evaluation of usability tests application on medicaments packing, and mainly, the implementing of solutions that facilitate the differentiation between drugs and avoid dosing errors, that 38.3% of respondents admit having committed.

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