

Dublin Business School

RESEARCH PROJECT

Consumer behavior concerning the e-business in the French pharmaceutical industry

By

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I declare that this dissertation is the result of my own independent investigation and that all sources are duly acknowledged in the Bibliography

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Introduction

Since the last few years, the development of the internet and especially of online shopping has affected all the activity sectors. The pharmaceutical sector has also been involved and the purchase of medicines on the web has witnessed a real expansion. This expansion has led to some major problems. Indeed, regarding the law, e-pharmacies are allowed in some countries such as the USA but not in others such as France.

Consumer behaviour is a determining factor for the existence of the e-pharmacies. Without consumers, e-pharmacies would be useless but people can be very afraid to buy their medicines on the web, mostly because of the quality of the products that can be found on the internet. Generally speaking, people prefer going to a real pharmacy so that they can get advice of chemists. But on the other hand, the sale of medication on the web exists and people buy online medicines because it presents lots of advantages such as the home delivery and often better prices than in pharmacies.

The aim of this research project is to analyze the way in which consumers act about their medicines purchase and to show that consumer behavior is one of the most decisive factors in the development or the failure of e-pharmacies. For this purpose, we will focus on French consumer behaviour.

The starting hypothesis is that e-pharmacies have an uncertain future because of the fact that not all the medicines can be sold legally on the web in France (compared to other countries like the USA) and because of consumer behavior regarding the real pharmacies and the purchase intentions of medications on the internet.

In order to confirm this hypothesis, we will start by investigating the position of the pharmaceutical e-business compared to the other sales channels like real pharmacies and we will then analyze the consumer behavior in terms of medication purchase intentions on the web.

To really understand the situation of the e-business in the pharmaceutical industry, we will start by explaining the pharmaceutical industry with some historical background. We will then explain internet market and explain what e-business and online shopping are.

a. The pharmaceutical industry

The pharmaceutical industry is an economical sector which gathers research activities, the fabrication and the commercialization of medicines.

Before the creation of the pharmaceutical industry, medicines were prepared by physicians and apothecaries. The most important part of today's pharmaceutical companies was founded in the late 19th and early 20th century but the real development of pharmacies appeared in the 1950's thanks to scientific discoveries.

Nowadays, the pharmaceutical industry is one of the most profitable and important one in the world. It generates many billions of dollars of turnover. Pharmaceutical products such as medicines are a major part of the worldwide economy. As there is a huge demand for medicines and vaccines, countries that produce these medicines have the opportunity to sell them to a large market across the world.

France is the third larger exporter of medicines of the world after Germany and Switzerland. Indeed, the history of the French pharmaceutical industry has created a strong reputation of the country with the rest of the world. According to the LEEM (French Pharmaceutical Companies Association), the French-based pharmaceutical industry employs around 100 000 people, a quarter of them graduates, with about another 200 000 people employed in related industries. The pharmaceutical industry works in close ties with the French government, the European authorities as well as with patients, trying to provide appropriate and high-quality medicines access and information.

b. The internet market: what is e-commerce?

E-commerce (electronic commerce), is the buying and selling of products on the web or via computer networks. The term of "e-commerce" describes all business transactions where the parties are not physically in contact with each other. There are lots of component in the e-commerce and the online shopping is one of the most important one. People have started to use internet to buy some goods online in the late 1990's and now in 2010, the big majority of the world population use internet to buy products or services.

According to David Whiteley (2000), electronic commerce is a general concept covering any form of business transaction or information exchange executed using information and communication technologies (ICT's). E-commerce takes place between companies, between companies and their customers, or between companies and public administrations. E-

commerce systems include commercial transactions on the internet but their scope is much wider than this. Indeed, internet e-commerce is only one part of the overall sphere of e-commerce (with electronic markets and Electronic data interchange).

Loshin, Vacca and Murphy (2001) explain also that the term e-commerce has evolved from its meager notion of electronic shopping to mean all aspects of business and market processes enabled by the internet and the World Wide Web technologies.

Electronic commerce as online selling means doing business online or selling and buying products and services through Web storefronts. For the purpose of this thesis, we can consider both of them. Products can be medicines sold on the web and services can be an online medical consultation.

Electronic commerce as a market means having the whole world at the doorstep and must not be considered only as the buying and selling of products online but as a whole new worldwide market.

Chapter 1: Literature Review

1.1 The legal position of French pharmacies on the web

In France, the sale of medications on the web is not properly forbidden by the law but the sale of medicines with no previous contact between the patient and the chemist is not approved by the medical association. The chemist must check if the prescription matches with the state of health of the patient. That's why so few medicines are sold legally on the web in France.

Concerning the online advertising of medications, the French "Code de la santé publique" (public health Code) explains that only the medicines without prescription and that don't get a refund of the social security can be advertised.

The French pharmacist association (ordre des pharmaciens) has created ten rules to regulate the sales of medication on the web:

- The pharmacist has to guarantee the quality of the medicines that are sold on his website.
- An e-pharmacy can exist only if it is linked to a real and legal pharmacy that obeys the public health Code.
- The website must be conceived in a way that no medicine can be sold without an interactive chat with the chemist to make sure that the medication will be adapted to the patient.
- The e-business activity is submitted to the pharmaceutical monopoly.
- Each webpage that presents a medicine must have been controlled by the AFSSAPS (Agence Française de Sécurité Sanitaire des Produits de Santé: French agency of sanitary security of health products)
- The information and advices given by the chemist on his website must be up-to-date and must respect the science code.
- The website administrator must be able to prove the intervention of a pharmacist for each sale of medication.
- The chemist is responsible for everything and for every medication that is sold on his website and must obey the public health Code.
- It is impossible to forbid the sale on the web of medication without prescription.

- The website administrator must be the appointed pharmacist and must ensure that the information on the patient stay confidential.

