

**Pharmaceutical Notices:  
Are Their Purports within Reach for Algerian Bilingual Patients?**

**Dr LAHIOUEL Azza**

Badji Mokhtar University –Annaba - (Algeria) laywell@gmail.com

*Date of submission: 01/11/2024*

*Date of acceptance: 14/12/2024*

*Date of publication: 22/12/2024*

**Abstract**

Pharmaceutical notices are compulsorily jointed in drug boxes for allowing patients to read attentively every instruction as well as to apply minutely every advice while consuming any form of medicine. The present study aims at examining linguistically the pharmaceutical notice of Aprovel 150mg, and at peering at its morpho-syntactic structures. A focal focus is also put on the choice of words through which instructions are delivered in Standard Arabic and Standard French, being the two prevailing language varieties used by Algerian patients. Thus, sentence formulations and word choices in the two respective languages have to convey the same meaning. The study, finally, comes up with final results displaying the inaccurate application of word choices in the target languages. Some modifications occur by either applying a radical change or by providing a rare use of particular words.

**Key Words:** Pharmaceutical Notices – Bilingual Patients - Sentence Formulations - Word Choices -

**1. Introduction**

It is, undeniably observed, that most people worldwide are bi/multi-linguals since today's epoch exigencies impels upon language users to possess at least two language varieties. Owing to such requirement, nations watch out over the educational realm by assigning overly prominence to both teaching and learning foreign languages, besides the national languages. They mostly not only invest whopping budgets for propelling their apprenticeships, but also recruit a qualified teaching staff in order to assure success in using proficiently the target languages, within diverse formal social settings as well as with distinct instructed agents.

Algerian learners, whether being pupils or students, receive sound and accurate acquaintances about the way Standard Arabic, Standard French and Standard English function as linguistic systems along their learning process within different cycles they undergo. These linguistic notions will be compulsorily explored not only in their ensuing vocational lives, but also within their private and personal ones. Knowing languages is an everlasting lore. It is generally equated with its efficient explorations and its convenient uses while encountering situations that appeal for consistent linguistic knowledge. Nonetheless, Algerian bilingual language users, in general, and bilingual patients, in particular, are seldom linguistically independent when reading pharmaceutical notices if their contents encompass specialized jargon. The provided explanations are meant for being correctly grasped by drug consumers. The gist of their contents remains hardly accessible to the target circle because of the rareness of such exposure to a specific register. Moreover, language users tend more to prioritize receiving orally delivered explanations than to spend time in digging in content scripts for unveiling information.

In the light of this perspective, we hypothesize that (1) the linguistic handicap might stem from the language varieties (registers) used in the pharmaceutical notice scripts and/or (2) it might result from word selections that hinder readers' comprehension. The current research, hence; aims at examining to what extent both Standard Arabic and Standard French can be useful to Algerian instructed people in deciphering successfully pharmaceutical notices involving specialized languages. More precisely, it attempts to scrutinize the "Aprovel 150mg" pharmaceutical notice content by focusing on its morpho-syntactic dimensions and by putting the accent on word selections explored in the languages under study.

\* Dr LAHIOUEL Azza

## **2. Theoretical Frame**

Traditionally, language has always been defined as a means of communication used by members of speech communities to tie social relations. This insight, from a sociolinguistic point of view, still remains genuine and conventional because of the real substantiation it witnesses. From then, several trends in Linguistics realm have scrolled one after the other for approaching language as an independent entity in terms of its systematic constitution as well as its manifold functions it accomplishes. A set of language perceptions can be displayed as follows:

### **2.1 Language as a System**

Notwithstanding that language has been for a long time socially identified, this does not preclude its valuable prominence after the advent of novel insights. Its social value could not be dissociated from the new insight brought by structuralists. Their intrinsic insight was highly put on perceiving languages as a pure system that relies heavily on both organization and relatedness of segments delivered in utterances. The novel view revolves around perceiving a language as a set of elements combined together for forming patterned expressions that are frequently used to accomplish specific tasks in specific contexts (Chomsky, 1957). Utterance constitutions, thus; can never be done in an arbitrary way since they are submitted to laws internalized in the speaker's mind (De Saussure, 1972). Language users have recourse to various norms, namely phonological, morphological, syntactic and semantic, to produce well- formed and coherent parlances for expressing their inner ideas. The string of thoughts is shaped through the well-distribution of segmental units (morphemes) and arranged in a linear axis of speech production (syntagmatic relation). Their distribution is definitely submitted to the syntactic rules governing the particular language in use; with no neglect to have recourse to the semantic facet for articulating meaningful and rational conversations.

Strongly believing and maintaining their view towards approaching languages, structuralists do insistently carry on within their theory development that focalises on the fact that language "... is a system of rules assigning structures to sentences" (Janks, 2005, p.102). Hence, the socialisation of language smoothly weaves its principles with the ones on which Structuralism stands on. "Structuralism assumes that all human social activities (...) constitute languages and that their regularities can therefore be codified by abstract sets of underlying rules" (Fairgough, 1989, p.18). From the interlacing of the already stated views, language is regarded as a system due to the "togetherness" that emerges from the assembled individual linguistic units. Their gathering must extricate comprehensible output. "A language is a system in which all the elements fit together, and which the value of any one element depends on the simultaneous coexistence of all the others" (De Saussure, 1957, p.48). Subsequently, the Chomskian vision, perceives that all languages "...possess the same principles of grammar therefore occur to be similar" (Pinker, 1984, p.5). This perception postulates that there has to be one grammar that applies to all languages known as Universal Grammar (UG). The latter fundamentally advocates all sentence formations encompass, for instance, a Noun Phrase (NP) and a Verb Phrase (VP), which at the same time is a feature of a language structure dependency because its principles are claimed to be universal and stable components of UG (ibid). By dint of these pertinent clarifications, the essence of approaching language as a system has entailed to the conception of universality. In other words, the principles on which languages reckon for their functions are universally shared and hence, conventionally admitted. (Kaczmarek, 2004)

