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RESEARCH ARTICLE

PREVALENCE OF SELF-MEDICATION WITH ANALGESICS IN PHARMACY

Khadija LECHHEB[1], Meriem EL BAKI[2], Nadia BOUHLALA[1], Fadoua BERDI[1] and Yassir BOUSLIMAN[1,2]

1. Mohamed V Military Hospital, Rabat, Morocco.
2. Faculty Of Medicine And Pharmacy Of Rabat, Morocco.

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Abstract

Self-medication practices are widely practiced globally as a major form of pain management self-care. Our study was undertaken with the objective of evaluating the self-medication in pharmacy by analgesic medicine within the population of casablanca. . This study revealed that 68% of the investigated people requested analgesic in self-medication, without medical prescription .The predominant age range was 20-60, This study showed that 65% investigated people used mainly paracetamol, followed by buprofen with 11%, and then aspirin and tramadol. Pharmacist advice represents 1/3 of self-medication great source. Half of the population used analgesics frequently. The use of those drugs requires an adequate follow-up by the pharmacist. pharmacist to make sure that the analagesics are used properly.and minimized the occurrence of or potential for adverse effects.

Introduction:-

Self-medication is of great current interest in Morocco and it gains a lot of importance in the health care system. self-medication Medicinal products for self-medicationare those which do not require a medical prescription. The term "over the-counter " (OTC) medicines is widely used to describe this class of product.The most common types of OTC are the pain relievers

WHO may defineself-medication as the use of medicinal products by the consumer to treat self-recognized disorders or symptoms, or the intermittent or continued use of a medication prescribed by a physician for chronic or recurring diseases or symptoms.**[1]**

The drug safety issues related to the self-medication practices is an important matter which is involved to switch form a system with a very large drug intake after medical consultation or a reuse of treatment previously prescribe to a system where the patients use the drug on their own initiative and responsibility, when they consider such a use appropriate.

A significant number of studies reported the use of ineffective treatments, treatments for which there are a lack of safety data, or incorrect use of drugs.**[2]**

OTC analgesics are widely used, are frequently taken inappropriately and potentially dangerously, and users are generally unaware of the potential for adverse side effects. **[3]**

Corresponding Author:- Khadija LECHHEB
Address:- Mohamed V Military Hospital, Rabat, Morocco.

Our study was undertaken with the objective of evaluating the self-medication inpharmacy by analgesic medicine within the population of Casablanca.

Materials And Methods:-

This descriptive, cross-sectional, questionnaire-based study was carried out on patient searching for analgesics for their own use, with or without a prescriptionin a pharmacy which is located in a popular district in Casablanca during the time period of January 2021 to July 2021.

Only participants who filled the survey were included in the analysis. The total scores of patients were expressed as percentages

The survey had two sections in it, the section A containing sociodemographic data and the section B was mainly focusing on the common sources of self-medication, analgesic used for self-medication, frequency for using analgesics.The returned questionnaires were checked for completeness of data, and only completed questionnaires were analyzed.

Statistical analysis was performed using descriptive statistics, and $\chi 2$-test was used for testing group differences, with $p \leq 0.05$ set as the level of statistical significance. International Business Machines (IBM) SPSS (Statistical Package for the Social Science; IBM Corp, Armonk, NY) was used to perform all statistical calculations, version 21 for Microsoft Windows.

