Assessment of the quality of the services provided by pharmaceutical representatives: Case of Moroccan delegates from the region of Salé

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ABSTRACT: In a context of increasing budgetary constraints, controlling health expenses becomes a necessity. One of the important actions is mastering the proper drug use by healthcare providers, patients and drug manufacturers. It's recommended to provide all necessary medical and economical information's to scientific professionals with the required quality.

The aim of this work is the assessment of the quality of the information and services provided by pharmaceutical representatives and measure the level of satisfaction of general practitioner and subsequently determine the adequate actions to help those representatives to play properly their role in improving the health care system.

The study was conducted among general practitioner in the region of Salé through a survey. The results showed that overall doctors find useful medical information provided by medical representatives, even if the scientific level of this information and those visitors is low (63%). The practitioners note also that the ethics of the delegates is excellent. The overall satisfaction of respondents in the study is significant (88%). Improvement actions have to be undertaken by the pharmaceutical industry to improve the content of the medical visit, which is rather focused on business than in scientific information. The competence of the pharmaceutical industry representatives have to be improved, especially because professionals are becoming more demanding with development of new innovative products (genetics, cell biology, molecular imaging ...).

KEYWORDS: quality, quality of services, pharmaceutical industry, pharmaceutical representatives, Morocco.

1 INTRODUCTION

The Moroccan pharmaceutical industry is an important pillar of the national economy and it is a growing sector due to acquired technology, its competence is recognized by the World Health Organization and its performance both in the produced volume and high quality of its products [1].

According to the statistics of the Moroccan Association of the Pharmaceutical Industry (AMIP), in 2011 this pole had 32 laboratories, nearly 70% are backed by international groups, 40 000 direct and indirect jobs with a frame rate 20%, more than 290 million units with cover nearly 70% of local needs of drugs against only 15% in the sixties and a revenue generated of more than 8milliards of DHs.

In terms of quality control, drugs industry in Morocco is subjected to four levels of control. The first one is conducted by the manufacturer itself, the second by the license provider who has its own requirements and the other two by the National

Laboratory of drug Control before the granting of the marketing authorization and the Ministry of Health conducts unannounced inspections.

In addition, the Moroccan pharmaceutical industry has established for more than thirty years a quality conforming to international standards assurance system, good manufacturing practices and regulations in force. Locally manufactured products are exported on average between 8-10% of the total production to European countries, Arab, Asian, African and North American countries [1], [2].

To promote and strengthen the legal arsenal of the industry, a new code of drugs and pharmacy (17-04 Act) came into force in December 2006, opening the capital to foreign participation. In 1965, Morocco had only eight industrial units against 35 currently [1], [2].

Access to health care, which includes access to medicines and health products, is an essential condition for the enjoyment of fundamental rights of the human being, the right to health. Since the advent of the new Moroccan constitution, the right to health cannot be overlooked in the development of public policies and national drug policy is no exception.

This policy aims to ensure Moroccan citizens the availability and accessibility and affordability of medicines and high quality health products, without any social or regional discrimination [3].

In this context, the Moroccan Minister of Health annonce that Morocco has decided to revise downward the price of 800 drugs achieving 50 to 60% for certain drugs [4]. This significant cost decrease associated with the placing on the market of new generic drugs usually cheaper will affect negatively on sales of pharmaceutical companies.

They must revise their marketing systems in order to increase sales volume and persist in a highly competitive market. This industry is widely recognized as a important source of information in general practice, particularly with regard to new drugs [5].

To meet these challenges, the pharmaceutical industry in general and Morocco in particular uses various advertising means like the training of practicians, medical journals, participation in national and international conferences, sponsorship, supported visits medical.

Although the pharmaceutical industry has powerful means to disseminate its messages, the medical visit is the main promotional arm of the industry and a means of promoting prescription drugs [6], [7]. In 2004 in France, this activity represented 75.8% of promotional spending [8]. On the other side, general practicians attach considerable importance to the medical vist [9], [10].

The main reason for the commitment of practicians to a medical visit is due to the fact that it gives quick access to practical and useful information [11], [12], [13]. In France, the medical visit is the second source of information evoked spontaneously, 65% after the medical press [14].

Its main purpose, according to the charter of 2004, is "to ensure the promotion of medicines to the medical professionals and contribute to the development of drug companies. It promote by de way the quality of medical treatment in order to prevent misuse of the drug, not to cause unnecessary expense and participate in the information of health-care industry professionals .

The action of drug promotion is based on a network of medical representatives (also known as pharmaceutical or medical sales executives or 'reps'). The medical representative is the link between the pharmaceutical industry and the medical profession. His role is to provide information to prescribers on medication, to enable better use [15]. For this, he provide to doctors, pharmacists and other therapeutic informations about drug properties, highlights components and detailed presentations, prices, dosage and cons-indications. On the other side, he reporting information back to his head office about customer needs and remarks made by prescribers and also those of the competitors.

In fact, he has no direct commercial role, but he is the "ambassador" of the laboratory he represents, promotes drugs and helps to establish a dialogue between the two parties. his actions, in the context of business goals, are, simultaneously, better healthcare of patients and economic improving   .. ". However, a poor-quality message, widely disseminated, may indeed have negative consequences of a health point of view [6].

So, for the dilemma of protection of public health on the one hand and reduction and master of health spending on the other hand and then carry out its mission in accordance with the regulations and ethics of the profession, the function of the medical representative must be monitored continuously and requires strong scientific skills and work ethic confirmed by a degree[16] :

Personal qualities: sense of initiative and autonomy, proactive, trustworthy, precision, tenacity, self-confident enough to take the initiative.

Intellectual qualities: strong interest in science and medical information, organizational, analytical and synthesis, good standard of general culture.

Good communication skills: interpersonal skills, good appearance, well-spoken, ability to convince.