### **2.2 Language as Functions**

Language function refers to the purpose for which speech or writing is being used. Broadly speaking, Halliday (1976, p.28) sums them up as the following:

In speech, the aims can be clustered as the following:

- giving instructions
- introducing ourselves
- making requests

In writing, a range of specific functions is used in order to communicate explicitly a set of thoughts. The written forms can be output for expressing the following issues:

- describing processes
- comparing or contrasting things or ideas, and
- classifying objects or ideas

Halliday (1975, p.12) went further, into more details, by identifying the seven functions a language has:

- **Instrumental:** This is when children use language to express their needs (e.g. "Want juice")
- **Regulatory:** This is where language is used to tell others what to do (e.g. "Go away")
- **Interactional:** Here language is used to make contact with others and form relationships (e.g. "Love you, Mummy")
- **Personal:** This is the use of language to express feelings, opinions, and individual identity (e.g. "Me good girl")
- **Heuristic:** This is when language is used to gain knowledge about the environment (e.g. 'What is the tractor doing?')
- **Imaginative:** Here language is used to tell stories and jokes, and to create an imaginary environment.
- **Representational:** The use of language is meant for conveying facts and information.

According to Halliday (1976), these functions give way to the generalized "meta-functions" of language: A triangular relationship exists between the three fold elements, namely lexicon, grammar and semantics. They are soundly coined to give rise to interpretations.

### **2.3 Language as an Expressive Device**

Communication, in its broadest sense, whether verbal or written, aids language users to meet their traced objectives as well as to satisfy their needs by dint of using the most relevant expressions (including various words) to express themselves (McKay, Davis, & Fanning 1995). In terms of instrumental needs, communication is set between the addresser and the addressee for gathering specific information that might be very useful in a specific social setting. Interlocutors, throughout their verbal behaviours, can target precise goals such as informing, persuading, warning, advising...etc. So do writers throughout their written performances. Whatever the type of language performances adopted (oral or written) by social agents, the shared words and expressions ease the task for establishing communicative ties. At its essence, language remains an expressive linguistic device whose utility is too vital among members of speech networks.

### **2.4 Language as Discourse**

For many ages, it was believed that structuring well-formed sentences drives inevitably to thorough comprehension: the better the sentences are grammatically shaped, the more understandable their meanings are. Both word choice and sentence construction significantly contribute in transmitting messages as they stand as the major components on which communication relies. "Forming sentences requires attention to the rules as to how phrases and clauses combine in the system" (McCarthy & Clancy, 2015, p.438) Nevertheless, Sinclair & Coulthard (1992) perceive that describing "language in use" can be possibly done without having recourse to describing sentences. Sentences are never randomly structured. Rather, they appear in a verbal or a written discourse to mean something. Word and segment distribution does hold meaningful connotations. For such reason, most of the time, language is newly approached as a system whose linguistic constituents are put together for producing meaningful sentences. Janks (2005) points out to the systematic organisation of language by stating that "When people use language, they have to select from

options available in the system – they have to make lexical, grammatical and sequencing choices in order to say what they want to say.” (p.98)

Within time, the perspective has importantly taken a novel turning by perceiving language as “...a system of meanings, accompanied by forms through which the meanings can be realized.” According to Halliday (1978, p.39) “...the lexico-grammatical system as a whole, operates as the realization of the semantic system, which is what the speaker can mean”.

All in all, languages have multifaceted functions; each of which allows language users to explore them within their oral and/or written productions so that they can minutely convert their abstract thoughts into concrete items in order to send explicitly their intended messages. The embodiment of ideas into suitable items ensures the success of the communication clarity because the chosen items mean what they must mean. Neither ambiguity nor deviation can be set, but hence, rather radically excluded.

### **3. Practical Frame**

In order to investigate the way the contents of pharmaceutical notices are formulated for addressing Algerian consumers and for examining the languages through which the scripts are output, a sample of drug has been selected as linguistic data to work on. The latter neatly comprises different kinds of sentences through which prescriptions, instructions, advice, warnings, and the like are shaped.

The purposefully chosen sample drug is labeled “Aprovel” 150 mg (See Appendix 1). It is administrated to patients who suffer from hypertension. Knowing that this particular disease is chronic, and thus; incurable, and necessitates a regular taking of medicine. For this particular motive, the pharmaceutical notices serve mainly as a source of instructions, especially when the drug is taken for the first time, besides the physician’s orientations. Moreover, it stands as a pertinent reminder if the patient forgets some accurate notions or confuses between some information.

#### **3.1 Languages Used in “Aprovel” 150mg Pharmaceutical Notice**

The pharmaceutical notice “Aprovel” 150mg is written into two languages: The former is in Standard Arabic while the latter is in Standard French (See Appendices 2 &3). It is quite rational that these linguistic codes are the ultimate adopted means of communication since the majority of the Algerian citizens are largely acquainted with both: Standard Arabic is the official language of the country and Standard French is its first foreign language. Owing to such positions the targeted languages occupy in the bosom of the Algerian social network, it is obvious to transmit the intended pharmaceutical knowledge into language varieties existing in the population’s linguistic repertoire. From their first reading, the contents seem to be understandable and within the reach of patients. The most striking feature noticed on the two-language scripts is that they are not overloaded with medical terms. That is, surely, very appreciable for patients since the targeted languages are simplified, enabling them to get access to the gist of the contents. What initially trigs our inquisitiveness, however, is whether or not these simultaneous scripts are done by professional translators? or by Sanofi-Aventis laboratory managers? or by pharmacists themselves? No single statement is displayed on the pharmaceutical notice to satisfy our curiosity. The reflection, still, revolves around the divergences existing between the two respective languages in terms of word choices, sentence structures, and meaning explicitness.