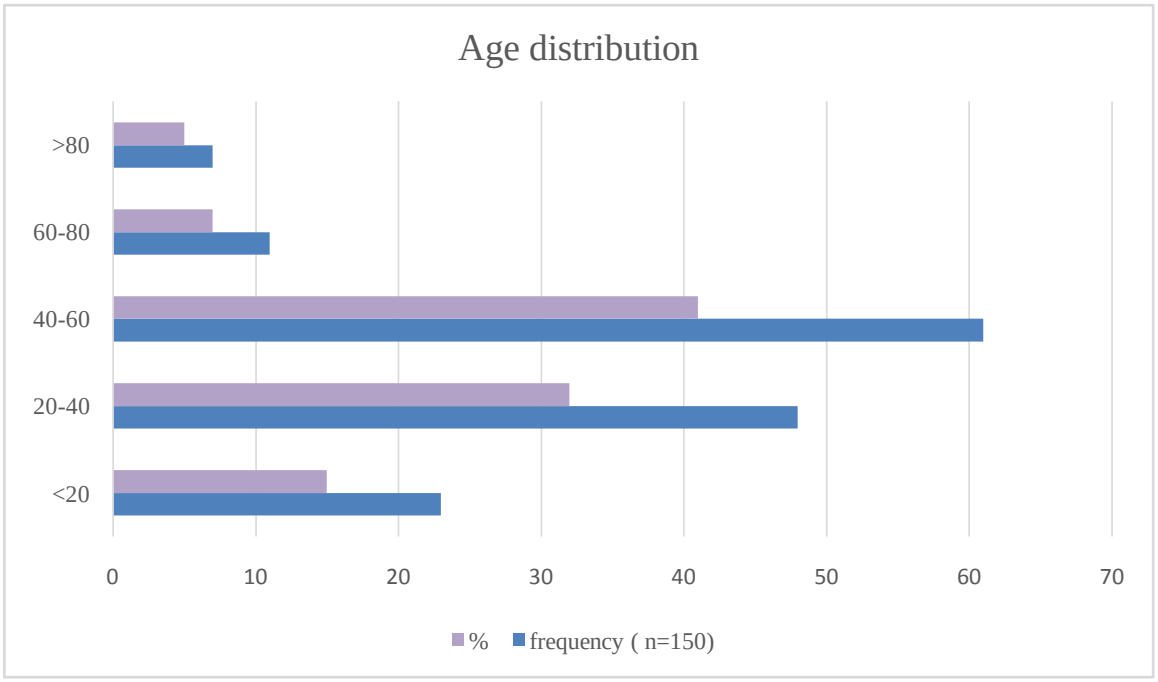
In the light of the ethical considerations, the questionnaire takes into the account the respect of the anonymity, confidentiality, the informed consent and the integrity of the patients. All participants are able to withdraw from, or leave, the study at any point without feeling an obligation to continue.

Results:-

Almost 170 responders participated in this questionnaire study. Only participants who completed all the questions in the survey were included.Sociodemographic of participants and analysis of the questionnaire are shown below (figure1,2) (table1)

The percentage of women is lower than that of men, with a difference of 10.6% in advantage of men. This study showed that the predominant age range was 20-60with a percentage higher than 70%, while each of the other age groups does not exceed a quarter of the population.

Figure 1:- Distribution of participants by sex.