Communication about medications is subject to arrangements governing relations with healthcare professionals and users of the drug, but also by regulations, legal and ethical rules, in order to make available to each actor, a not misleading complete, verifiable, fair, updated, based on available evidence and promoting knowledge of drug [15], Articles 38 to 49 of the Moroccan law 17-04, 2006.

In Morocco, although the pharmaceutical industry is regulated in all its aspects including the creation, operations and the control of industrial pharmaceutical institutions, placed on the market and the prices of medicines, the job of a medical delegate have no status and no regulation govern that job. The average number of these representatives is estimated to 3,000 while France account around 17300 and 16500 in Spain [17].

Given the importance of the function of medical representative in the health system and the communication on drugs and its potential impact on the health and on financial plan [6], we decided to assess the quality of services provided to doctors by Moroccan medical representatives. Thus, the objectives of this work are:

Make an inventory of the various dimensions of quality of service provided by medical representatives;

Assess the level of physician satisfaction of the quality of the service and information provided by medical representatives;

Highlight the shortcomings and weaknesses of the medical visit to Morocco and invite industry stakeholders to develop appropriate solutions;

Getting to construct and standardize a measurement tool and evaluating the quality of services provided by medical representatives in Morocco. Probing the evolution of the level of satisfaction of these services and support laboratories in the evaluation process and quality management with health professionals.

Contribute to improving the quality of healthcare and to master health spending by improving the medical visit and the communication between pharmaceutical industry and health actors in Morocco.

2 WORKING METHODOLOGY

We've choosen target population and we've developed a questionnaire to conduct an exploratory quantitative study, in order to evaluate the quality of the service provided by medical delegates and measure the level of satisfaction of doctors of these services,

The choice was made on the population of GPs operating in the private sector in the region of Salé whose numbers totaled 160 physicians randomly selected for a direct interview with a medical representative in their offices . This method was preferred over others for reasons of cost (email, phone ...), time (receive a reply by mail), effectiveness (question-answer precise, and fast) and also to clarify any ambiguities in the questions.

The exploratory quantitative study was conduct through a questionnaire. This one was the result of a literature review and adaptation of existing questionnaires compared to the Moroccan context ([6], [10], [12], [14], [15], [16], [17], [18], [19], [20], [21]).

The questionnaire included 15 questions divided on items related to "what" (content) and "how" runs the medical visit. These questions are designed to assess respectively the service (quality of the information perceived during the medical visit) and the peripheral services (medical delegate qualities perceived by the doctor).

These parameters allow us to have a look at the quality of communication of the pharmaceutical industries to physicians through the medical visites and the medical delegates.

The 15 questions are divided as following:

- The characteristic of the doctor answering
- Quality of perceived information (5 criteria)
- The quality of medical representatives (4 criteria).

- The evaluation of the brand pharmaceutical industry with the identification of the expectations of doctors.
- The assessment of overall satisfaction of physicians on the quality of services provided by the Moroccan medical representatives during the medical visit.

In accordance with the choice of a quantitative method, the questions were closed one.

Before the phase of the investigation, the questionnaire has been validated with a group of medical delegates and a researchers then it was tested with 3 doctors. Some remarks were raised and remedied (rank order of questions, ambiguity in some questions ...).

For the presentation and analysis of results SPSS software was used.

3 PRESENTATION OF RESULTS

To ensure complementarily in the presentation of results, both flat and cross sorting of date was used according to the order of the questions on the questionnaire.

Following the method of administration of the questionnaire used, the response rate to the survey was 100%.

3.1 PHYSICIAN CHARACTERISTICS

The characteristic of the answerer has been studied and has been the subject of crossing with the other criteria. It is related to the age of GPs and number of years of experience, cf. # 1. The selected sample contains doctors with different experiences. Young doctors who have less than 10 years of experience have more than 40%, and 23% of physicians have an experience of 10 to 15 years.
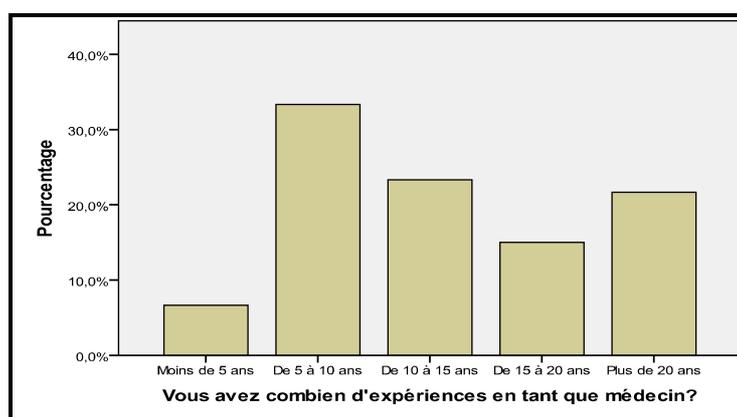
Figure1. Physician experience

3.2 QUALITY OF INFORMATION PROVIDED

This dimension has been investigated with reference to five criteria:

1. Number of products presented during the medical visit,
2. Duration of the medical visit,
3. Scientific level of information provided,
4. Medical level of the information provided by the health visitor (VM)
5. Content of the medical visit.