1.2 The actual position and importance of the pharmacies

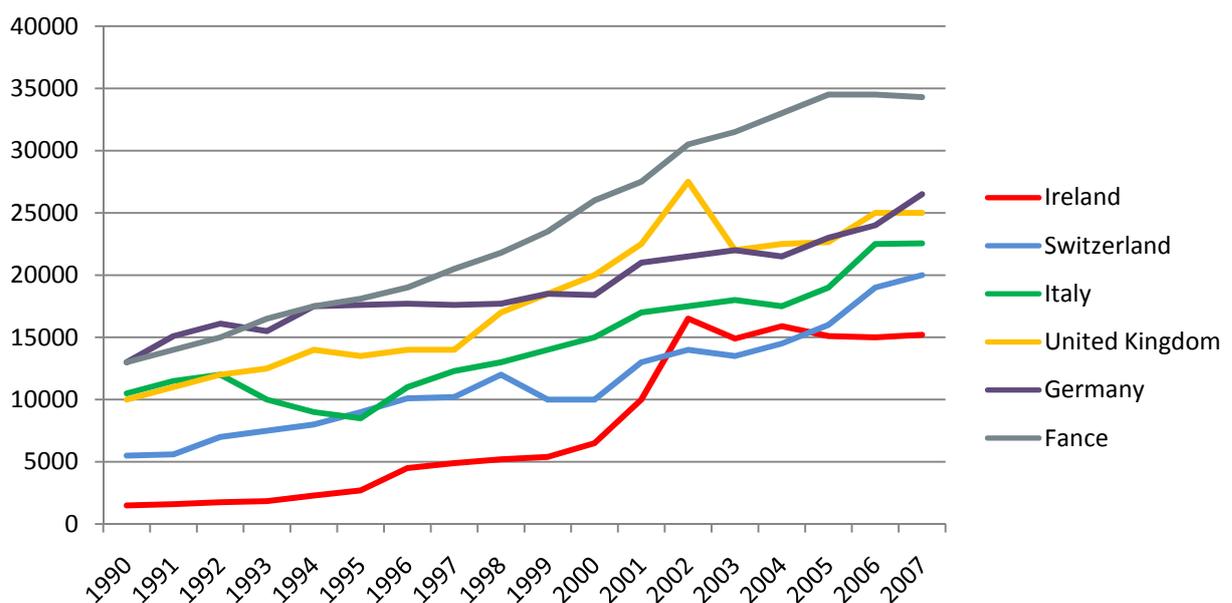
Nowadays, there's a huge monopoly of pharmaceutical industries. A lot of money is invested in the research and development process in order to discover and to market new medication and new vaccines. According to the statistic centre INSEE, € 163 million were invested by the French pharmaceutical industries in 2008 for research and development.

The 5 most important pharmaceutical companies in the world are:

- Johnson & Johnson (United States) with a revenue of 63,747\$
- Pfizer (United States) with a revenue of 48,296\$
- GlaxoSmithKline (United Kingdom) with a revenue of 44,654\$
- Roche (Switzerland) with a revenue of 44,267.5\$
- Sanofi-Aventis (France) with a revenue of 42,179\$

Since 1995, France is the most important country of the European Union regarding the production of medications. Sanofi-Aventis is the most important pharmaceutical company and contributes a lot to this production.

Pharmaceutical production in Europe (million euros)



1.3 Consumer behavior concerning medication and the web

1.3.1 About purchasing intentions on the web

Since the development of the internet, more and more people use online shopping to buy goods. Buying products online is often less expensive, faster, easier and provides the same advantages concerning the quality of the products that are bought.

In France, according to Eurostat, 61% of male and 64% of female from 16 to 74 years regularly used the internet in 2008. And 40% of the whole French population buys goods on the web (with 63% of them between 25 and 34 years) in 2008.

Quite the majority of the French population buy or has already bought goods on the web.

Part of people who regularly buy goods on the internet (in%)

Countries	2006	2008	
		All	among 25-34 ans
Germany	49	53	80
Austria	32	37	57
Belgium	19	21	35
Spain	15	20	33
Finland	44	51	79
France	22	40	63
Greece	5	9	16
Ireland	28	36	52
Italy	9	11	19
Netherlands	48	56	77
Poland	12	18	34
Portugal	7	10	20
United Kingdom	45	57	72
Sweden	55	53	70
European Union (27 countries)	26	32	47

1.3.2 About medication purchasing

French people buy a lot of medication, especially those who are refunded by the social security. Indeed, the medicines that are not refunded are really expensive. Consumers often prefer going to the doctor (the consultation is refunded by the social security) to have a prescription and then go to a pharmacy to get a medication that will be refunded rather than going directly to a pharmacy to get a medication without prescription that will be more expensive.

Turnover of the sale of medication in million euros

YEAR	2006	2007	2008
Medication refunded by social security in pharmacies	18 810	19 589	19 424
Medication non refunded by social security in pharmacies	1432	1482	1663
Medication in hospital	4583	4885	5288
Total	24 821	25 956	26 375

Source: AFFSAPS

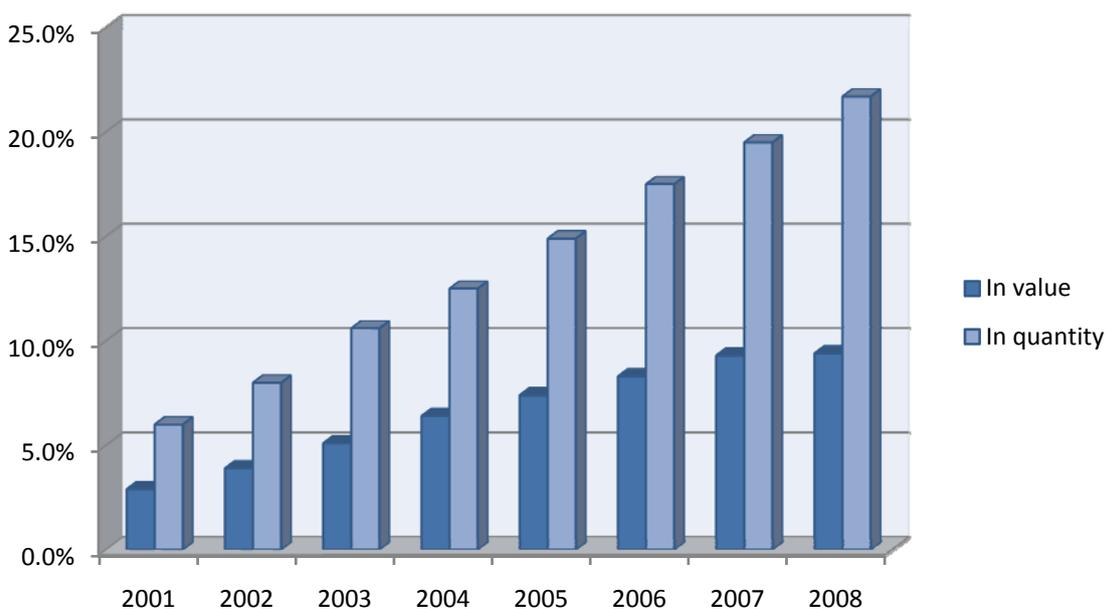
Number of medication sold in French pharmacies (number of boxes)

YEAR	2006	2007	2008	Evolution 2007/2008
Medication sold in pharmacies	3 134	3 194	3 092	- 3.2%

Source: AFFSAPS

The generic medicine stays the favorite one of French consumers because the majority of them are refunded by the social security and are always less expensive than patented medicines.