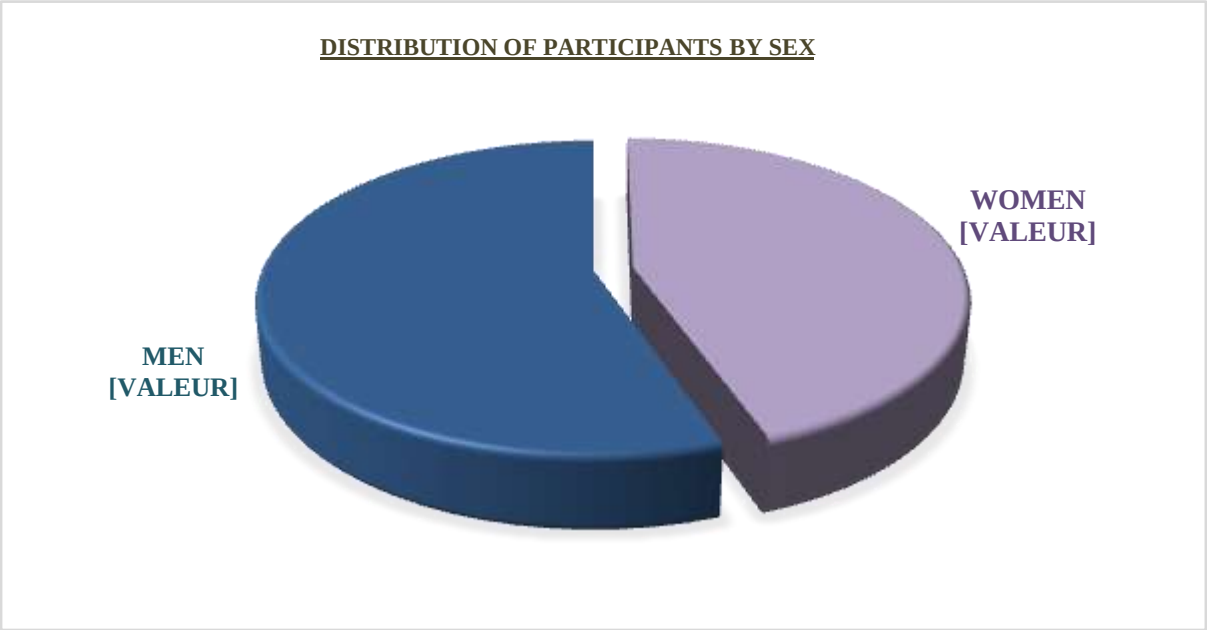


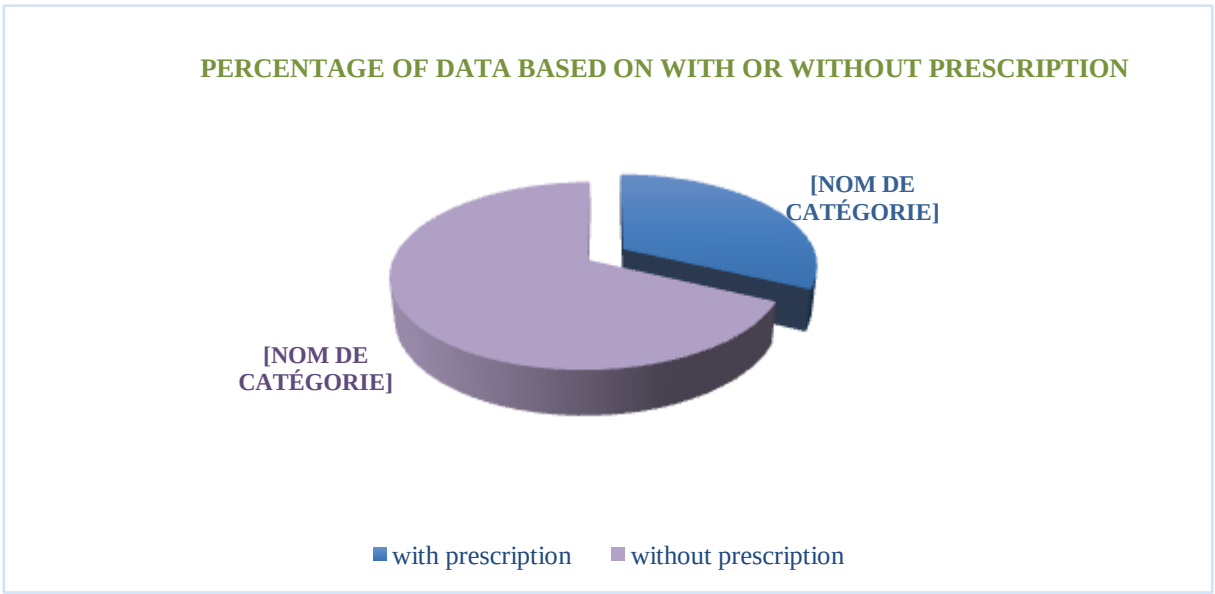
Figure 2:- Age distribution.

	<20	20-40	40-60	60-80	>80
Frequency (n=150)	23	48	61	11	7
%	15	32	41	7	5

Table 1:- Age distribution.

In the figure below (Figure3), participants who attended the pharmacy with a medical prescription did not exceed one-third of the population, while participants without a prescription exceeded 65%.

Figure 3:- Percentage of data based on with or without prescription.