Before starting to make the linguistic analogies between the two scripts, a brief presentation of Aprovel 150mg is furnished in the following section:

#### **3.2 Description of “Aprovel” 150mg**

Below are the main descriptive elements characterising the pharmaceutical notice under study

- Brand Name: Aprovel 150mg
- Form: Coated Tablets
- Company: Sanofi-Aventis –Algeria- SPA
- Pharmaceutical Notice: Drug approval is on April 11<sup>th</sup>, 2019.

### 3.3 Description and Analysis of Aprovel 150mg Pharmaceutical Notice

The pharmaceutical notice of “Aprovel 150mg” is presented in two sides: One side is written in Standard Arabic while the other side is written in Standard French. It comprehends six major sections. They can be displayed as follows:

Sections	Standard French	Standard Arabic
1	Qu'est ce que Aprovel et dans quel cas est-il utilisé ?	ما هو ابروفيل و ماهي دواعي استعماله؟
2	Quelles sont les informations à connaitre avant de prendre Aprovel ?	ماهي المعلومات التي يجب معرفتها قبل تناول ابروفيل؟
3	Comment prendre Aprovel ?	كيف تتناول ابروفيل؟
4	Quels sont les effets indésirables éventuels?	ماهي الآثار الجانبية المحتملة؟
5	Comment conserver Aprovel ?	كيف يحفظ ابروفيل؟
6	Contenu de l'emballage et d'autres information.	محتويات العبوة ومعلومات أخرى ماهي محتويات ابروفيل؟

#### Sub-headings in “Aprovel 150 mg” pharmaceutical notice

From the onset of comparing and contrasting the way sentences are juxtaposed in the two targeted languages, it is remarkably observed that the brand name of the drug remains the same. The calque translation is allowed since it is customarily adopted in scientific, industrial and technological fields. Most labels in foreign languages are re-written within Arabic letters since they are not liable to translation. They must be kept in their original version. On the contrary, the section sub-headings included in the pharmaceutical notice under study are submitted to conversion. They are shaped into interrogative forms, more particularly into WH Question types. It seems it is deliberately made to provide patients with accurate responses in case such similar questions are raised. Very often, before taking the target medicine, a series of questions runs through the consumers' mind in order to avoid serious mistakes that harm their health. For such a relevant cause, subtitles, generally, tend to trig the patients' curiosity. By affording them reliable replies, patients can avert what is irretrievable.

From a linguistic point of view, it is apparently noted that the constitution of the interrogative sentences follows a linear axis. The distribution of the segments is submitted to the morpho-syntactic rules that govern the two languages under scrutiny. More precisely, the syntagmatic relationship existing between the ranges of segmental units highly proves the correct application of their prescribed laws. A fan of samples can be peered at as follows:

1. *Qu'est ce que Aprovel et dans quel cas est-il utilisé?*

1. *إستعماله؟ دواعي ما هي ابروفيل ما هو*

For instance, the above first subtitle which can be translated as “What is Aprovel and in which case is it used?”, does not integrally convert the words as they are in the two respective languages: The structure “et dans quel cas est-il utilisé?” is juxtaposed with “إستعماله؟ دواعي ما هي” instead of

“يستعمل؟ حالة ايوفي”. The latter seems to be more commonly used than the written one. The word “دواعي” is seldom encountered when compared to “حالة ايوفي” which is frequently employed in diverse contexts. It might mislead readers to ambiguity by understanding the item “دواعي” as “reasons” “الأسباب”. Thus, a dissimilar choice of words is noticed between the two versions.

## 2. *Quelles sont les informations à connaître avant de prendre Aprovel?*

2!؛ إبروفيل تناول قبل معرفتها التي يجب المعلومات ماهي

The formulations of the two subtitles are distinct because of the selection of the words themselves. If it happens to the readers to start with the subtitle written in French, they will probably note that the author focuses on the information patients are supposed “to know” before taking Aprovel. A sort of knowledge the subjects are required to be equipped with before engaging themselves in the treatment. In parallel, the conversion of the same subtitle into Standard Arabic, nevertheless, does take a slight deviation by inserting a new word that does not figure into the French version. The verb “يجب” (Must modal verb in English) is totally missing in the French sentence, allowing tolerance to patients of knowing or not some information before taking the medicine. On the contrary, in the Arabic version, the exigency is highly accentuated through the use of “يجب” that becomes “A must”. On the basis of these word choices, the French version can be reformulated into English as “What is the information to know before taking Aprovel?” while the Arabic form does initiate to consumers what they “have to know”. Hence, the reshaping of the subtitle from Standard Arabic to Standard English will be “What is the information that must be known before taking Aprovel?”. The whole nuance resides in the fact of “knowing” with degrees i.e. either the minimum or the maximum of information patients may possess. This might lead to confusion and to the inaccessibility of reaching accuracy in such context that purely requires it. Word choices, hence; is significant when addressing bilingual patients. The scripts are supposed to obey to the equivalent items in order to preserve the same meaning.

3. Similarly, the third subtitle “*Comment prendre Aprovel ?*” “تتناول كيف إبروفيل؟” is not saved from a non-integral reproduction of the main elaborated content. This can be detected as well from word choice itself. The distinction lies in the divergent uses of verbs: “prendre” is not really “تتناول” since the verb prendre might be associated to different complements as prendre un stylo, unegorgéed’eau, l’initiative, le risque...etc. However, “تتناول” has other distinct complements such as “قرص ، منصب ، غذاء ووجبة تتناول”. The verb “Prendre”, however; is always thought of as “يأخذ” and not commonly referred as “يتناول”. When reading the subtitle in French “*Comment prendre Aprovel ?*”, the statement seems addressing every consumer who is concerned, regardless of being feminine/masculine or singular/plural. On the contrary, the Arabic version “إبروفيل كيف تتناول” points out the addressee as being singular and masculine. The restriction of referring to “You” mode might sensitize more and more the addressee by letting him feel that the explanations are directly communicated to him, and hence; let in him the sensation of assurance. Of course, the feminine gender is implied. It is just a matter of unifying the two genders and making them one; otherwise, the text will be longer if every gender is individually addressed.