3.2.1 NUMBER OF PRODUCTS SHOWN DURING THE MEDICAL VISIT

According to Figure 2, more than 63% of medical delegates present 5 to 6 products per medical visit and over 18% have more than 7 products.
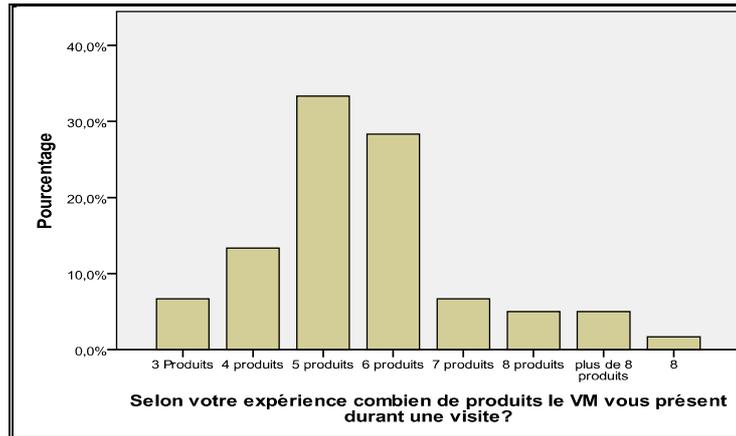
Figure 2: number of products presented during medical visit

On another question, doctors were asked how many products maximum a MR.must provide for a visit. The results show that 88% of physicians prefer a maximum of 4 products per visit, against 12% who opt for 5 products per visit (see # 3). No one has voted for more than 5 products per visit.
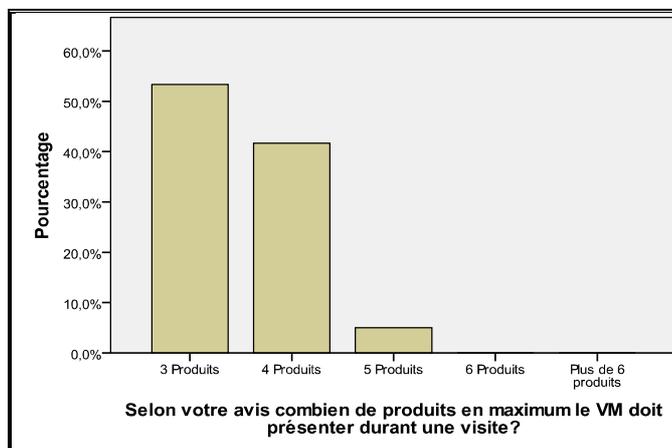

Figure 3. Nombre de produits en maximum présentées.

The cross sorting of data on the duration of the medical visit with the number of products presented, shows that (Table No. 1) 94% of physicians have reported that in reality the duration of an interview does not exceed 15 minutes and a maximum of 67% of MR.have between 5 to 6 products per visit; and almost 19% of MR.present 6 products over a period not exceeding 15 minutes. So the MRs have several products in an insufficient period of time.

Tableau 1. Duration of a medical visit versus number of product presented

| | | Selon votre expérience combien de produits le VM vous présent durant une visite? | | | | | | | | |
		3 Produits	4 produits	5 produits	6 produits	7 produits	8 produits	plus de 8 produits	8	Total
Quelle est la durée moyenne d'un entretien avec le VM?		1	0	0	0	0	0	0	0	0	1
	Moins de 10 min	0	3	6	14	11	1	1	2	0	38
	De 10 à 15min	0	1	1	5	4	3	2	1	1	18
	De 15 à 20min	0	0	1	1	1	0	0	0	0	3
	De 20 à 25 min	0	0	0	0	1	0	0	0	0	1
Total		1	4	8	20	17	4	3	3	1	61

3.2.2 THE MEDICAL VISIT DURATION

More than 60% of physicians who have participated in the survey estimate the average duration of a visit within 10 minutes, and 23% believe that a visit lasts between 10-15 minutes (see # 4).
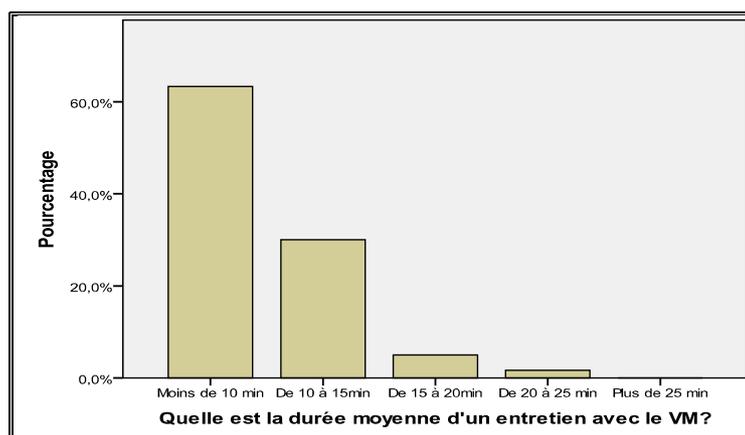
Figure 4: Medical visit duration

3.2.3   SCIENTIFIC LEVEL OF INFORMATION PROVIDED

The results in Figure 5 show that the scientific information given to physicians by pharmaceutical representatives are not always convincing. In total 37% of responders believe that this information has conclusive scientific value (good), a large percentage 63% still for inconclusive scientific information (poor). Two respondents (3%) believe that the scientific value of information provided by the MR.is very unacceptable (very poor).
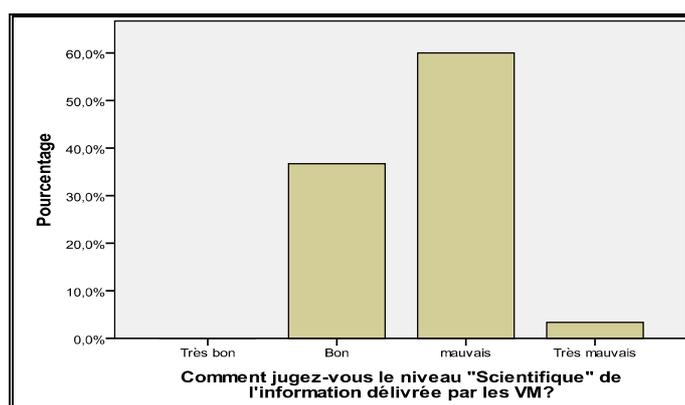


Figure 5 : Scientific lever of provided information

Through cross-tabulation of the scientific level of information provided by the MR. with the experience of physicians (Table No. 2), we can see that 83% of doctors who have less than 5 years of experience are unsatisfied of the scientific level against 56% of physicians who have experience of over 10 years. So the ancient physicians are more satisfied with the scientific side than their younger one.

