



Nonwovens Markets

A tale of two markets.

A survey of disposables versus reusables in hospitals BY

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A TALE OF TWO MARKETS: A SURVEY OF DISPOSABLE VERSUS REUSABLE PRODUCTS IN HOSPITALS

by

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Introduction

Portuguese and French universities have been involved in an extensive study within these two countries relating a survey of the use of disposable and reusable products in Portuguese and French hospitals.

We compare between the employments of this type of products in this two countries with the help of a survey realised during 2001.

Regarding Portugal we can compare the results obtained with a previous study carried out in 1996 during the development of a master thesis (1) that focused on disposable textiles used in the healthcare sector.

National enquiries have been carried out about the use of disposable versus reusable products and concluded that private hospitals use more disposable, independently of the ratio price/quality.

Some results of the survey will be presented and the analysis show that a significant agreement of the consumption of these products exist in both countries, made possible by the exchange of experiences between two foreign - portuguese and french - universities.

Another goal of this study is the clarification of the impact of disposable and reusable products showing the pattern of consumption of both options, because of the competition between disposable and reusable products. The penetration of the disposable market varies across Europe. It is higher in North of Europe and lower in South of Europe. Though, the market is tending to disposables and the penetration is growing (2).

Studying the gain and loss of market share of disposable and reusable products yields a very telling measurement of strategy, indicating the companies to follow the trend of the hospitals or making more publicity and eliminate preconceived ideas from the medical staff (comfort during use vs. protection) and purchase department (price vs. quality).

In France exists a central organisation – the *Union des Groupements d'Achats Publics* (UGAP) – that performs most of the public purchase for hospitals, the rest is being made directly by the hospitals.

In Portugal, provision of medical products is provided by approved dealers and made directly by the hospitals. There is no significant loyalty, because the price is the most important factor of purchase. (3)

Survey of the use of disposable and reusable products

We launched the data collection phase, simultaneously in Portugal and France, in March 2001 and finished it in September of the same year, based on the survey realised in 1996, with some improvements that we considered important to optimise hospital response and to minimise the impartiality many surveys can introduce to market research (4).

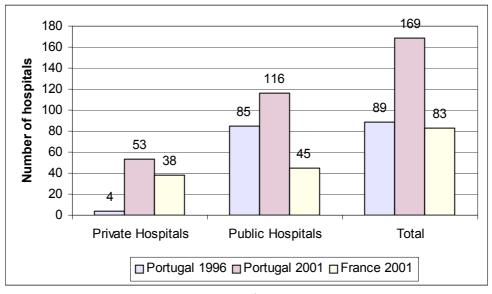
In 1996, were used interview strategies and test surveys in the local hospital, to test them for efficacy and accuracy. This proceeding was introduced also for the french survey in 2001.

The Table I, designates the number of hospitals inquired during the period of the survey.

Country/Year	1996	2001	
Portugal	89	169	
France	-	83	

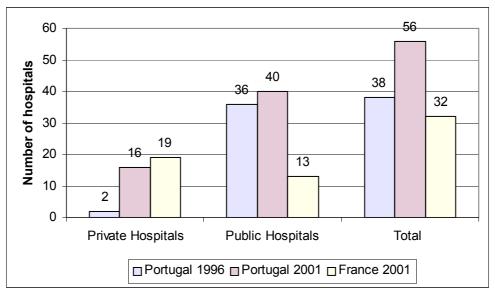
Table I

Graph 1, indicates the number of public and private hospitals inquired.



Graph 1

Graph 2, shows the number of public and private hospitals response.



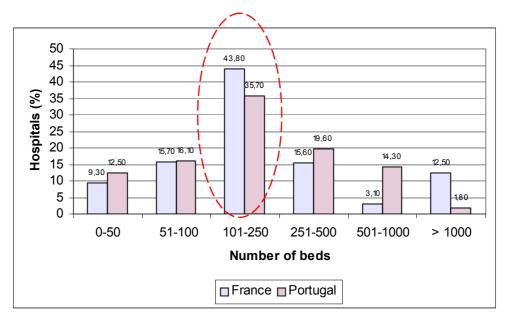
Graph 2

The Table II designates the number of hospitals that response during the period of the survey and the ratio between the numbers of inquired and the number of responds.

