



Field Project :Fall 2018/2019

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Under supervision of:

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Participated students:

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|--------------------------------|------------------------------|
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The Project

Assessment of Community Awareness of The Rational Use of Analgesics: A Questionnaire-Based Study

Project Summary

●Project Idea

Analgesics are drugs that relieve pain due to multiple causes. Analgesics are classified into two main groups; Narcotic analgesics and Non-narcotic analgesics. Narcotic analgesics (opioid) are the most powerful analgesics that can relieve any type of pain except itching. They act mainly at the level of the cortex and can produce addiction.

Non-narcotic analgesics are the non-steroidal anti-inflammatory drugs (NSAIDs). They are mild analgesics, effective in mild types of pain as headache, toothache ...etc. NSAIDs are also used to treat inflammation (except paracetamol) and to lower the elevated body temperature. They don't produce addiction but can cause bleeding tendency, hypertension , gastrointestinal and renal complications .

●Project Aim

This field-based project aimed to assess patient awareness about the hazards of irrational use of NSIADs and narcotic analgesics and to evaluate patient counseling provided by Alexandrian pharmacists.

It was also designed to address the following points concerning analgesic drugs:



- The incidence and trends of clinical use of different analgesics in the Egyptian drug market.
- Reported ADR based on patient' and pharmacist' questionnaires
- The project aimed also to cover the demographic data of the sample of patients participating in the questionnaire, social habits and medical history,
- In addition, the project aimed to make a survey for analgesic drugs present in the Egyptian retail pharmacies.

● **Project Phases**

***Work Design**

The study started by dividing 400 students into 4 groups (A, B, C, D) with a leader on top of each group . Each leader supervised 4 sub-leaders of subgroups e.g. (A1, A2, A3, A4).... The whole class divided into blocks; each block composed of 10 students. The block was the working group and all the blocks had the same tasks. Each block had a leader, who collected the data and facilitated the communication among the groups.

The study conducted on a sample of patients seeking NSAIDs or narcotic analgesics from retail pharmacies, and pharmacists who sold them either through a prescription or non-prescription. The student conducted a survey in the form of a questionnaires, each student has to ask 6 patients and 4 Pharmacists. Using a patient-designed questionnaire, the student evaluated the patient's awareness about the proper use of analgesics.

The *patient's questionnaire* included the following information:

- Demographic data of the patient including gender, age and educational level.
- The drug used; name, indication and frequency of use.
- Adverse effects reported by the patient (indirectly asked).
- The patient awareness of side effects of irrational use of analgesics and source of his knowledge

Using a pharmacist-designed questionnaire, student evaluated the contribution of the pharmacists in patient counseling, regarding analgesics products and their rational use.

The *pharmacist's questionnaire* included the following information:

- The Pharmacist experience and his district area
- The most common sold analgesics; name, prescribed or not and indication for use.
- Adverse effects mentioned by the pharmacist
- Does he inform the patients about these adverse effects or not?



Data were fed into a suitable computer program (Excel) tabulated , and subjected to statistical analysis using suitable statistical software programs.

***Results:**

Regarding patients, the survey showed that from 1800 patients, around 65% of patients using analgesics without prescription while 35% are using them as prescribed by physicians. In addition, the frequency of using analgesics was around 39% upon needed, 16% once daily, 15% once weekly and 10% once monthly. Moreover, the survey showed that 57% of patients don't know the adverse effects of analgesics while 43% know them and the source of their knowledge is mainly from the pharmacists (48%), followed by the physician (23%).

Concerning pharmacists (sample of 1200 pharmacists), the survey revealed that 73% of NSAIDs are sold without prescriptions (OTC) while 89% narcotic analgesics are sold as prescribed medications. Also, the survey showed that 49% of the pharmacists don't inform the patients about the possible NSAIDs side effects while 70% of them inform the patients about the possible Narcotic analgesics side effects.

***Conclusion:**

Based on the results of obtained data, students designed and distributed informative brochures among patients to raise the community awareness towards the proper use of analgesics and their possible side effects. In addition, they designed and distributed brochures for pharmacists to remind them by the hazards of irrational use of analgesics and the necessity to inform their patients about that.