Tableau 2. Scientific level of the provided information versus the experience of doctors

| | | Vous avez combien d'expériences en tant que médecin? | | | | | |
		Moins de 5 ans	De 5 à 10 ans	De 10 à 15 ans	De 15 à 20 ans	Plus de 20 ans	Total
Comment jugez-vous le niveau "Scientifique" de l'information délivrée par les VM?		1	0	0	0	0	0	1
	Bon	0	1	2	5	5	9	22
	mauvais	0	3	17	8	4	4	36
	Très mauvais	0	0	1	1	0	0	2
Total		1	4	20	14	9	13	61

3.2.4 MEDICAL QUALITY OF THE INFORMATION PROVIDED

The survey shows that, overall, doctors found quite useful the information provided by MR. No one has said that the information was not helpful. 91% of respondents felt they received good quality medical information (see # 6).
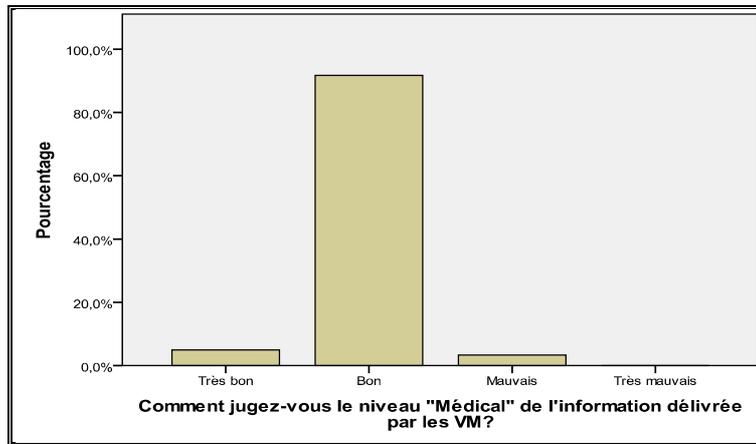
Figure 6: the medical level of information provided

The table below shows the results of pairwise medical level of information provided by MR. and physician experience.

Table 3. Medical level of information provided by MR. in connection with the experience of physicians

		Vous avez combien d'expériences en tant que médecin?						Total
		Moins de 5 ans	De 5 à 10 ans	De 10 à 15 ans	De 15 à 20 ans	Plus de 20 ans		
Comment jugez-vous le niveau "Médical" de l'information délivrée par les VM?		1	0	0	0	0	0	1
	Très bon	0	0	1	0	1	1	3
	Bon	0	4	17	14	8	12	55
	Mauvais	0	0	2	0	0	0	2
Total		1	4	20	14	9	13	61

From this table, we see that almost all the doctors are satisfied with the medical level of MR whatever the experience of the physician. So the medical level MR. still not changed over time.

3.2.5 CONTENT OF THE MEDICAL EXAMINATION

According to the physicians responses (see # 7), 66% believe that the content of the medical visit is more commercial than informative (33% of *respondents)*
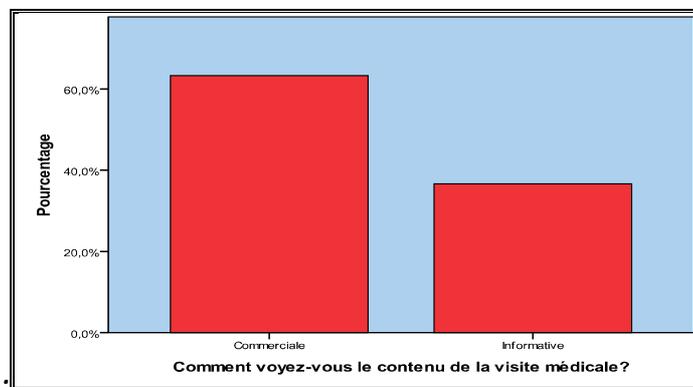
Figure 7. The content of the medical examination

3.3   THE QUALITY OF MEDICAL REPRESENTATIVES.

Four criteria were evaluated to determine the qualities of a medical representative, the personal and professional qualities, ethics and the respect of ethics during the discussion with doctors.

3.3.1   PERSONAL AND PROFESSIONAL QUALITIES OF MR.

The figure below shows the responses to the question: Which of the following features best describe the Medical Representative?
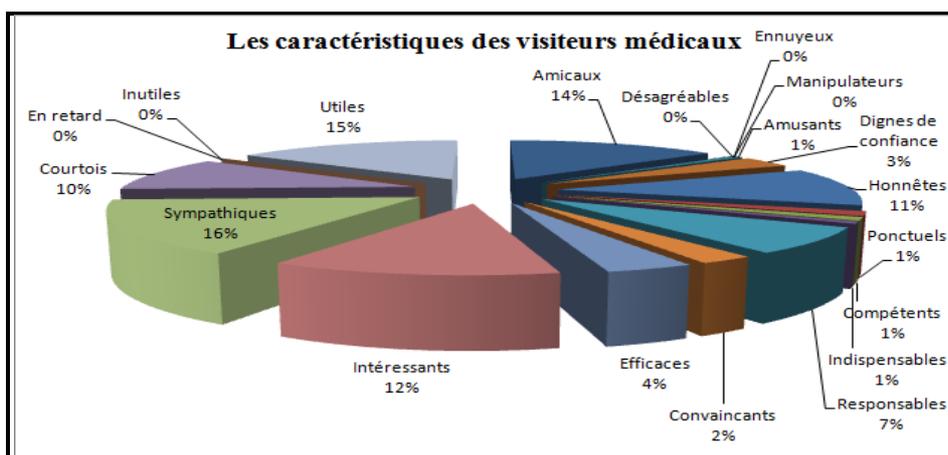