Part of generic medicines compared to patented medicines



1.3.3 About medicines purchasing of medications habits on the web

The French consumers are not really aware of the possibility for them to purchase medications legally on the web. They are conditioned by the media that keep talking about the risk of buying medicines online because of the counterfeiting. Because of this, consumers are really afraid of the quality of the products they can find on the web and consider that all the medicines they will be able to purchase won't be safe for their health.

There are two 3 types of e-pharmacies:

- Illegal websites that sell medicines that must require a prescription and that get around the law by using internet (which is really hard to control for the authorities). Those websites often sell illegal products that can be dangerous for the health because they contain no active ingredient or because they contain other substances that can be dangerous.
- Legal French e-pharmacies that are created by real pharmacists and that sell only medicines without prescriptions and that obey the French public health Code.
- E-pharmacies in foreign countries. Those e-pharmacies are legal in the country where the pharmacist lives and sell medicines according to the law of the country. Those e-pharmacies are quite controversial because they sometimes accept to sell medicines to foreign countries despite the fact that it's illegal. On those e-pharmacies, you can purchase medications that do not exist in France or that require a prescription.

French consumers are sometimes confused about those three types of e-pharmacies. A study made by IPSOS explains that French consumers are afraid of purchasing medicines online because they think that it's always illegal and/or because they think they will automatically get counterfeiting products.

Chapter 2: Research Methodology

2.1 Determination of the Information Research Problem

Hair, Bush and Ortinau (2003) explain that redefining the decision problem in a research problem is the most critical step in the information needs and that the researcher must redefine the problem in scientific terms.

The general research question of this project is:

“Consumer behavior concerning e-business in the French pharmaceutical industry”

The starting point of this thesis is the hypothesis that e-pharmacies have an uncertain future because of the fact that not all the medicines can be sold legally on the web in France (compared to other countries like the USA) and because of the consumer behavior regarding the real pharmacies and the purchase intentions of medications on the internet.

2.2 Definition of Research Objectives

To test the hypothesis, we will focus on three main objectives:

2.2.1 Study the consumer behaviour regarding the purchasing on the web

This first objective focuses only on the French consumer behaviour in terms of how he consumes and how he buys goods on the web. For this, data and statistics about French consumer habits are given to understand how the consumers behave regarding the online shopping.

2.2.2 Investigate the consumer behaviour about the buying of medication

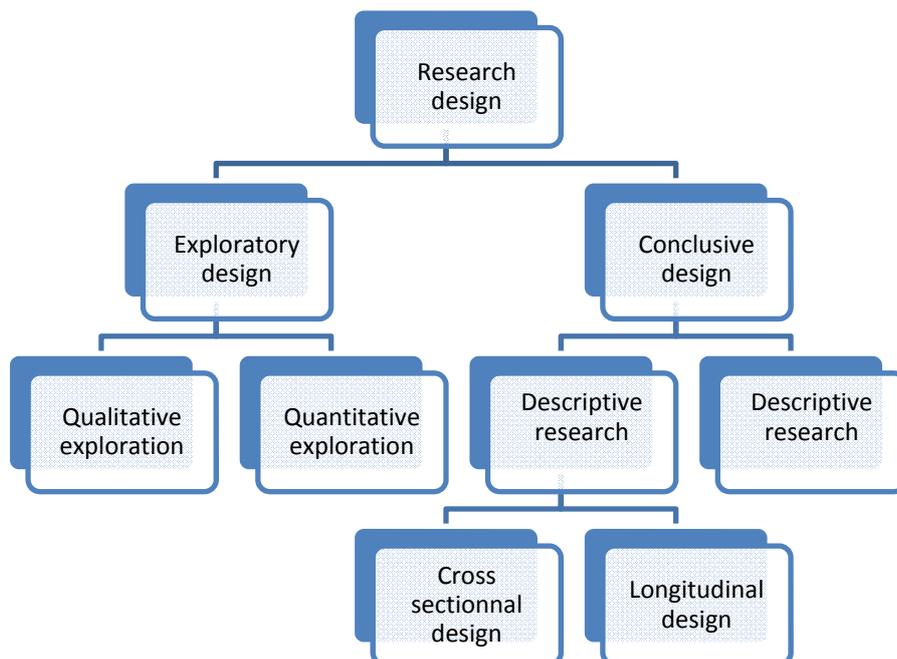
The aim of this second objective is to understand which types of medication do French people use and how they behave about it. Once again, some data are given to understand why do consumers buy certain types of medications and not others and which factors influence them in their choices.

2.2.3 Analyze the consumer behaviour in terms of medication purchase intentions on the web

Finally, the third objective groups together the previous ones to see if French consumers buy medicines on the web or not. The aim is to understand their point of view about the sale of medicines on the internet and to analyze their fears about buying medicines online.

2.3 Research design

According to Hair, Bush and Ortinau (2003), the research design serves as a master plan of the methods and procedures that should be used to collect and analyze the data needed by the decision maker. Determining the most appropriate research design is a function of the information research objectives and the specific information requirements.



Source: Malhotra & Birks (2007)

2.3.1 Exploratory research design

According to Domegan and Fleming (2007), exploratory research design is about collecting either secondary or primary data using an unstructured format or informal

procedures to interpret them. This type of research design is not meant to provide conclusive information but more to get classifications of problems and opportunities. The main objectives are to provide insights and understanding of the nature of marketing phenomena.

This was important in the consideration of my own research because in this type of research design, data analysis can be either qualitative or quantitative. Furthermore, the aim of the thesis is to analyze consumer behaviour and it is a flexible variable which is easier to study with the exploratory research design because it is meant to identify relevant or salient behaviour patterns, beliefs, opinions, attitudes, motivations, etc.