4. The fourth subtitle “*Quelles sont les effets indésirables éventuels?*” raises the issue that frightens every patient after taking the drug. It is a matter of knowing about the side effects that may stem from the drug constituents and may negatively impact the patient’s body in terms of intolerance. The French formulation seems to be more habitual for the Algerian consumers as, even within their verbal interactions undertaken in Algerian Dialect, being their mother tongue, they use the collocation “les effets indésirables”. More surprisingly, it has become a part included in the Algerian

Dialect as no equivalent can be found in their own dialect. Regarding Standard Arabic, a ready-made collocation is available formulated as “الآثار الجانبية”. Indeed, its use appears to be unfamiliar to Algerian patients when compared to the French one “les effets indésirables”. Sometimes, French version is closer than Standard Arabic for Algerian language users. It will not be shocking if someone asks for the meaning of “الآثار الجانبية” and the reply is certainly picked up from French language as either “les effets indésirables” or frequently referred to as “les effets secondaires” which means “side effects”.

5. The fifth subtitle, in French language, “*Comment conserver Aprovel ?*” is shaped the way the third subtitle is “*Comment prendre Aprovel ?*” i.e. in terms of its constituents and their distributions. The unique change is, of course, noted in the replacement of the verb “prendre” “to take” by the verb “conserver” “to keep” so that new advice will be suggested accordingly. Regarding the Arabic version, the fifth subtitle is presented as “إبروفيل؟ يحفظ كيف”. From a morpho-syntactic point of view, the use of the given verb “conserver” in Standard Arabic is molded into the passive form “يحفظ”; whereas, in the third subtitle the verb “prendre” is reproduced in the active form “تتناول”. In fact, “يحفظ” and “تتناول” can not be classified in the same group category since the former belongs to the active voice while the latter belongs to the passive voice. “Prendre” and “Conserver”, conversely, are both gathered in the same segment category (infinitive verbs). All in all, the conversion of subtitles from Standard French to Standard Arabic seems to gain a dissimilar structure, a distinct form (voice), and a divergent mode.

6. The list of subtitles does not end with “interrogative form” when compared to the first fifth ones. Its sub-heading is a cluster of segments forming a meaningful content: “Contenu de l’emballage et d’autres informations.” and “أخرى ومعلومات العلبة محتويات. إبروفيل؟ محتويات ماهي”

In French, it includes a nominal phrase which indicates the presentation of the content of the packaging and other information. It uses the first part in singular form “Contenu de l’emballage”, translated in English as “Package Content”. However, the second part is formulated into plural form “et d’autres informations”, having its translation in English as “and other information”. If a comparison is established between what is output in French and what is written in Arabic, a quick glance allows a neat observation of the word “محتويات” which is used in plural form and does not correspond to the French singular word “Contenu”. Moreover, it is noted that an additional sentence figures within the Arabic subtitle “إبروفيل؟ محتويات ماهي”, but does not get its equivalent in French. Its addition might be a two-fold meaning since “العلبة محتويات” does not absolutely hold the same connotation as in “إبروفيل؟ محتويات ماهي” in the sense of “العلبة محتويات” means “Box contents” while “إبروفيل؟ محتويات ماهي” means “what are the constituents of Aprovel?”. The presence of the sentence “إبروفيل؟ محتويات ماهي” and its absence in French version does not really provoke a certain disorientation for readers as they are bilinguals, and can settle for one version.

### **3.4 Instructions and Advice**

The contents developed after every subtitle along the presentation of Aprovel 150mg pharmaceutical notice, whether presented into Standard French or in Standard Arabic comprises a wide range of instructions as well as a variety of advice so that patients can carefully apply them. They are formulated into quite short sentences for guiding patients to get directly to the gist of their target meanings. Hence, confusions, to a larger extent, can be averted. Drug consumers, relying on each single item to comprehend the overall clarifications, break down the sum of the linguistic units into pieces of chunks in order that exactitudes in comprehension are attained. The patients' integral comprehension to the pharmaceutical notice content assures them that no mistake must be

committed. Taking drugs is a serious engagement patients embark themselves in because carelessness in regarding the content of the pharmaceutical notice or misreading it might conduct to harmful results. For these pertinent motives, the major role of the pharmaceutical notice is to be a facilitator for patients whose medical knowledge needs sound supports. Below is a couple of samples which can be displayed to examine to what extent instructions and advice are morpho – syntactically formulated:

1.« *Si par inadvertance vous oubliez un jour de prendre votre médicament, prenez la dose suivante comme d'habitude. Ne prenez pas de dose double pour compenser la dose que vous avez oubliée de prendre* ».

1. جرعة مضاعفة تتناول لا و كالمعتاد الموالية الجرعة تناول العلاج واصل الدواء من جرعة تناول نسيت " إذا المنسية".

