

## IMPROVING READING AND SPEAKING SKILLS BY USING PHARMACOLOGY REFERENCE

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*Abstract:* This article refers to developing reading and speaking skills by using patient information leaflets. The activities are particularly addressed to students in Pharmacy and imply understanding a printed text about different medicines, about their active substance, use, contra-indications, side-effects, dose etc. The article suggests different activities that use patient information leaflets as the basic material for building up dialogues between patient and pharmacist.

*Keywords:* patient information leaflet, active substance, disease, contra-indications, side-effects.

Teaching medical English is a challenging task for any teacher in that he needs to address a specific group of students, depending on their main field of study which may be dentistry, general medicine, pharmacy, nutrition or any other field and in doing this he needs to focus on a certain terminology which the students are more likely to use in their subject area.

In my experience as a teacher of medical English I have noticed that students may find very hard to deal with medical articles that do not belong to their research field because they contain medical terminology they are not familiar with. It was a surprise for me to see that general medicine students found themselves in great difficulty when asked to translate an article about bridges and orthodontic bands used in dentistry, while they were really quick and confident when dealing with general medicine topics. My intention was to see to what an extent they comprehend a text that doesn't necessarily address medical students but students in dentistry and to encourage them to read medical articles regardless of their subject, to improve their vocabulary. The most important thing though is that the students learn the terminology that is most used in their field of study.

This article has in view the students in Pharmacy as a target group and it suggests some practical methods of helping them acquire pharmaceutical terminology by using patient information leaflets of different medicines. These methods include reading and speaking skills development which I will describe step by step.

Leaflets are of great help because they offer a lot of information for the user: the active ingredient in the pill/capsule, the medical conditions in which a certain medicine is used for treatment, it talks about warnings and precautions when taking a given medicine or how it interacts with other prescribed pills and it also gives information about the doses in which a medicine should be taken, depending on the weight of the patient, or on whether he is a child or an adult.

Leaflets are a great source of medical language for pharmacists, they contain the terminology that the pharmacists use in their everyday life at work and the students will encounter in them exactly what they will meet in real life. Moreover, patient information leaflets

for medicines can be found easily on the internet, so that you can choose any leaflet you find proper for your English course. The challenge in doing that belongs exclusively to the teacher because the information about a certain medicine can be displayed on too many pages containing too many details, whereas the practical course has to be taught in two hours on one hand, and the 1<sup>st</sup> or 2<sup>nd</sup> year students may not have all the knowledge needed for understanding all the information in the leaflet. The proper thing to do is to minimize the amount of information while preserving the most important data:

1. Indications
2. Cautions
3. Contra-indications
4. Side-effects
5. Dose

For my course, I chose leaflets about medicines the students are familiar with, such as 1) ampicillin, 2) erythromycin, 3) gentamicin, 4) paracetamol and 5) aspirin. I tried to compress the information I found about these medicines and I wrote them down on charts. For example, for ampicillin I wrote the following:

### **Ampicillin**

**Indications:** urinary-tract infections, otitis media, chronic bronchitis, invasive salmonellosis, gonorrhea, it is used to treat bacterial infections.

**Cautions:** hypersensitivity reactions have been seen in patients on penicillin therapy (such as penicillin, amoxicillin, carbenicillin, dicloxacillin). If you know you are allergic to penicillin, tell your doctor or pharmacist about the allergy and what signs you had, like rash, itching, shortness of breath, wheezing, cough, swelling of face, tongue or throat, or any other signs.

**Contra-indications:** before using this medication, tell your doctor or pharmacist your medical history, especially of kidney disease, a certain type of viral infection (infectious mononucleosis). Ampicillin may cause live bacterial vaccines (such as typhoid vaccine) to not work as well. Do not have any immunizations/vaccinations while using this medication unless your doctor tells you to.

This medication is removed by the kidneys. Therefore, elderly people may be more sensitive to this drug or those who have a kidney condition.

Ampicillin passes into breast milk. Consult your doctor before breast-feeding.

**Side-effects:** erythematous rashes in glandular fever and chronic lymphatic leukaemia; reduce dose in renal impairment.

**Dose:** *by mouth:* 0.25-1g every 6 hours, at least 30 minutes before food. Urinary-tract infections, 500 mg every 9 hours; *by intramuscular injection or intravenous injection or infusion,* 500mg every 4-6 hours; higher doses in meningitis; CHILD – ½ adult dose.

None of the leaflet should be longer than half a page and teachers should bear in mind that they do not address doctors, but student in the first years of study. Each of these five leaflets is written on a different sheet of paper which is numbered from 1 to 5.

*The 1<sup>st</sup> Step* aims at developing reading skills by understanding a printed text. All the charts are presented to the students who are then asked to read them in silence. They are given a few minutes to do so. During this stage the students should first read the passages through, even

if they don't understand each word, the meaning of this activity being to give them a general idea about the medicines described in the leaflets.

*The 2<sup>nd</sup> Step* implies checking the understanding of a written text by translating the given material. During this stage the students read and translate in detail the medical leaflets, with the help of the teacher who can give information on the unknown words. The most common difficulty that the students may encounter during this stage is the pronunciation of some medical terms standing for chemical substances and in learning how to pronounce them they should be encouraged by the teacher to repeat them for several times.