Figure 8. Characteristics of medical representatives

According to the different responses of physicians, we find that most of them have described the MR. as honest people, friendly, sympathetic, helpful, interesting and responsible. In contrast, 1% of physicians stated that these visitors are competent. Compared to a question "What is your level of satisfaction with the adequacy of responses to questions asked to medical representatives? "The results show that over 58% of physicians are not satisfied (satisfaction less than 50%) of responses to questions by the delegates (cf.N 9).
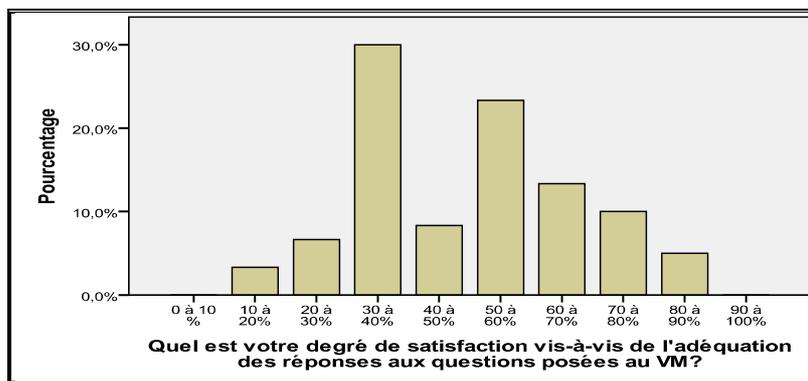

Figure 9. Adequacy of MR. responses to the questions asked by doctors

3.3.2   ETHICS AND THE ETHICS OF DISCOURSE MR. WITH PHYSICIANS

A large proportion of physicians 68% states that the sense of ethical of the pharmaceutical representatives is high and 28% consider it very high.
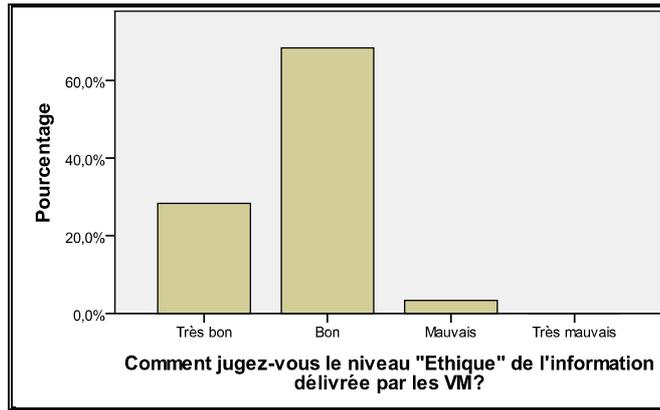
Figure 10. Ethical level of pharmaceutical representatives

Assessing ethical level of MR. based on years of experince of physicians shows (Table No. 4) that actually 97% of physicians were satisfied. But if we analyse in depth we found that 41% of doctors who have experience of over 10 years have responded that the ethic level is very good against only 8% for physicians less than 10 years. So the ancient physicians are more satisfied with the ethical level than the young one.

Table 4. Evaluation of the ethical level of the MR. based on experience of physicians

			Vous avez combien d'expériences en tant que médecin?					Total
			Moins de 5 ans	De 5 à 10 ans	De 10 à 15 ans	De 15 à 20 ans	Plus de 20 ans	
Comment jugez-vous le niveau "Ethique" de l'information délivrée par les VM?		1	0	0	0	0	0	1
	Très bon	0	1	1	3	6	6	17
	Bon	0	3	18	10	3	7	41
	Mauvais	0	0	1	1	0	0	2
Total		1	4	20	14	9	13	61

3.4 EVALUATION OF THE BRANDING OF MOROCCAN PHARMACEUTICAL INDUSTRY AND IDENTIFICATION OF PHYSICIAN EXPECTATIONS

3.4.1 EVALUATION OF BRANDING AND RANKING OF MOROCCAN PHARMACEUTICAL INDUSTRY

3.4.1.1 IMAGE BRAND

All respondents (98%), confirmed the importance of the image brand of the pharmaceutical industry in their profession. Only one doctor neglects it. Besides, 60% of physicians think that the pharmaceutical industry has a strong brand image and 22% estimate it as very good. Only 18% of respondents found it to be
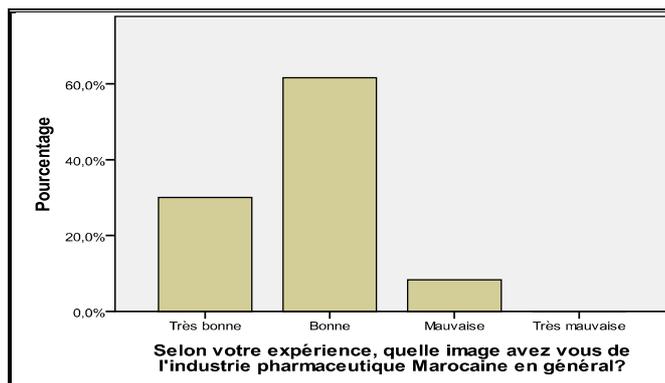
weak(cf. No. 11).

Figure 11. Branding of the Moroccan pharmaceutical industry

Crossing data on branding Moroccan pharmaceutical industry with years of seniority of doctors shows that only one doctor (who has experience of less than 10 years) who responded that the image of this industry is poor (Table No. 5). So, the new doctors think that brand image of Moroccan pharmaceutical industry is *pretty good.*

Table 5. Picture of the Moroccan pharmaceutical industry based on years of experience of physicians

Tableau croisé Selon votre expérience, quelle image avez vous de l'industrie pharmaceutique Marocaine en général? * Vous avez combien d'expériences en tant que médecin?