2.3.2 Descriptive research design

Hair, Bush and Ortinau (2003) explain that the descriptive research design uses a set of scientific methods and procedures to collect raw data and create data structures that describe the existing characteristics of a defined target population or market structure. Descriptive research design is appropriate when the research objectives include determination of the degree to which marketing variables are related to actual phenomena. The researcher looks for answers to the how, who, what, when and where questions concerning different components of a market structure.

This is even more relevant to my research because compared to the exploratory research design, descriptive research is characterized by the prior formulation of specific research questions and hypotheses (Malhotra & Birks 2007). In other words, for my research, the required information was clearly defined and the interrogation of a large representative sample (to make the better representation of the whole French population) was necessary.

2.3.3 Causal research design

According to Hair, Bush and Ortinau (2003), causal research design is designed to collect raw data and create data structures and information that will allow the decision maker to model cause-and-effect relationships between two or more market (or decision) variables. Causal research is most appropriate when the research objectives include the need to understand the reasons why certain market phenomena happen as they do. That is to say, the decision maker may have strong desire to understand which market or decision variables are the cause of the dependent phenomenon defined in the decision or research problem.

Malhotra & Birks (2007) explain that causal research is meant to understand which variables are the cause and which variables are the effect of marketing phenomena, to determine the nature of the relationship between the causal variables and the effect to be predicted and to test hypotheses.

Regarding this, the causal research design is also really appropriate to my own research because the research question is to analyze consumer behaviour concerning the e-business in the pharmaceutical industry, which mean that we are studying two different variable and we need to understand the nature of the relationship between the causal variables (consumer behaviour) and the effect to be predicted (future of e-pharmacies in France).

2.4 Primary research

For the purpose of this thesis, a research questionnaire has been chosen. Hair, Bush and Ortinau (2003) explain that a questionnaire is a formalized framework consisting of a set of questions and scales designed to generate primary raw data. Questionnaire construction involves taking established sets of scale measurements and formatting them into a complete instrument for communicating with and collecting raw data from respondents.

The secondary research was not enough to analyze the real consumer behaviour because the subject is quite new and no books (or only a few) are written yet on the e-business in the pharmaceutical industry. To fill the gaps of the secondary research, a primary research was needed and the questionnaire was the best way to get the French population's opinion.

The main features of the research question are to understand consumer behaviour in general concerning e-pharmacies and to analyze how consumers act about their medications purchase. The questionnaire is the best way to get as many answers as possible and is designed to reach a lot of people. No real sample has been chosen for this questionnaire because the only things that matters are that people buy medicines (which is the case for almost all the French population) and that people are over 18 so that they are allowed to buy on the web.

To reach as many people as possible, the online survey has been chosen. Compared to a paper based questionnaire, people can easily fill in the survey by only click on a web link. It takes less time, less energy and it's easier for the people who answer the questionnaire. As I previously stated before, the aim was to reach as many people as possible so simplicity and facility of use were the magic words to success. Furthermore, the overall subject of this thesis

concerns internet and especially consumer behaviour regarding the internet use. So doing an online survey (and getting a lot of answers) can be a proof in itself that people use internet.

Fifteen questions have been asked to a hundred and seven French consumers.

- The first part of the questionnaire analyzes consumer behavior regarding the use of the internet.
 - The first questionnaire item is about the online shopping. The aim of this question is to see the percentage of the population that regularly buys or has already bought goods on the web in order to analyze the habits of French people consumption on the web. Then, some justifications are asked to the consumer about why does he buys or doesn't buy on the internet.
 - The second question concerns the kind of items that are bought by French people on the web. This is a very important question because it allows understanding which kind of product and especially in which field people prefer buying on the internet.
 - Finally, the third question is about the security of the means of payment on the websites. This is often why people don't buy on the web, because they are afraid of the protection of their bank information.
- The second part is made up of questions concerning the buying of medicines by the French population.
 - One question concerns the type of medication bought by the French population. This is a very relevant question because some kind of medicines can be sold legally on the web in France and that is interesting to see if this is the type of medication that French people buy the most or not.
 - Another question is about the prices of medicines in France. Buying medication on the web is often less expensive and the answer to this question can be interesting to analyze.
- The third part is about consumer behavior regarding the purchasing of medication on the web. This is the most crucial part because it gives all the justifications to answer to the hypothesis.
 - The first question is about the buying of medicines on the internet. This is the most important question because it explains the percentage of people that buy or have already bought medication on the web.

- The two next questions are justifications for buying or not buying medicines online and it gives good information about consumer behaviour and consumer opinion.
- The question that follows is an open-ended question about the opinion of French consumers on the sale and the purchase of medication on the web. This qualitative question is really useful to help understanding the behaviour of the consumer.
- The two final questions concern the future intentions to buy medicines online. It helps to understand and analyze consumer wants and needs.
- Some other demographic questions are asked at the beginning of the questionnaire in order to create groups of population so that the analysis will be clearer. The demographic questions were about the age, the gender and the occupation.

2.5 Secondary research

Hair, Bush and Ortinau (2003) explain that the term secondary data refers to data not gathered for the immediate study at hand but for some other purpose. Secondary data exist in three forms: internal secondary data, external secondary data and computerized data sources.

For this project, the secondary research consists essentially in finding information in articles and websites. Indeed, it is a quite new subject and a very few books have already been written on the e-business in the pharmaceutical industry.

The first step of the secondary data is to study the legal position of the pharmaceutical industry in e-business in law texts and websites such as AFFSAPS (Agence Française de Sécurité Sanitaire des Produits de Santé: French agency of sanitary security of health products). This research provides all the legal aspects about what can be sold legally on the web and what cannot.

The second step is to analyze the scope of the pharmaceutical industry through some institutional websites such as EFPIA (European Federation of Pharmaceutical Industries and Associations)

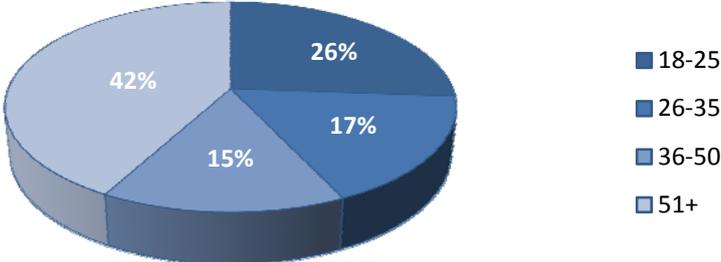
The final step consists in searching for some statistics and data about French medicines consumption on statistic websites such as INSEE or IPSOS. Those statistics allow the understanding of how does a typical French consumer act when he purchases and how are his habits regarding medication.