From the onset, it is clearly observed that some linguistic units do not figure in both versions. The words “inadvertance”, “un jour” are missing in the sentence written in Arabic. The morpheme “inadvertance” which means ‘the lack of attention’ is not commonly used among the Algerian bilinguals. Instead, they are more used to ‘manqued’attention’ Thus, the word choice put on “inadvertance” seems to be unsuitable because of its rareness in the Algerians’ linguistic behavior when compared to the expression ‘manqued’attention’ or ‘par hazard’. This instance, confirms our second hypothesis that perceives word choice can neither be an elusive feature nor a negligible matter while addressing a specific social circle. It can be a significant hindrance for obstructing meaning. However, its presence within the advice does not thoroughly impede the understanding. Patients might, to a certain extent, guess its negative interpretation that it carries. They may think of some items that go hand in hand with the context as “négliger”, “ne pas faire attention”, “délaisser”...ect. Likewise, within the Arabic version, the word “العلاج” figures in the French version as “médicament”. In fact, the two items are not equivalents since the former insinuates “treatment” while the latter implies “drug” or “medicine”. The equivocation resulting from receiving different word meanings in two distinct languages, merely, oscillates the readers’ position from persuasion to dissuasion while reading the pharmaceutical notice. The risk of losing its credibility might be strongly coined to the word choice in the targeted languages.

2. *La dose habituelle est de 150mg une seule fois par jour. La dose peut être ultérieurement augmentée jusqu'à 300mg en une prise par jour en fonction de la réponse sur la pression artérielle.*

2. هي إلى عتادية الجرعة 150 اليوم في وحدة مرة ملغ.. الإلاحق وتنفيا الجرعة زيادة يمكن 300 مرة ملغ الضغط استجابة حسب ليو ميا واحدة الشرياني .

The instruction stated in the pharmaceutical notice in both Standard French and Standard Arabic initiates patients that the dose of 150mg can be increased to 300 mg in response to the arterial pressure. The information is rather delivered into exact numbers representing the accurate dose: from 150mg to 300mg. This could have been done through the use of the verb “double” as stating “the dose can double”. It is purposefully done to get recourse to precise numbers as the field treats the amounts of drugs in terms of milligrammes and not in approximations.

It is also noted that the adverb “ultérieurement” in French language might be split into two morphemes “ultérieure” as a free morpheme and “ment” as a bound morpheme. Its equivalent in Standard Arabic is presented into three independent morphemes: “لاحق وتنفيا”. The syntagmatic relationship between these three segments is shortened in one morpheme in French “ultérieurement”.

### **3. Discussion**

The usefulness of pharmaceutical notices is unquestionable. They are deliberately added in drug boxes for bringing further clarifications to either drug consumers themselves or to relatives who are in charge of providing help to close patients.

Whoever is appealed to engage himself in reading pharmaceutical notices, careful attention need to be focalised on a two-fold purpose: The entire scripts must be tailored into language(s) the population is used to be exposed to. The medical jargon can be employed for referring to a specific item providing that its equivalent exists in Standard French and/or Standard Arabic. The medical expression, for example, “*la pression artérielle*” i.e. “blood pressure” can also be referred to as “*la tension artérielle*”. Commonly referred to among Algerian people is “la tension” and not “la pression”. However, “*artérielle*” can not have an equivalent in standard languages. It is purely a scientific term, thus ; it belongs to the medical terminology. It emerges from the free morpheme “Artère”. e. “Artery” coined to the bound morpheme “ielle” for building up the entire word “Arterielle”. Moreover, the essence of every pertinent idea embodied into instructions and advice have to be easily grasped and carefully memorized. Taking drugs, undoubtedly, happens under practitioners’ control such as physicians and pharmacists who always verbally explain and re-explain to patients not only the way drugs are administrated, the duration they have to take them, but also the side effects they might provoke. Sometimes, too many accumulated information at the same time drive to confusion and/or to non-retainment as patients cannot recall all the verbally received details.

“Apovel 150mg” pharmaceutical notice is a sample used to examine linguistically the way scripts are presented to the Algerian patients. Its contents are written in Standard Arabic as well as in Standard French, being the language varieties used by a large portion of educated persons. In fact, the languages are simplified languages. The authors have probably taken into regard that the use of an excessive medical register will be of no help. The best strategy to adopt for addressing bilinguals is to keep the two languages side by side and provide them with opportunities to read both contents so that they can double check their understanding. If the meaning has been initially grasped in French language, for example, and has been similarly understood in Standard Arabic, the reader would have attained the successful interpretation of the contents. Thus, the first hypothesis is disconfirmed as the script languages are purely simplified.

The set of sentence structures are not identical since the targeted languages do not have the same linguistic system, and do not derive from the same language family. It is obvious that the distribution of the linguistic units is not submitted to the same syntactic norms. Worth mentioning, despite of the divergences existing in the arrangements of items to construct well-formed sentences, it is visibly noted that some statements are substituted by new ones and sometimes radically modified, like “*Si par inadvertance vous oubliez un jour de prendre votre médicament, prenez la dose suivante comme d’habitude*” “إذا نسيت تناول جرعة من الدواء واصل العلاج”

“*comme d’habitude*” is not “واصل العلاج”. Rather, “*comme d’habitude*” is more commonly used as “as usual” while “واصل العلاج” means “Continue the treatment”. Hence, the interpretation is impacted by word choice since it is considered as the core components in the sentence formation. For instance, the word “العلاج” in Arabic figures in French version as “médicament”. “العلاج” and “médicament” hold two different concepts and this can be proved by checking a bilingual dictionary. So is the example of “emballage” which is presented in Arabic as “محتويات”. Guesses might be the strategies patients refer to for achieving a correct comprehension. Contextualised items may bring a support, at least, in approaching the closest meanings, and may be the right ones. Guesses, unfortunately, do not guarantee accurate understanding. The contents must hold the same meaning and not the same sentence structures. Our second hypothesis is clearly confirmed as word selection is not identical in Standard Arabic and in Standard French.

The task of writing pharmaceutical notices becomes, thus, more credible when performed by professional translators specialised in medical fields. Item selections as well as their appropriate positions in sentence structures consolidate the strength of the contents. Writing pharmaceutical

notices necessitates “language knowers”, those who are the most skilled in manipulating the languages according to their subtle uses. Their writing, indeed, goes beyond the practitioners and drug manufacturers. Pharmaceutical laboratories must care about the quality of writing pharmaceutical notices as seriously as they do for producing efficient drugs.