Effectif

			Vous avez combien d'expériences en tant que médecin?					Total
			Moins de 5 ans	De 5 à 10 ans	De 10 à 15 ans	De 15 à 20 ans	Plus de 20 ans	
Selon votre expérience, quelle image avez vous de l'industrie pharmaceutique Marocaine en général?		1	0	0	0	0	0	1
	Très bonne	0	2	4	4	2	6	18
	Bonne	0	2	15	8	6	6	37
	Mauvaise	0	0	1	2	1	1	5
Total		1	4	20	14	9	13	61

3.4.1.2 ORDER MOROCCAN PHARMACEUTICAL INDUSTRIES

In a list of 22 pharmaceutical companies, doctors were asked to check up to 3 that provide the best "medical services" : Training modules, medical meetings, website information hotline ...

Reading results (cf. No. 12) shows the emergence of four laboratories that provide the best services to the Moroccan medical body, which are: Cooper, Pharmaceutical Institute, Afric-phar and GSK.
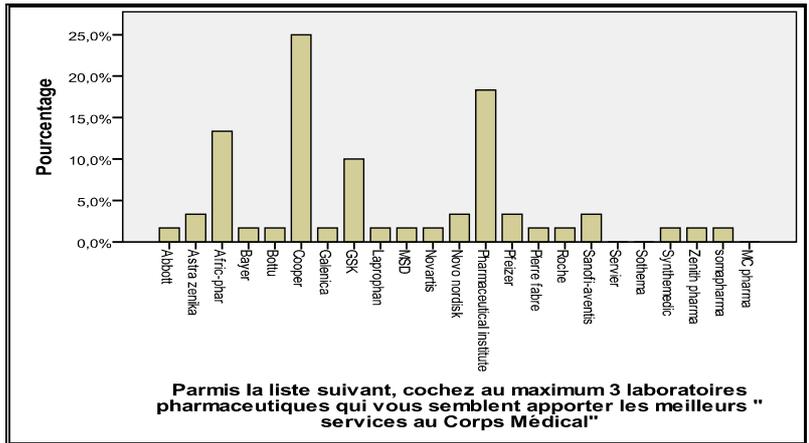
Figure 12: The best laboratories according to their medical service

3.4.2 IDENTIFYING EXPECTATIONS OF DOCTORS

As far as concerning pharmaceutical companies, expectations and various proposals have been raised with the physicians surveyed. Some concern the improvement of quality of medical representatives and other the interpersonal skills. They listed as the main actions to improve qualities:

1- Medical visites:

- Strengthening scientific training and technical communication
- More objectivity and honesty;
- More pharmacovigilance data;
- Lower prices for certain drugs;

2. Doctors:

- Ongoing training for the medical profession;
- More roundtables and symposiums;
- Make more recent studies.
- Increase the number of products covered by the medical insurance (AMO);

3.5 ASSESSMENT OF OVERALL SATISFACTION OF PHYSICIANS (CF. NO. 13)

A strong majority of respondents (88%) stated that the quality of services provided by the Moroccan medical representatives during the medical visit is good. Against less than 12% who reported that overall quality is poor.

Figure 13: Quality of the medical visite

The split of the level of satisfaction on the years of experience of physicians (Table No. 6), allows us to see that 25% of doctors who have less than 10 years of experience, are non-satisfied with the overall quality of the information provid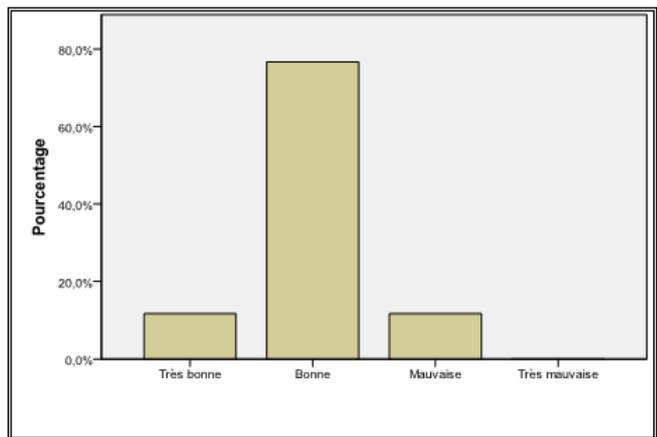ed by medical representatives against 3% for physicians who have over 10 years' experience. So we can say that the ancient physicians are more satisfied of the quality of the information provided by the MR, compared to the the new doctors.

Table No. 5. Overall satisfaction based on years of experience

		Vous avez combien d'expériences en tant que médecin?					
		Moins de 5 ans	De 5 à 10 ans	De 10 à 15 ans	De 15 à 20 ans	Plus de 20 ans	Total
Quel est votre degré de satisfaction vis-à-vis de la qualité générale de l'information médicale délivrée par les VM?		1	0	0	0	0	0	1
	Très bonne	0	1	2	2	1	1	7
	Bonne	0	2	13	12	7	12	46
	Mauvaise	0	1	5	0	1	0	7
Total		1	4	20	14	9	13	61

4   ANALYSIS AND DISCUSSION OF RESULTS

From the literature review we found that the medical visit provided by medical representatives is one of the most used tools by doctors to update their knowledge, although it has less credibility with respect to other means of training and the quality of the information provided by MR contributes significantly to the quality of medical services rendered by physicians to their patients. This quality in turn depends on the quality of information provided by pharmaceutical industries.