Country/Year	1996	Ratio (%)	2001	Ratio (%)
Portugal				
Public Hospital	36	42	40	34
Private Hospital	2	50	16	30
Total	38	43	56	33
France				
Public Hospital	-	-	13	29
Private Hospital	-	-	19	50
Total	ı	-	32	39

Table II

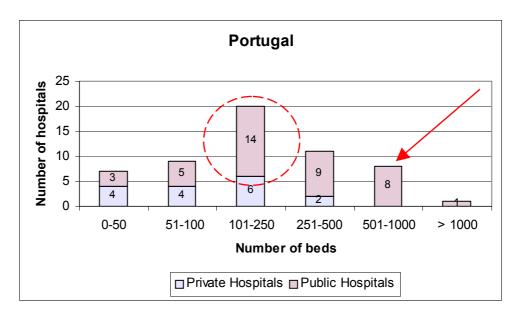
The majority of the hospitals that answered the survey in 2001 (Graph 3), in both countries, has around 101-250 beds



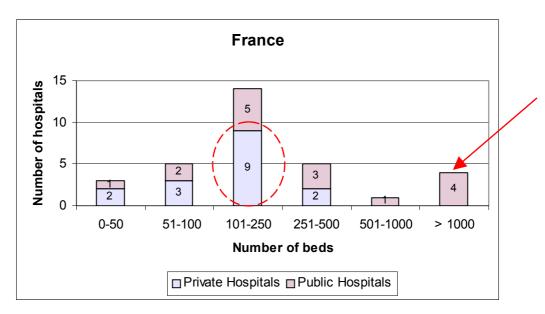
Graph 3

The public hospitals have the biggest hospitals, with the larger amount of number of beds (Graph 4).

In the range of 101-250 beds there exist more public hospitals in Portugal (Graph 4), in comparison with France (Graph 5), where there exist more private hospitals in the same range.



Graph 4

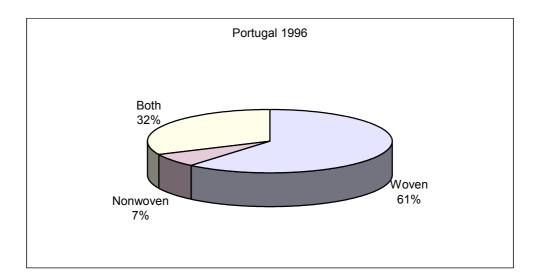


Graph 5

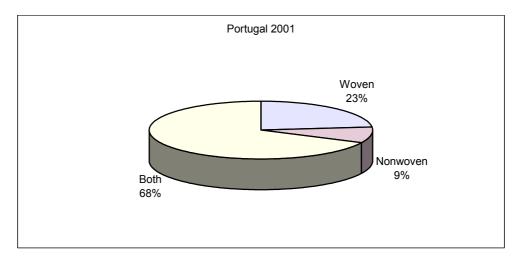
The most important materials in the hospitals are the woven and nonwoven products.

The consumption of woven products is decreasing in portuguese hospitals (Graph 6 and 7) and the nonwoven products are increasing slightly.

The surveys reveal that the tendency of portuguese hospitals is to use both of the materials, increasing considerably.

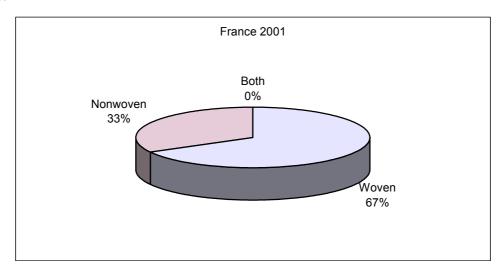


Graph 6



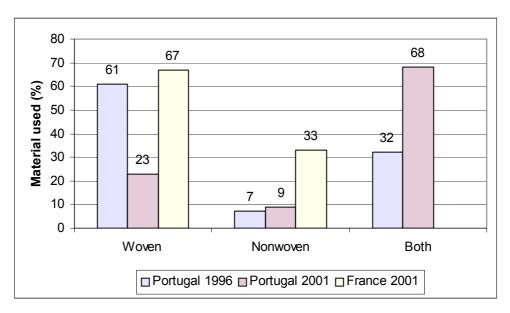
Graph 7

In France (Graph 8), the nonwoven products have one quarter of the market and tendency to increase.