Chapter 3: Data analysis

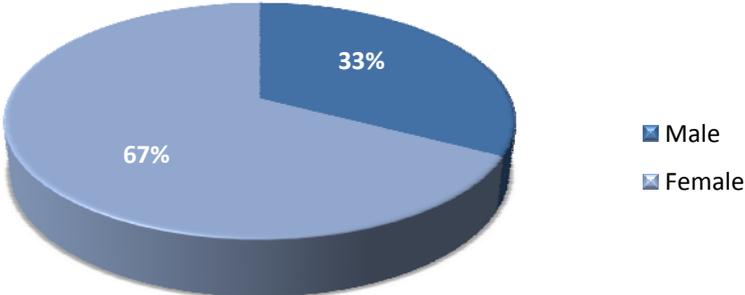
3.1 Introduction

The questionnaire was sent on February 2nd by email via Google Docs. By the beginning of March, one hundred and seven people have answered to the survey.

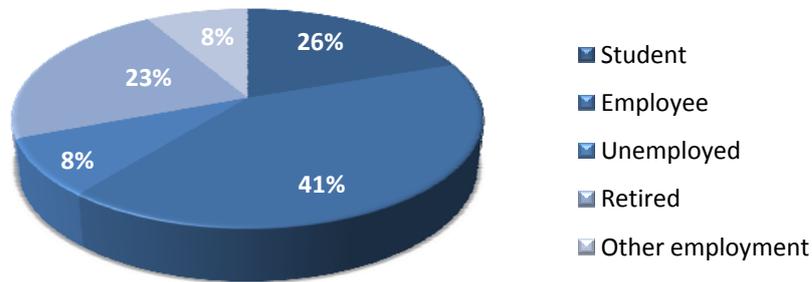
Age



Gender



Occupation

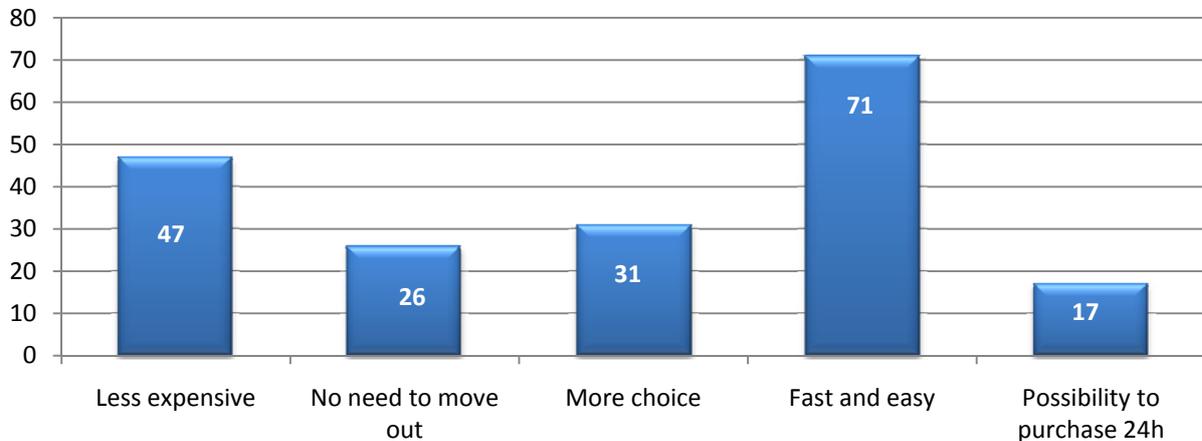


3.2 Objective 1: research findings

Study the consumer behaviour regarding the purchasing on the internet

82% of the sample regularly buys goods on the web.

Reasons why yes



We can see here that the two main reasons why consumers purchase online is because it's fast, easy and very often less expensive. People are working more and more, often late and even on week-ends and don't have time to go out to do some shopping. Internet is a very useful way to buy goods without going out and people seem to trust this way to do shopping.

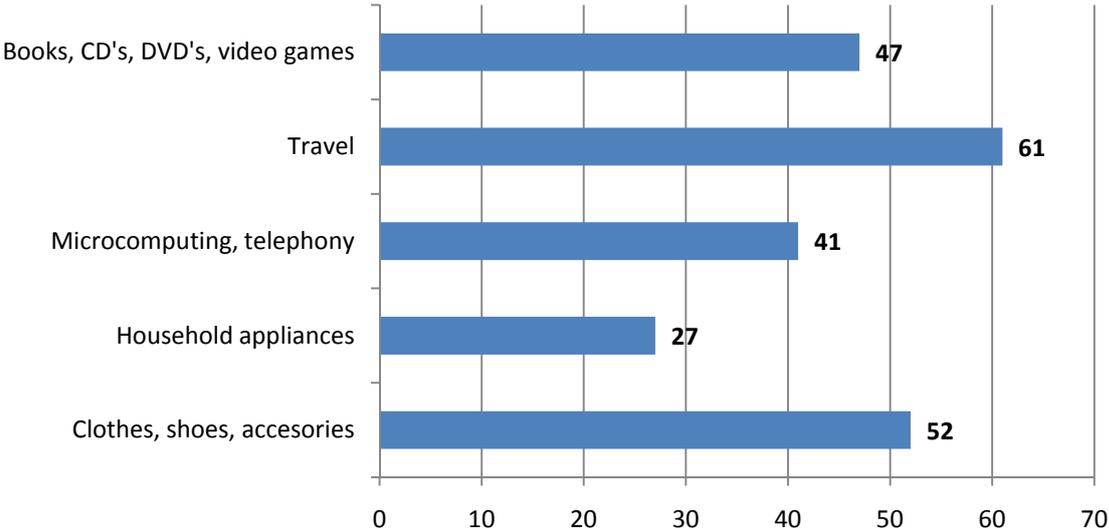
But some others have responded no. Indeed, 18% of the samples said that they never purchase online.

Reasons why not



The main reason why some French people do not buy online is that they prefer seeing the product they want before buying it. This choice is very comprehensible because a picture of a product that you can see on the web is not as precise as if you really see the product in front of your eyes. Depending on the product, you can have bad surprises when you receive it at home, especially concerning the size or the aspect of it that you may not have paid attention to when you looked on the web.