To sum up, despite the colossal endeavours furnished for setting “Aprovel 150mg” pharmaceutical notice, its contents remain undecipherable because of the tiny characters used along with its presentation (See appendices 2 & 3). Patients, in general, and those who are shortsighted, in particular, encounter huge troubles in deciphering the instructions and the advice they expect to have: Their expectations fall apart because of these small characters. Thus, the question " what is the utility of getting pharmaceutical notices that can not be even readable???" remains open till plausible initiatives are taken.

## **Conclusion**

After scrutinizing the two language varieties, namely Standard Arabic and Standard French, employed in Aprovel 150 mg pharmaceutical notice, it is neatly observed that the formulations of sentences tend to be, to a certain extent, not identical. Astonishingly, word choices are not accurately applied. Such inaccuracy in choosing exact items while converting both instructions and advice from one language to another might deviate the gist of the intended messages, whether partially or entirely. Bilingual patients have the aptitude to detect successfully the divergences in item selections since they are acquainted with the most frequent used glossary. Words, being the core components in sentence constructions, are crucial in pointing out what must be done and what must not within pharmaceutical notice scripts. The latter instigates a minute elaborated word selection for being a source of credibility and steadiness.

## **References**

### ***Books***

- CHOMSKY, NOAM. (1957). Syntactic structures. Mouton, The Hague
- CLANCY, BRIAN. & Mc CARTHY, MICHAEL. (2015) .Co-constructed turn taking, in K. Aijmer and C. Rühlemann (eds) *Corpus Pragmatics: A Handbook*, Cambridge: Cambridge University Press: 430-453.
- DE SAUSSURE, FERDINAND. (1957). *Course in general linguistics*. London: Duckworth
- ————. (1972). *Course in general linguistics*. London: Fontana
- FAIRCLOUGH, NORMAN. (1989). *Language and power*. London: Longman.
- HALLIDAY, MICHAEL ALEXANDER KIRKWOOD. (1973). *Explorations in the functions of language*. London: Edward Arnold.
- ————. (1975). *An introduction to functional grammar*. London: Arnold.
- ————. (1976). *System and function in language*. London: Oxford University Press.
- McKAY, MATTEW., DAVIS, MARTHA, & FANNING, PATRICK. (1995). *Messages: Communication skills. Book, 2<sup>nd</sup> ed.* Oakland, CA: New Harbinger.
- SINCLAIR, JOHN. & COULTHARD, MALCOM. (1992). Towards an analysis of discourse. In *Advances in Spoken Discourse Analysis*, M. Coulthard, (ed.), 1–34. London: Routledge.

### ***Journals***

- H.Janks, “Language and the design of texts”, *English Teaching: Practice and Critique*, 4(3), 2005 pp. 97-110.
- B.Kaczmarek, “Neurocybernetic model of linguistic communication”, *Journal of Neuro-linguistics* 3,1, 2004 pp. 39-48

- Pinker, S. (1984). <https://web.physics.wustl.edu/alford/reviews/pinker.html>
- Willems, K. (2006). European structuralism.  
<https://core.ac.uk/download/pdf/55813467.pdf>

**Appendix 1: Aprovel 150 mg**



**Appendix 2: Arabic Version of Aprovel 150mg pharmaceutical Notice**



Aprovel 150 mg - Aprovel 300 mg

irbésartan

comprimés pelliculés



Veillez lire attentivement l'intégralité de cette notice avant de prendre ce médicament car elle contient des informations importantes pour vous.

- Gardez cette notice, vous pourriez avoir besoin de la relire.
-Si vous avez toute autre question, si vous avez un doute, demandez plus d'informations à votre médecin ou votre pharmacien.
-Ce médicament vous a été personnellement prescrit. Ne le donnez pas à d'autres personnes. Il pourrait leur être nocif, même si les signes de leur maladie sont identiques aux vôtres.
-Si vous ressentez un quelconque effet indésirable, parlez-en à votre médecin ou votre pharmacien. Ceci s'applique aussi à tout effet indésirable qui ne serait pas mentionné dans cette notice. Voir rubrique 4.

Que contient cette notice ?

- 1. Qu'est-ce que Aprovel et dans quel cas est-il utilisé
2. Quelles sont les informations à connaître avant de prendre Aprovel
3. Comment prendre Aprovel
4. Quels sont les effets indésirables éventuels
5. Comment conserver Aprovel
6. Contenu de l'emballage et autres informations
1. Qu'est-ce que Aprovel et dans quel cas est-il utilisé ?
Aprovel appartient à un groupe de médicaments connus sous le nom d'antagonistes des récepteurs de l'angiotensine-II.
L'angiotensine-II est une substance formée par l'organisme qui se lie aux récepteurs des vaisseaux sanguins, ce qui entraîne leur constriction, il en résulte une élévation de la pression artérielle. Aprovel empêche la liaison de l'angiotensine-II à ces récepteurs et provoque ainsi un relâchement des vaisseaux sanguins et une baisse de la pression artérielle.

Aprovel ralentit la dégradation du fonctionnement des reins chez les patients ayant une pression artérielle élevée et un diabète de type 2.

Aprovel est utilisé chez l'adulte :
-pour traiter l'hypertension artérielle essentielle (élévation de la pression artérielle)
-pour protéger les reins des patients ayant une élévation de la pression artérielle, un diabète de type 2 et ayant une preuve biologique d'altération de la fonction rénale.