Graph 8

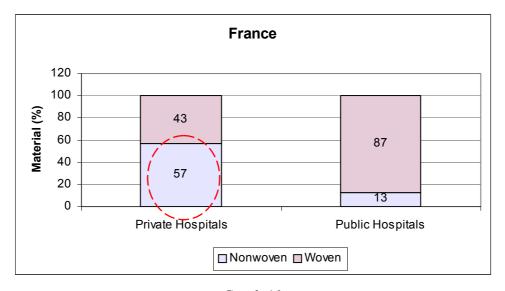
Graph 9, point out that in France, the use of nonwoven is more significant than in Portugal. Here we have to draw attention to the fact that in the french survey we didn't mentioned the option "both", being the consumption of the materials distributed only in woven and nonwoven materials.



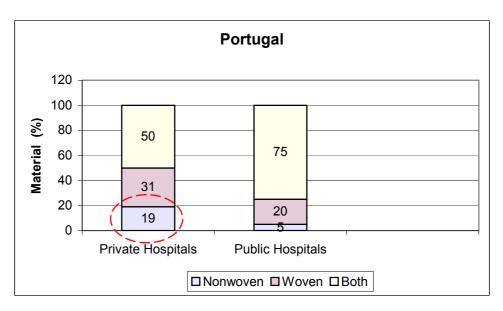
Graph 9

The private hospitals have the largest percentage of the use of nonwoven in France (Graph 10) and Portugal (Graph 11).

The consumption is higher in France (57%) in contrast with Portugal (19%) in the private hospitals.

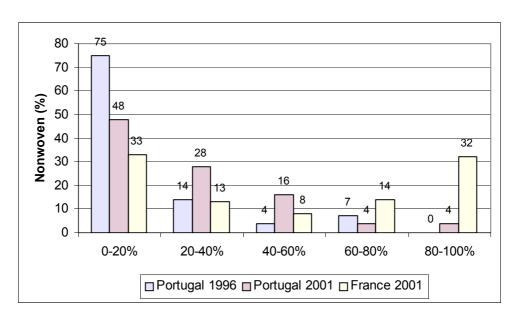


Graph 10



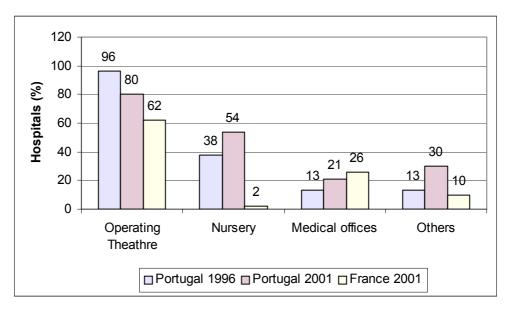
Graph 11

The percentage of use of nonwovens is increasing in the totality of the hospitals (Graph 12). The french hospitals are using more this type of material, than the portuguese hospitals.



Graph 12

The most common areas of use of nonwovens (Graph 13), in both countries, are the operating theatre. In Portugal the use in the nurseries and medical offices are increasing and decreasing in the operating theatre. In France exist the same behaviour, except for the nurseries, were nonwovens are not much in use.



Graph 13

Conclusions

The surveys show a significant agreement of the consumption of these products in Portugal and in France.

The majority of the hospitals that answered the survey, in both countries, have around 101-250 beds.

The public hospitals have the biggest hospitals, with the larger amount of number of beds.

In the range of 101-250 beds there exist more public hospitals in Portugal, in comparison with France, where there exist more private hospitals.

In Portugal the use of nonwoven increased between 1996 and 2001. In France the value is stable and we forecast an increase in both countries.

The private hospitals have the biggest percentage of the use of nonwoven - disposable products. In french hospitals the use of nonwoven is more relevant than in portuguese hospitals.

Private hospitals use more nonwoven disposable products, independently of the ratio price/quality.

The nonwoven is used mostly in the operating theatre (surgical gowns and drapes), hence it is increasing also in the nurseries and medical offices, because of the risk of infection from human immunodeficiency virus (HIV) and hepatitis B.

Acknowledgement

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References:

Araújo Marques, M. J., "Contribuição para a definição de propriedades de materiais têxteis hospitalares descartáveis". Master Thesis, September (1997).

- Fapomed, S. A.; "Market Study". 2 Portugal, (1998).
- Cabeço Silva, M. E., Oliveira, C., Marques Abreu, M. J., Coelho, A., Ferreira, L., 3 Cabeço Silva, A. A., Gonçalves, I.; "STERITEX Project". Jornadas de Inovação, Portugal, (2001).
- Barella Miró, A.; "Estadistica Aplicada". Spain, (1982). 4