Type of goods bought on the web

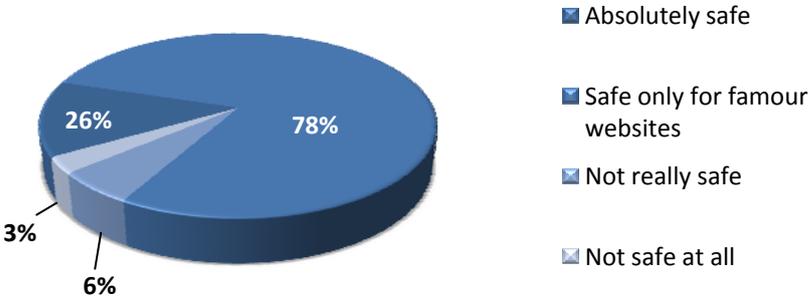


Other:

- Shopping for food
- Furniture
- Concert tickets
- Gifts
- Musical instruments
- Cosmetics

This question is interesting to analyze. We can see that consumers buy online only things that are not really expensive or that are not really important. For example, nobody buys a car or a house or some other products that are expensive and that involve responsibilities. Regarding the subject of this thesis, we can understand that people will not buy medicines online because it involves their health, which is even more important for everybody than a car or a house.

Opinion about payment security online

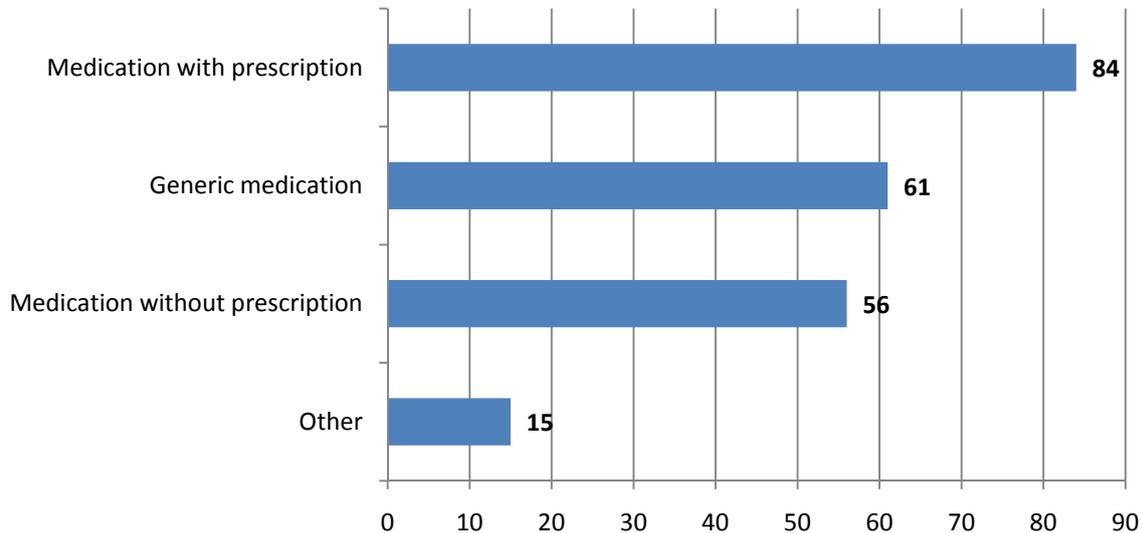


The answer to this question is quite surprising because a lot of people really trust internet by giving their bank account information when they shop online. We can see that 26% of the respondents said they completely trust internet, no matter on which website they purchase. The majority trust only famous websites where they know that their data will be protected. Only 3% thinks internet is not safe at all.

3.3 Objective 2: research findings

Investigate the consumer behaviour about the buying of medication

Type of medication bought



Other:

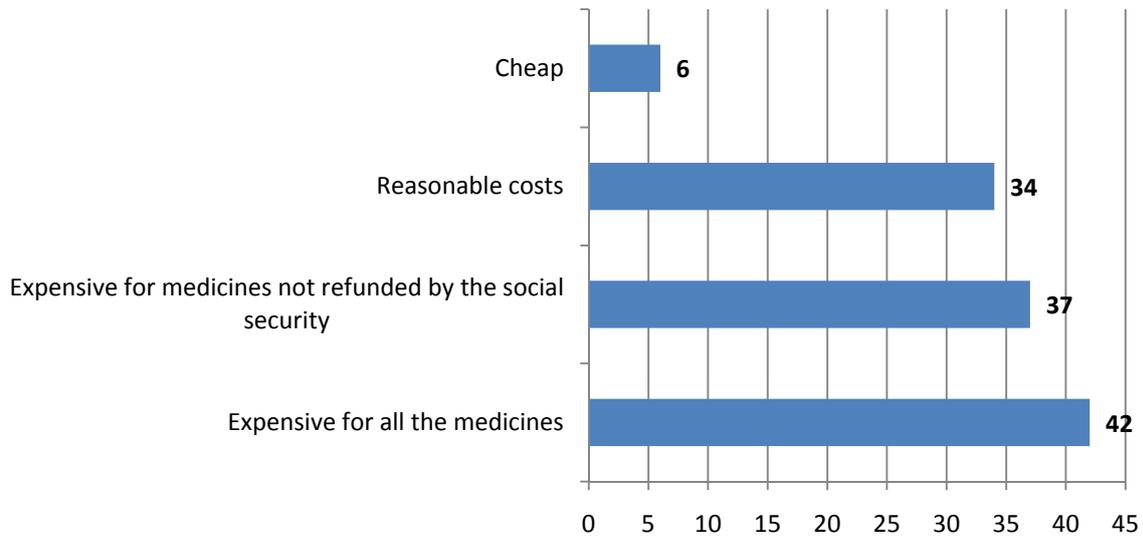
- None
- Food supplement

This question concerns the type of medication that the French population buys. 84 people (that represents 79% of the respondents) buy medication with prescription, which means they have to go to the doctor before buying this medicines in a pharmacy. In France, except for “basic” medicines, quite all the medications need a prescription to be bought. Even to cure a simple disease, sometimes medicines given with prescription are required.

A lot of people also purchase generic medications, that are often less expensive. The explanation why more medications with prescription than generic medications are bought, despite the fact that they are more expensive, is because generic medicines do not exist for all the “real” medicines. When they exist, people will always prefer buying the generic medication rather than the other one, because of its price, but when they do not exist, people have no choice and must spend more money.