The percentage of patients who were themselves the source of their self-medication, is almost equal to that of patients who sought advice from the pharmacist, with a difference of 4%. A quarter of self-medication was offered by a relative, while the media represented 13%. (Figure 4) (Table 2)

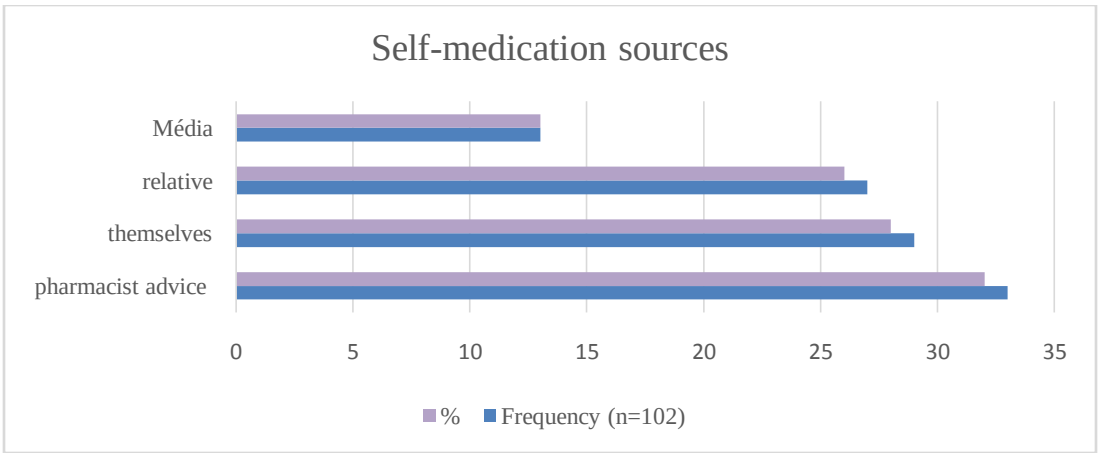


Figure 4:- Self-medication sources.

	Pharmacist advice	themselves	Relative	Média
Frequency (n=102)	33	29	27	13
%	32	28	26	13

Table 2:- Self-medication sources.

The prevalence of self-medication is high for the 20-40 and 40-60 age range, with almost equal percentages including the 3% difference in the advantage of the 40-60 age range. 29% is the total percentage of other age groups.(Figure 5) (Table 3)

Figure 5:- Self-medication sources.