Studies have confirmed that the most effective means of communication in pharmaceutical marketing is the medical visit [7]. The figure below shows proportionality between the market share and the number of medical representatives of a company. which tend to confirm the centrality of the medical examination in the marketing strategy.
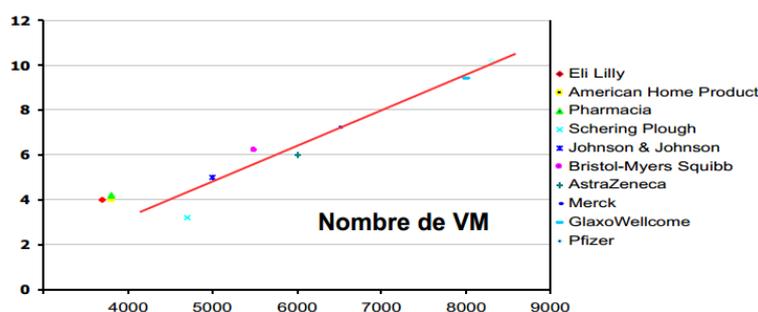
Figure 14. The relationship between market share and the number of medical visitors (Pesty, 2005).

This source of information is mainly used by doctors to update their knowledge in the field of medicine [5], [22]. In some studies, doctors even believe that interactions with medical visitors are beneficial for the treatment of patients and health practice [23].

Given the importance of the medical visit in the process of medical treatment and given the scarcity or even the lack of scientific studies on this service in Morocco, we introduced for the first time, this quality assessment project aim to gauging the quality of communication of the Moroccan pharmaceutical industry through the medical visit and the medical delegates and thereafter the continuous improvement.

The study of the quality of the medical visit was conducted among general practitioners in the region of Salé by a questionnaire adapted from the literature review and existing models. The questionnaire items cover the aspects of content and how is conducted the medical visit.

In the first axis of the questionnaire, "the years of experience of the physician" has been crossed with several evaluation criteria to see if the age and the experience of the beneficiaries of the medical visit doesn't affects their perception.

The results show that the assessment of doctors for the criteria studied (the quality of the medical visit, medical representatives, brand of the laboratories and the level of satisfaction) change depending on their age, except for medical level of MR that has not changed (see Tab. 3). The literature review confirms this difference of opinion between physicians based on their experience. Thus, a Canadian study notes that residents of 1st and 2nd year accord greater significance to the pedagogical role of the medical visit than the ones of 3rd and 4th years [24]. However, this difference was not found in France [14].

No one can deny the importance of the quality of the information provided by the medical representatives to their customers-prescribers (doctors). Any drift on the quality of that information or concealment of certain information relating to adverse drug reactions, will lead to very serious health and economic consequences.

This was the case, for example, of the Vioxx ® and pick. Vioxx ®, anti-pain and anti-inflammatory widely used against arthritis between 1999 and 2004, have caused 160,000 heart attacks and strokes and was the cause of about 30,000 deaths in the United States and dozens of thousands in the world [25] against 70 officially reported in France [26]. The scandal of the Mediator, a drug prescribed to overweight diabetics and also used as an appetite suppressant.

Marketed from 1976 to its withdrawal from the market in 2009, accused of causing pulmonary arterial hypertension and valvular heart disease and could have killed at least 500 people and cause 3,500 hospitalizations [27]. In terms of economic consequences, such revenues increased health spending, they have worsen deficits and create inequalities in access to care [28]. The U.S. Senate has estimated the additional costs of the information supplied by the pharmaceutical industries to $ 700 billion, on a budget of 2,000 billion who could be saved annually if the information to physicians and their patients were less biased [29].

In France, according to a study of "Que Choisir" on medication, only about 14% of city prescriptions and quality of care at least equivalent, the community could save 200 million euros per year for 5 years [28].

In our study in Morocco, the assessment of the quality of the information provided by MR. was conduct on five closely related criteria (number of products, duration of the visit, scientific and medical level of information provided and the content of the medical visit).

The quality of both the information and the exchange between MR. and physician depends strongly on the duration and on the number of products to present. Higher is the number of products, shorter is the time to discuss and convince the doctor to prescribe the product.

The results show that for a period not exceeding 15 minutes (60% of physicians estimate around 10 minutes the average duration of a visit), the number of products presented exceeds the expectations of physicians (4 instead of 6 or 7 products per visit, none doctor has voted for more than 5 products per visit).

In France, for example, on average, the interviews last 7 to 8 minutes and the MR. has only 3 products [8]. The visit is in general short and involves only few products. This allows the delegate to give further details and to gain the confidence of the physician to prescribe their products.

With regard to the scientific and medical level MR., The results are divergent.

The medical content of a drug reflects:

- Basic informations (name, active ingredients, ingredients, legal classification, approved indications and addresses of beneficiaries, ...);
- Informations of the use of the drug (therapeutic use, dosage, adverse effects, precautions, cons-indications, drug interactions ...);
- Economic informations (cost).

The responses show that almost all doctors believe that the medical content is quite good. It was also found that this level has not changed over time. This satisfaction is possibly due to the different trainings that pharmaceutical companies organize internally to their delegates.

However, doctors are neither satisfied of the scientific level of medical representatives (63%) especially new physicians who are more demanding in this respect, nor of the adequacy of responses to their questions (more than 58% of physicians are not satisfied).

In addition, only 7% of physicians found that medical representatives as convincing people, efficient and knowledgeable. These results are explained by the fact that, during the visit the conversation takes other direction than the product presented, the delegate then loose the scientific reasoning to convince the doctor, consequently the MR. becomes unable to detect the needs of the prescriber.

This is due among other things to a lack of general culture, knowledge and skills in science. It's for this reason that the new Moroccan law (Law 17-04, art 46) states to any "persons who provide information by canvassing or prospecting drugs to have sufficient scientific knowledge attested by a degree"and it requires to pharmaceutical manufacturers to ensure the continous updating of knowledge of these people.