*The 3<sup>rd</sup> Step* – After the activities of reading and understanding the texts, the class is divided in pairs. Depending on how many students you have in the class, there should be ten or fifteen pairs of students, each given one of the charts presented above, patient information leaflets for ampicillin, erythromycin, gentamicin, paracetamol and aspirin. Each pair of students is then given the same list of possible patients, a list that includes 10 different medical conditions, each case numbered by a letter, such as:

- a) A five-year-old girl with meningitis due to infection with pneumococcus. Her medical history shows that she is allergic to penicillin;
- b) A 58-year-old man with a history of chronic bronchitis now suffering from pneumonia. The infected organism is resistant to tetracycline;
- c) A 16-year-old girl with right leg amputation as a result of a road traffic accident;
- d) A 25-year-old woman with urinary tract infection in first stage of pregnancy. She complains of nausea and vomiting;
- e) A 5-year-old boy with fever after running during a sport game, drinking cold water afterwards, complaints of sore-throat;
- f) A 41-year-old woman suffering from acute sinusitis and septum deviation, accusing difficulty in breathing; etc,

there could be any number of medical conditions you would want to choose, they should not be exactly as many as the number of the charts you agreed to use and you can think about other cases in which the medicines described in the leaflets can be prescribed. It is up to you how many charts you decide to use or what diseases you want to bring into discussion, just keep in mind that you address students, not doctors and that your number of medical leaflets should be established by the size of the group you have in the class.

The next step, *Step 4* challenges students' ability to find connections and correlations between symptoms, diseases and treatment. They will be asked to use the prescribing information in the leaflets and find the medical condition that requires a specific treatment, in other words they need to match the numbers with the letters, for example number 4) (Paracetamol) with letter e).

During this stage the students have to prove that they have understood the information in the leaflets very well and that they can make use of the new knowledge by sustaining their choice and their point of view. During this stage the teacher asks questions addressing each pair of students, checking if they have chosen the right answer, if they can use the vocabulary properly. He also has to guide them towards the right answer in case they failed in finding it by challenging them, asking them more questions that would trigger closer attention to the details of this exercise, until the answer is clear and obvious.

At this point, the students should be confident in using the medical vocabulary contained in the medical texts of the leaflets and should be prepared to use it in a more realistic situation. This could be a visit to the Chemists' to buy some over-the-counter medication that one needs

for himself or for somebody else he tries to help or with prescription from the family doctor or a general practitioner in case antibiotics are needed.

*Step 4* implies developing communication skills through role-play activities. The students remain grouped in pairs as in the previous activities. The situation the students are asked to imagine is a dialogue between a patient / someone helping a patient and the pharmacist. The situation they have to create is one that they have encountered in real life when going to buy medication with or without prescription from the doctor.

Each pair of students is given one of the numbered leaflets about which they know a lot of details by now, including the medical conditions the active substance may be prescribed for.

The students are given 8 minutes to improvise the dialogue at the pharmacy. They are instructed to start by using greetings and common questions and answers. In doing so students who play the role of the patient/ patients friend or relative have to describe the medical condition of the patient, ask for details about the over-the-counter medication/ prescribed medication that they need, they have to begin by referring to the general condition of the patient, they need to mention the symptoms that the patient may experience, add details regarding the onset of the disease or speak about the moment that they realized something was going wrong because of some disturbing signs of being unwell. In their turn, those students who play the part of the pharmacist should ask questions about the debut of the medical symptoms, about the present health condition of the patient, they should offer information about the indication and use of the medicine they give, they should give instructions on how the pills should be taken. In case they are associated with other pills they should also recommend how they should be administered, if they have to be taken, after meals or with a glass of water, not to impair their effectiveness. They should also tell the patient how many times a day he needs to take his medicines. They should also be careful not to forget to mention the quantity of a dose (if they have to give a cough syrup or linctus for example), or to specify the dose for a child in case the medicine can be prescribed to an adult or a child as well. They should offer reassurance and confidence to the patient by being polite and helpful in their answers. While listening to the students' dialogues, the teacher should take notes on the students' answers, write down any grammatical mistakes they may make in their conversations. While doing that, the teacher should never interrupt the conversation, should wait for the students to finish their dialogue, and only then intervene with explanations and correction of grammar mistakes.

As I already mentioned, this part of the course involves pair-work and speaking or communication skills. During this stage the teacher has to follow the dialogue of each pair of students and point out the possible grammar mistakes, suggest more proper expressions if needed, help students be more fluent in English. The teacher should intervene only when the students have ended their discussion and not interrupt them while they carry on their lines, because that would only make them feel uncomfortable and it is likely that they feel embarrassed and unsure about what they need to say next. All the corrections and suggestions should therefore be given only when pairs have finished presenting their task. The teacher should also encourage his students to keep up the good work, pointing out what each pair has done in a very good and impressive manner and stress on the positive points of each presentation.

This is a sequence of activities that use patient information leaflets for different medicines prescribed for different medical conditions, they are the basic material for the class. The activities are centered on reading and speaking skills. They can be done during one course, meaning two hours and they can be followed by another course focused on grammar. The students' dialogues presented during these activities imply the knowledge of building up

questions which can be very difficult for non-native speakers. Doctor-patient dialogues are carried out by using Present Perfect Tense and Past Tense and students need to know when they have to switch from one tense to the other. Building up questions, Past Tense and Perfect Tense can be explained in another English course following the one suggested in these pages.

This is a type of practical activity that I have experienced with my group of students in Pharmacy and I can say that they have shown great motivation in carrying out the tasks they have been given, they showed great interest. They enjoyed every step of the activity, while they were very serious and focused on what they needed to prepare. The medical leaflets they were given, the explanations and exercises that they had to do made them more confident in carrying out dialogues that take place in everyday life, in pharmacies, between the two sides of the counter, the pharmacist and the patient.

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## ONLINE RESOURCES

<http://ro.search.yahoo.com/search?p=patient+information+leaflet>