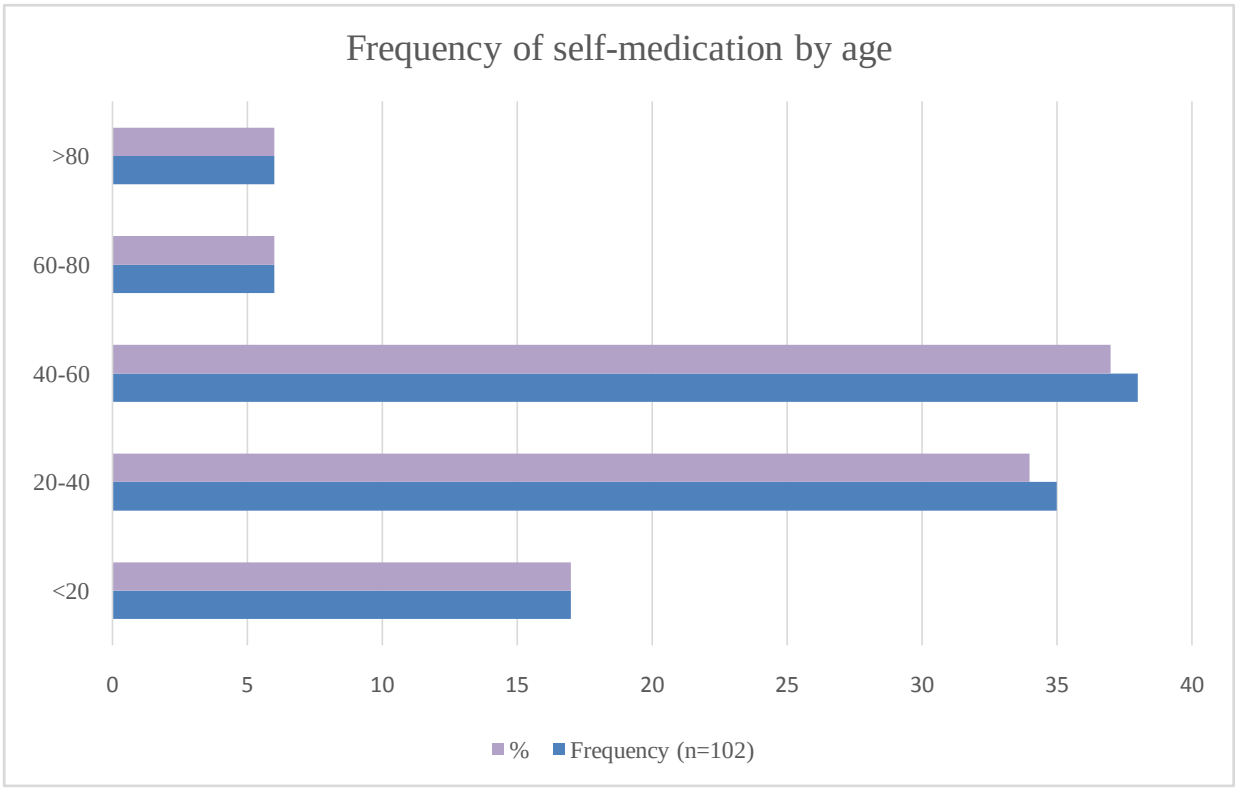
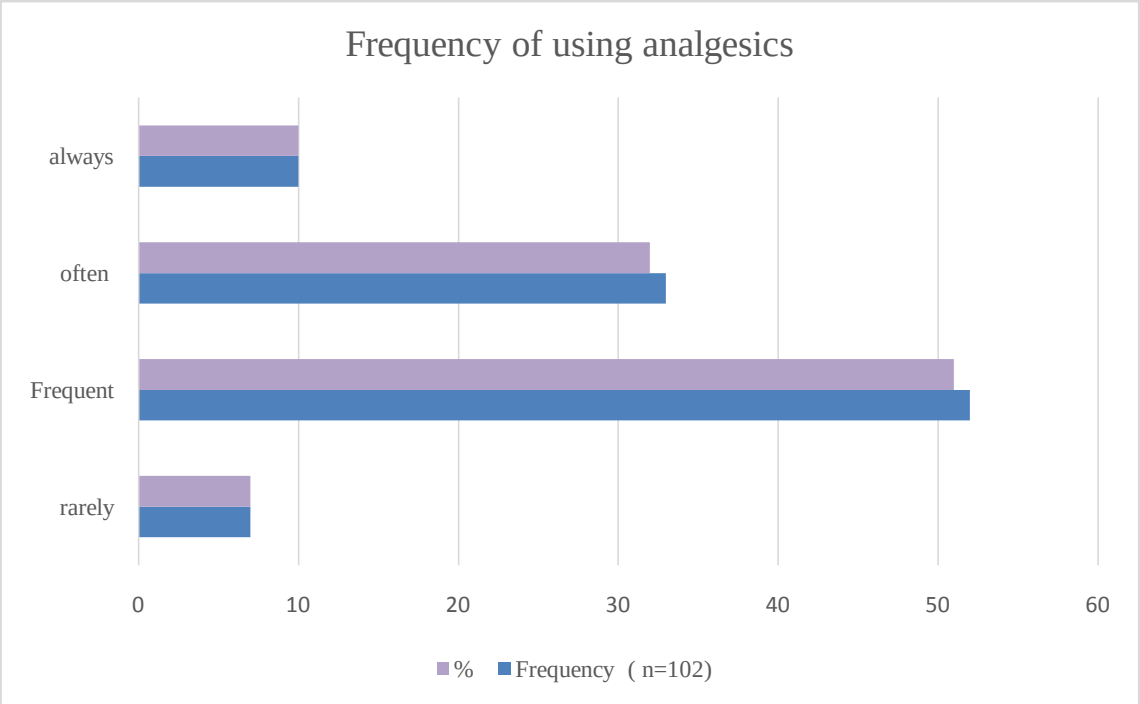


Table3:- Self-medication sources.

		<20	20-40	40-60	60-80	>80
Frequency (n=102)		17	35	38	6	6
%		17	34	37	6	6

This study showed that 65% investigatedpeople used mainly paracetamol, followed by Ibuprofen with 11%, and then aspirin andtramadol.(Figure 6) (Table 4)

Figure 6:- Frequency of using analgesics.