2. Quelles sont les informations à connaître avant de prendre Aprovel ?

- Ne prenez jamais Aprovel
-si vous êtes allergique à l'irbésartan ou à l'un des autres composants contenus dans ce médicament (mentionnés dans la rubrique 6)
-si vous êtes enceinte de plus de 3 mois (il est également préférable d'éviter de prendre Aprovel en début de grossesse - voir la rubrique grossesse)
-si vous avez du diabète ou une insuffisance rénale et que vous êtes traité(e) par un médicament contenant de l'alisirkien pour diminuer votre pression artérielle

Avertissements et précautions

- Adressez-vous à votre médecin avant de prendre Aprovel et si une des situations suivantes se présente :
-si vous souffrez de vomissements ou de diarrhée importante
-si vous souffrez de problèmes rénaux
-si vous souffrez de problèmes cardiaques
-si vous recevez Aprovel pour une atteinte rénale due au diabète. Dans ce cas votre médecin peut faire pratiquer des tests sanguins réguliers, en particulier pour mesurer le taux de potassium dans le sang en cas de mauvais fonctionnement des reins
-si vous devez subir une intervention chirurgicale ou une anesthésie
-si vous prenez l'un des médicaments suivants pour traiter une hypertension : un «inhibiteur de l'enzyme de Conversion (IEC)» (par exemple énalapril, lisinopril, ramipril), en particulier si vous avez des problèmes rénaux dus à un diabète.
- aliskiren

Votre médecin pourra être amené à surveiller régulièrement le fonctionnement de vos reins, votre pression artérielle et le taux des électrolytes (par ex. du potassium) dans votre sang.

Voir aussi les informations dans la rubrique « Ne prenez jamais Aprovel »
Vous devez informer votre médecin si vous êtes enceinte ou si vous envisagez d'être enceinte. Aprovel est déconseillé en début de grossesse, et ne doit pas être pris si vous êtes à plus de 3 mois de grossesse, car il peut entraîner de graves problèmes de santé chez l'enfant à naître s'il est utilisé au cours de cette période (voir la rubrique grossesse).

Enfants et adolescents

Ce médicament ne doit pas être utilisé chez les enfants et les adolescents car l'efficacité et la tolérance n'a pas encore été établie.

Autres médicaments et Aprovel

Informez votre médecin ou pharmacien si vous prenez, avez récemment pris ou pourriez prendre tout autre médicament.

Votre médecin pourrait avoir besoin de modifier la dose de vos médicaments et/ou prendre d'autres précautions :
Si vous prenez un inhibiteur de l'enzyme de conversion ou de l'alisirkien (voir aussi les informations dans les rubriques « Ne prenez jamais Aprovel » et « Avertissements et précautions »)

Vous pouvez être amené à effectuer des contrôles sanguins si vous prenez

- une supplémentation en potassium,
-des sels de régime à base de potassium,
-des médicaments d'épargne potassique (tels que certains diurétiques),
-des médicaments contenant du lithium.

Si vous prenez des médicaments antidouleur appelés anti-inflammatoires non stéroïdiens, les effets de l'irbésartan peuvent être diminués.

Aprovel avec des aliments et boissons

Aprovel peut être pris au cours ou en dehors des repas.

Grossesse et allaitement

Grossesse
Vous devez informer votre médecin si vous êtes enceinte ou si vous pensez l'être. Votre médecin vous recommandera normalement d'arrêter de prendre Aprovel avant que vous ne soyez enceinte ou dès que vous apprenez que vous êtes enceinte et vous conseillera de prendre un autre médicament à la place de Aprovel. Aprovel n'est pas recommandé en début de grossesse et ne doit pas être pris après plus de 3 mois de grossesse car il est susceptible de nuire gravement à votre bébé s'il est utilisé après le 3ème mois de grossesse.

Allaitement

Informez votre médecin si vous allaitez ou si vous êtes sur le point d'allaiter. Aprovel est déconseillé chez les femmes qui allaitent, votre médecin vous prescrira normalement un autre traitement si vous souhaitez allaiter, en particulier si votre enfant est un nouveau-né ou un prématuré.

Conduite de véhicules et utilisation de machines

Aucune étude sur l'aptitude à conduire des véhicules et à utiliser des machines n'a

3. Comment prendre Aprovel ?
Veillez à toujours prendre ce médicament en suivant exactement les indications de votre médecin. Vérifiez auprès de votre médecin en cas de doute.

Mode d'administration
Aprovel se prend par voie orale. Avez les comprimés avec une quantité suffisante de liquide (ex un verre d'eau). Vous pouvez prendre Aprovel au cours ou en dehors des repas. Vous devez essayer de prendre votre dose quotidienne approximativement à la même heure chaque jour. Il est important que vous continuiez de prendre Aprovel jusqu'à avis contraire de votre médecin.

Chez les patients ayant une pression artérielle élevée
La dose habituelle est de 150 mg une seule fois par jour. La dose peut être ultérieurement augmentée jusqu'à 300 mg en une prise par jour en fonction de la réponse sur la pression artérielle.

Chez les patients ayant une pression artérielle élevée et un diabète de type 2 avec atteinte rénale
Chez les patients ayant une pression artérielle élevée et un diabète de type 2, la dose d'entretien recommandée pour le traitement de l'atteinte rénale associée est de 300 mg une fois par jour.

Le médecin peut conseiller la prise d'une dose plus faible, en particulier lors de la mise en route du traitement chez certains patients tels que les patients sous hémodialyse ou les patients âgés de plus de 75 ans. L'effet maximal de baisse de la pression artérielle est obtenu quatre à six semaines après le début du traitement.

Utilisation chez les enfants et les adolescents
Aprovel ne doit pas être administré aux enfants de moins de 18 ans. Si un enfant avale des comprimés, prévenez immédiatement votre médecin.

Si vous avez pris plus de Aprovel que vous n'auriez dû
Si vous prenez accidentellement un trop grand nombre de comprimés, prévenez immédiatement votre médecin.