On the other hand, doctors have described MRs. like honest people, friendly, helpful, interesting and responsible, their ethics and compliance level are good (68%) or very good (28%). This is because the medical delegates ensure that the visit does not cause any inconvenience to the physician and they complies with the rules laid down by each physician especially in terms of days and hours visit.

As far as benefit of medical visit concerns several countries and scientific studies challenges in that it leads to an increase in health spending and interest on the health plan is not shown [6].

The main criticism is to provide non objective and biased information [12], [22]. 90% of French physicians recognize that the medical visit is for commercial purposes [30], [10].

This study confirms the results obtained elsewhere with respect to the content of the medical visit, which is estimated by 66% of respondents as having trade purpose rather than informative (33%).

This observation is justified by the marketing policy and the methodology dictated by the pharmaceutical industry to MRs. to introduce the drug. During the visit, the medical delegate must always first present the benefits of the drug followed by the recommended dosage and expanding indications.

However, he presents less frequently the contraindications, drug interactions, and adverse effects; this gives a commercial aspect to the presentation of the drug. According to the monitoring results of the observatory of the magazine "prescrire" it appears that in 74% of the medical visits, the adverse effects of the product were ignored. As for contraindications and drug interactions they were mentioned only when the doctor asked, in 76% of cases [28]. Which is not in the interests of patients or health insurance organizations?

Pharmaceutical industries are private companies as others who must make a profit. Thus, they must sell the best possible medicines and ensure that doctors prescribe as possible their products. Their marketing function is to help ensure this goal effectively. One of the fundamental rules of pharmaceutical marketing is to put forward the attractive aspects of a product as specified Hermange (2006) "a practical medical visit is to highlight the benefits of a drug and to overshadow the risks. "This practice confirms that the medical representatives are one of the wheels of the marketing machine set up by the pharmaceutical industry.

The second rule is business to business, it is to have a more personal relationship with the end customer (the doctor). A widely used technique is to deliver a number of gifts to customers. It can begin by conventional pens and Post-it, Tissue boxes to recall the brand of the drug or product or more expensive gifts like a good meal or a trip to a medical congress. This kind of action is very common in the medical visit to Morocco, and that's why the majority of doctors believe that the commercial aspect predominates informative aspect in the medical visit.

This justifies, in this study, the identification in the expectations of physicians, the need for integration of pharmacovigilance during the presentation of the drug. However, the Moroccan law 17-04 on the code of the medicine and pharmacy, states that drug advertising "must not be misleading or affect the protection of health. It must present the drug or product objectively and promote its proper use. It must conform to the marketing autorisation file "(art 39).

Despite all findings previously raised, the majority of physicians (88%), especially the more experienced, are satisfied with the overall quality of the of MR. and maintain a positive image of the pharmaceutical industry in Morocco. Some laboratories (4/22) are evaluated in relation to others because of their support of the medical profession (training modules, medical meetings, website information, telephone support ...).

Other factors may explain this satisfaction, the 17-04 law does not prohibit the distribution of samples, and therefore almost all medical visitors distribute large quantities of samples to physicians and their staff. In addition, pharmaceutical companies are generous with the medical profession and provides supported, even for their carers to attend the conference, invitations to meals, subscriptions, donations and scientific literature.

With the development of innovative products and biological one (genetics, cell biology, molecular imaging ...) and with health professionals that are becoming increasingly demanding in terms of the quality of services, pharmaceutical companies are expected to follow this trend not only the development of new drugs but also services, provide informations that allow doctors to make an informed choice on the best treatment strategy for the patient. It appears also essential for drug manufacturers to better adapt the medical visit to the needs and expectations of physicians: scientific information, complete and meaningful on side effects of products, transparent, sincere, supported the mandatory reference to official documents and to recommendations and search for a real added value of communication.

5 CONCLUSION

Make an accurate diagnosis and assess the quality of the medical service provided by pharmaceutical industries in Morocco through their medical representatives were the main objectives of this study. For this, a questionnaire was developed and validated, and a survey was conducted among general practitioners in the region of Salé.

The quality of the services of medical representatives and the level of physician satisfaction were studied based on two main axis: the quality of the information collected (5critères) and qualities of medical representatives (4critères).

For the quality of information collected, GPs surveyed believe that the number of products presented during a visit is too high compared to its duration and the scientific level of medical representatives is insufficient, in contrast the medical level of the information provided is considered quite useful and good. Almost all doctors are satisfied with this information. The main fault found is the content of the medical visit which is considered commercial rather than informative.

Regarding the qualities of medical representatives, the study showed that most of the interviewees described the delegates as honest people, sympathetic, helpful, interesting and responsible but incompetent and more than half are not satisfied with the responses to their questions. In contrast, a large proportion has appreciate the ethics of Moroccan pharmaceutical representatives especially the more experienced doctors.

Overall, despite the inadequacies observed, the image of the pharmaceutical industry in Morocco and the quality of services provided by their medical representatives are estimated by the majority of respondents as being good. To ensure continuous improvement of these results, the establishment by the pharmaceutical companies of corrective actions is recommended or even necessary.

To complete this study, it would be efficient to study the impact of the quality of the service of medical Moroccan delegates on physicians and how they do they react to this stream of information coming from pharmaceutical companies. Thereafter, compare the results to the foreign studies. This one have shown that doctors who receive more frequent medical visitors are those who prescribe more. This reflects the business objectives of pharmaceutical companies against the interests of patients, health insurance funds, or management of health risks (taking into account issues of public health) [6], [31], [32].

We believe that further investigations are needed to clarify these relationships, in particular to determine whether there is a relationship between the use of medical visit and more frequent irrational prescribing, as suggested by some Anglo-Saxon studies, and what are the consequences on the health of patients and health insurance funds.

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