	Rarely	Frequent	Often	Always
Frequency (n=102)	**7**	**52**	**33**	**10**
%	**7**	**51**	**32**	**10**

Table4:- Frequency of using analgesics.

We notice that there is no significant difference between self-medication and age and the molecule used. (Table 5)

Variant (p adopted 0,05)	**P value**
Self -medication/ age	0.138
Self- medication/ analgesic	0,77

Table5:- The value of the P as a function of the variant.

Discussion:-

The number of questionnaires collected cannot conclude the findings reflecting the general population.

For this present investigation, the number of male participants was higher than the women. This can be explained by the fact that we received more male than female.

73% of our Patients had the age range of 20-60. This may be related to the fact that this is the category most present at the pharmacy, and had the intention to use the analgesic on their own initiative and responsibility. The population over 60 years old was 12%. This lower percentage can be explained by the fact that our patients in this age group rarely went to the pharmacy. Most of the time, one of their relativescan look for their treatment.

Worldwide, there has been an emerging patient demand for access to efficient drugs without consulting a doctor and obtaining a prescription.**[4]**Self-medication as a first aid is very common at the onset of the first signs and symptoms of the disease.In some cases, this practice is intended to relieve the patient in the pursuit of the safe care**.[5]**

The prevalence of self-medication is high all over the world with a rate of 68% in European countries**[6,7]**, this is comparable to the percentage observed in our study where more than two-thirds of patients come without a prescription, which can be explained by several factors, including:
-The most commonly used analgesics are OTC analgesic are most drugscommonly used for that reason the patient doesn't need a prescription to use them.
-Medical consultation was avoided because of lack of time or lack of money.
-Participants asked for painkillers they had already used, or suggested by relatives.
-In most cases, pharmacist advice was sufficient for the patient.

Studies conducted in Ghana by Adu **[8]** and in Senegal by Ndiaye et al. **[9]** have established that self-medication is justified by the "trivialization" of the offending diseases as well as by the claim of "possession of appropriate remedies"

The predominant age range was 20-60.An increasing tendency to self-medicate, particularly among the youth, has been observed in various studies **[6]**. the other age groups had a percentage not exceeding 17% each. There was no significant difference between age and self-medication (p=0.138). This is explained by the fact that a pharmacist's advice or a relative's advice was sufficient for most participants in the 20-60 age group, while patients over 60 years of age or even 80 years of age would prefer to see a doctor, The same is true for patients under the age of 20 who are often accompanied by their parents to the attending physician.

The pharmacist's advice represents one-third of the sources of self-medication, which is synonymous with patient confidence in their pharmacist. A relative or the patient himself comes in the second place as a source of self-medication, explained by the fact that the patient asked for the analgesic formerly used, or was guided by a relative who had lived the same experience.

This study showed that 65% investigatedpeople used mainly paracetamol, followed by Ibuprofen with 11%, and then aspirin andtramadol.It should be noted that there is no significant difference between the molecules used and self-medication (p=0.77). This is due to the fact that the level 1 analgesics are most used with or without medical prescription, and that paracetamol is always the reference analgesic even in self-medication.

The half of the population used analgesicsfrequently, while a 1/3 of this population usedthemoften. 7% of participants who rarely take this therapeutic class. This may mean that in our study population, pain is considered asa disease and not as a symptom, patients always seek to relieve it with analgesic.

Conclusion:-

Self-medication is widely practiced worldwide as a major form of self-care in pain management.

Pain can reduce the productivity of the individual **[11]** its management objective is to reduce itintensity and avoid itchronicity, thus improving the quality of life, the choice of treatment is then according to the degree of pain, its location, its mechanism as well as the patient's terrain

This study aimed to evaluate the self-medication by analgesic in pharmacy thus approaching population behaviors towards these drugs.

Frequent use of analgesics can lead to an increased incidence of adverse reactions that can be severe in some cases. **[12]** It is therefore necessary for the pharmacist, the first health stakeholder in contact with the population, to educate patients for safe self-medication.

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