Concerning the medicines without prescription, it is interesting to see that also quite a lot of people buy them, as they can be sold on legal e-pharmacies in France.

Opinion about medication prices

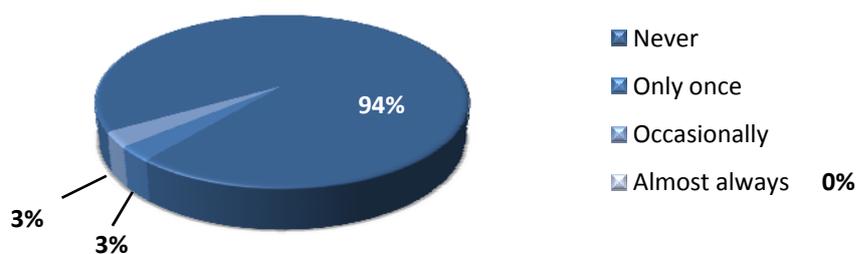


We can understand in this question that French people find the medicines very expensive in. This is interesting to analyze because we have seen before that medicines that can legally be bought on the web are often less expensive than in real pharmacies. This could be a good way for e-pharmacies to attract consumers and it could be interesting to work on the communication concerning the advantages of the prices of internet.

3.4 Objective 3: research findings

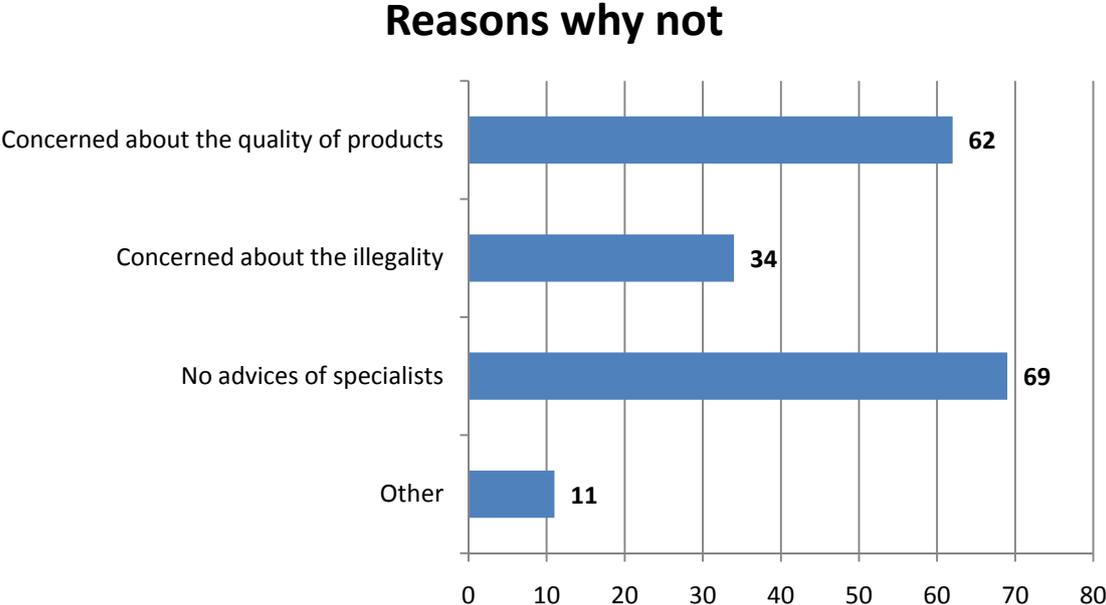
Analyze the consumer behaviour in terms of medication purchase intentions on the web

Purchase behaviour for medication online



On the chart bellow, we can see that only 6% of the representative sample has already bought medication on the web. 94% have never bought medicines on the web and quite a lot of them do not even know that it was possible. It is quite a surprising percentage because even if French people are not really aware of the possibility for them to buy certain type medication on the web, they should be aware of foreign websites, such as American websites, that do a lot of advertising, especially by emails.

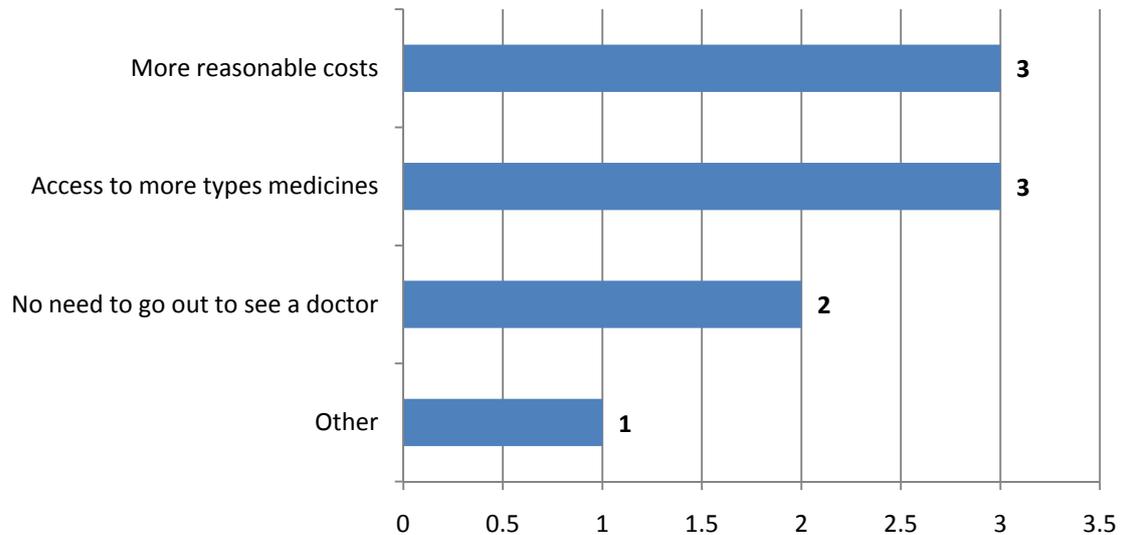
To understand better those numbers, the chart bellow explains the reasons why French consumers do not buy medicines online.



One of the main reasons why the French consumers do not buy medicines on the internet is that they do not get advices of specialists such as doctors or pharmacists. They explain that they are afraid of taking the wrong medication because they might not be sure about what exact disease they have. They prefer paying and going to a doctor and then to a chemist so that they can be sure of taking the good medication adapted to their health state.