Si vous oubliez de prendre Aprovel
Si par inadvertance vous oubliez un jour de prendre votre médicament, prenez la dose suivante comme d'habitude. Ne prenez pas de dose double pour compenser la dose que vous avez oubliée de prendre. Si vous avez d'autres questions sur l'utilisation de ce médicament, demandez plus d'informations à votre médecin ou à votre pharmacien.

4. Quels sont les effets indésirables éventuels ?
Comme tous les médicaments, ce médicament peut provoquer des effets indésirables, mais ils ne surviennent pas systématiquement chez tout le monde. Certains effets peuvent être sérieux et peuvent nécessiter une surveillance médicale.

Comme avec des médicaments similaires, des rares cas d'allergie cutanée (éruption, urticaire), ainsi que des gonflements localisés de la face, des lèvres et/ou de la langue ont été rapportés chez des patients prenant de l'irbésartan. Si vous pensez que vous développez l'un de ces effets ou si vous êtes essoufflé, arrêtez de prendre Aprovel et prévenez immédiatement votre médecin. La fréquence des effets indésirables listés ci-dessous est définie selon les conventions suivantes :

-Très fréquent : peut affecter plus d'1 personne sur 10.

-Fréquent : peut affecter jusqu'à 1 personne sur 10.

-Peu fréquent : peut affecter jusqu'à 1 personne sur 100.

Les effets indésirables rapportés au cours des études cliniques chez les patients traités par Aprovel ont été :

-Très fréquents (pouvant affecter plus d'1 personne sur 10) : si vous souffrez d'une élévation de la pression artérielle et d'un diabète de type 2 avec atteinte rénale, les tests sanguins peuvent montrer une élévation du taux de potassium.

-Fréquents (pouvant affecter jusqu'à 1 personne sur 10) : sensation de vertige, sensation de malaise/vomissements, fatigue et les tests sanguins peuvent montrer une augmentation des taux de l'enzyme qui traduit l'état de la fonction musculaire et cardiaque (enzymes créatine kinase). Chez des patients ayant une pression artérielle élevée et un diabète de type 2 avec atteinte rénale, vertiges lors du passage de la position allongée ou assise à la position debout, pression artérielle basse lors du passage de la position allongée ou assise à la position debout, douleurs articulaires ou musculaires et une diminution du taux de protéines dans les globules rouges (hémoglobine) ont également été rapportés.

-Peu fréquents (pouvant affecter jusqu'à 1 personne sur 100) : accélération des battements du cœur, bouffée de chaleur, toux, diarrhée, indigestion/brûlure d'estomac, troubles sexuels (problèmes de performances sexuelles) et douleur dans la poitrine.

Des effets indésirables ont été rapportés depuis la commercialisation de Aprovel. Les effets indésirables dont la fréquence d'apparition n'est pas connue sont : vertiges, maux de tête, troubles du goût, bourdonnements d'oreille, crampes musculaires, douleurs articulaires et musculaires, diminution du nombre de plaquettes, altération de la fonction hépatique, augmentation du taux de potassium sanguin, altération de la fonction rénale, une inflammation des petits vaisseaux sanguins affectant principalement la peau (pathologie connue sous le nom de vasculature leukocytoclastique) et réactions allergiques sévères (choc anaphylactique). Des cas peu fréquents de jaunisse (caractérisée par un jaunissement de la peau et/ou du blanc des yeux) ont été rapportés.

Déclaration des effets secondaires

Si vous ressentez un quelconque effet indésirable, parlez-en à votre médecin ou votre pharmacien. Ceci s'applique aussi à tout effet indésirable qui ne serait pas mentionné dans cette notice. En signalant les effets indésirables, vous contribuez à fournir davantage d'informations sur la sécurité du médicament.

5. Comment conserver Aprovel ?

Tenir ce médicament hors de la vue et de la portée des enfants. N'utilisez pas ce médicament après la date de péremption mentionnée sur la boîte ou sur la plaquette thermoformée. La date d'expiration fait référence au dernier jour du mois.

A conserver à une température ne dépassant pas 30°C. Ne jetez aucun médicament au tout-à-l'égout ou avec les ordures ménagères. Demandez à votre pharmacien d'éliminer les médicaments que vous n'utilisez plus. Ces mesures contribueront à protéger l'environnement.

6. Contenu de l'emballage et autres informations

Que contient Aprovel ?

-La substance active est l'irbésartan.

Chaque comprimé Aprovel 150 mg contient 150 mg d'irbésartan

Chaque comprimé Aprovel 300 mg contient 300 mg d'irbésartan

-Les autres composants sont : le lactose monohydraté, la cellulose microcristalline, le croscarmellose sodique, l'hypermellose, le dioxyde de silicone, le stéarate de magnésium, le dioxyde de titane, le macrogol 3000, la cire de carnauba.

Qu'est-ce que Aprovel et contenu de l'emballage extérieur ?

-Les comprimés pelliculés de Aprovel 150 mg sont blancs à blancs cassés, biconvexes, de forme ovale, avec un cœur gravé d'un côté et le numéro 2872 gravé sur l'autre côté.

-Les comprimés pelliculés de Aprovel 300 mg sont blancs à blancs cassés, biconvexes, de forme ovale, avec un cœur gravé d'un côté et le numéro 2873 gravé sur l'autre côté.

-Les comprimés pelliculés de Aprovel 150 mg ou Aprovel 300 mg sont fournis en conditionnements de 28 comprimés pelliculés présentés en plaquettes thermoformées.

Détenteur de la Décision d'Enregistrement :

SANOFI-AVENTIS ALGERIE SPA, Microzone d'activité, Et B, Lots 29,30 et 31,16035 Hydra - Alger, Algérie.

PH0185