The second most important reason is that they do not trust the quality of the products they can purchase online. Indeed, like the survey made by IPSOS in 2007 shows, French people are afraid of buying counterfeiting medicines that can be ineffective or even dangerous for their health.

Reasons why yes



Only 6 people on the one hundred and seven respondents said they purchase medicines online (and for the most of them, they buy occasionally). Their arguments are that you can find more interesting prices on the web than in pharmacies and that you can have access to more types of medicines that are not always sold in France. Indeed, some food supplements for example do not exist in France but only in the USA, and internet is the only way to buy them.

To the question “In general, what do you think about the sale or the purchase of medication on the web?”, 60% answered they are against because they fear that the situation won’t be under control by the French administration and they do not want to take risks for their health. 15% answered that they agree for the medicines without prescription but they do not want that all the medicines can be sold legally on the web.

And 10% don’t care because they said they would never buy medicines online.

Concerning the future potential purchase of medicines online, 90% of the respondents say they won’t buy medication online in the next few months, 3% said yes and 8% answered maybe.

And finally to the question “If no, how could you be convinced to change your purchasing habits in relation to the purchase of medicines online?”, 40% of the respondents answered that it would be impossible to convince them because they will always trust the products that

they can find in pharmacies and they would always prefer getting advice from specialists than take medicines by themselves. However, 30% said that if there was a recognized and legal website approved by the French minister of health, they would probably buy medicines online. But they all precise that there must be two conditions: the medications must be less expensive and they should be refunded by the social security like in pharmacies.

Chapter 4: Conclusion and recommendations

4.1 Testing the research question: objective 1

As a quick reminder, the first objective was to study the consumer behaviour regarding the purchasing on the internet. The primary research has been very effective on this point because firstly, the fact that so many people answered the questionnaire online is a proof that they go on the web and that they regularly use internet. Secondly, the data collected was very useful and proved that online shopping has been well understood by the French population and that the internet market is a great opportunity to launch products and to develop a strategy.

The secondary research was also successful because a lot of statistics have been found and they emphasized the results found in the primary research about the use of internet and the online shopping habits of French people.

4.2 Testing the research question: objective 2

The second research objective was the investigation of consumer behaviour about the buying of medication. Here, the primary research was useful because it helped to understand consumer behaviour and opinions about the type of medicines they buy. We also got some information about their opinions regarding the prices of the medications which is a great help concerning the sale of medication online. We can conclude that French people are really price sensitive which is an important clue to help understanding how their behaviour will impact the development of e-pharmacies.

Concerning the secondary research, a lot of official websites have provided information regarding the French consumption of medicines. Many surveys have already been done on that subject so finding information about consumer behaviour concerning the buying of medication. Once again, the findings of the secondary data have confirmed those provided by respondents in the questionnaire, that is to say French people buy essentially medications with prescription or generic medications when they exist and they are really concerned about the price of them.

4.3 Testing the research question: objective 3

The last objective focused on analyzing the consumer behaviour in terms of medication purchase intentions on the web. This time, the primary research was much more effective than the secondary research. Indeed, this is a quite new subject and no book has already been written on this subject, as well as no real official survey has already been done. As a matter of fact, the primary research was really useful and furthermore was a real success. Analyzing the answers given by the respondents to the questionnaire has permitted to draw a profile of a typical French consumer regarding his medication purchase intentions online. And so we have seen that quite the totality of the representative sample does not buy medicines online and is not ready to do so.

4.4 Recommendations

Two main recommendations can be told to conclude this thesis. The first one is that the e-business in the pharmaceutical will not be successful as long as there will not be one famous site, trusted by the consumers. This website should provide real information about what is illegal and what is not concerning the medicines, about the quality of the products and about the official French websites and e-pharmacies where consumers will be able to buy some types of medicines legally and without fear. French consumers may be able to trust internet as a mean of buying online medicines only if the French government and the French health authorities say it is safe. Otherwise, people will never purchase medicines online because they are too afraid of the products they can find and the illegality because they are not well informed.

The second recommendation that can be made concerns the refund by the social security. As already mentioned before, French people are really price sensitive and a vast majority of them finds that the medicines are expensive. They will not buy medicines online if no system exists to make them be refunded of their expenses by the social security. As soon as there will be such system, people will buy medicines on the internet more easily because they will be sure that they will get their money back by the social security like in any pharmacy.

Appendices

Questionnaire (107 answers)

❖ Description of the consumer

1. Please indicate your age range
 - 18-25
 - 26-35
 - 36-50
 - 51+
2. Please indicate your gender
 - Male
 - Female
3. Please indicate your occupation?
 - Student
 - Employee
 - Unemployed
 - Retired

❖ Consumer behaviour and internet use

4. Do you use the internet to purchase goods on line?
 - Yes
 - No
5. If yes, why? If no, why?
6. If you responded Yes, what particular items do you usually purchase?
 - Clothes, shoes, accessories...
 - Household appliances
 - Microcomputing, telephony
 - Travel
 - Books, CD's, DVD's, video games
 - Other (please specify) _____
7. Generally speaking, do you consider purchasing on line to be a safe practice?
 - Absolutely safe
 - Safe only for famous websites
 - Not really safe
 - Not safe at all

❖ **Consumer behaviour concerning the purchase of medication**

8. Which types of medicines do you buy?
- Medication with prescription
 - Generic medication
 - Medication without prescription
 - Other
9. Please indicate your views of the costs of medication in France
- Cheap
 - Reasonable costs
 - Expensive for medicines not refunded by the social security
 - Expensive for all the medicines

❖ **Consumer behaviour concerning the purchase of medication on the web**

10. Do you buy (or have you already bought) medicines on the web?
- No never
 - Only once
 - Occasionally
 - Almost always
11. If yes, why ?
- More reasonable costs
 - No need to go out to see the doctor or to a pharmacy
 - Access to more medicines on the web than in a pharmacy
 - Other (please specify) _____
12. If not, why ?
- Concerned about the quality of the products
 - Concerned about the illegality
 - No advice of specialists (pharmacist or doctor)
 - Other (please specify) _____
13. In general, what do you think about the sale or the purchase of medication on the web?
14. Do you plan to purchase medicines on the web in the next few months?
- Yes
 - No
 - Maybe
15. If no, how could you be convinced to change your purchasing habits in relation to the purchase of medicines on line?

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