

USE OF MEDICATIONS AND ITS RELATIONSHIP WITH THE FIRST KIT: CASE OF PARENTS FROM AN EDUCATIONAL INSTITUTION IN ICA, PERU

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Abstract: The use of medications without adequate control threatens the health and quality of life of the population; Also, it is necessary to have a safe place to store medications and properly dispose of any remaining medications. The objective of the research work was to determine the relationship between the use of medications and the family medicine cabinet and to compare the correlation between the use of the medication according to the dimensions: administration of the medication, therapeutic objective of the medication, safety of the medication and conservation of the medication with the management of the family medicine cabinet. The sample is made up of 291 parents from an Educational Institution in the province of Ica in the year 2023. The level of research is descriptive-correlational, the design is non-experimental, cross-sectional and to carry out this study, the survey technique, likewise the questionnaire instrument was used. The questionnaire applied to parents consists of 20 items that were administered to them at a single time. It has been shown that the correlation coefficient between the variables use of medications and the family medicine cabinet is $r_{\text{Pearson}}=0.602$ at a significance level of 0.05; and that there is a significant relationship regarding the study variables. This highlights the need to promote health education and acquisition of knowledge about the use of medications and conservation of the family medicine cabinet and periodic reviews of these to reduce the possible adverse effects of medications.

Keywords: medicine, first aid kit, parents.

INTRODUCTION

The use of medications without adequate control threatens the health and quality of life of the population, which entails the preparation of a family medicine cabinet, a safe place to store medications at home. The

medicine cabinet can increase in volume by storing medications that the patient does not require, which creates a danger by becoming a storehouse of medications from previous prescriptions and can lead to taking the wrong medications and cause various symptoms that can lead to much more serious conditions. by generating adverse reactions or masking the underlying disease, harming the patient's health. Half of patients do not take prescription or over-the-counter medications correctly (Cueva, et al., 2019)

In homes, prevention measures must be taken into account in the face of the danger of the use and adequate consumption of medications in different health situations. One of the activities of the Pharmaceutical Chemist is to provide health education to people in aspects related to the medication (Solà, et al., 2016).

A home medicine cabinet contains items needed to treat minor ailments and possibly over-the-counter medications while waiting for medical attention, however, it often contains leftover medications from previous treatments or simply other purchased medications; This problem becomes more pronounced when family members are chronically ill and elderly, so chronic changes in treatment can lead to an overfilled home medicine cabinet; The home medicine cabinet in this state can become a danger to the health of patients (Calderón & Tarapués, 2021).

One of the causes of health problems caused by medications is not the risk of their use, but the way in which they are prescribed and used; But the most worrying thing is the people who consume these medications without a medical prescription and without medical control, which is a problem that is observed every day (Matias Timana, 2021). An excess of previously prescribed medications, the overprescribing of certain treatments, and the idea that some people will use additional

medications in the future (Sattar J., Waleed K., & Mohanad Y. A, 2021).

The World Health Organization (WHO) warns that half of patients do not take medications correctly, which could generate harmful effects on their health with the waste of resources (Fernández-Argüelles, et al., 2020).

The use of medications in homes gives rise to having a family or home medicine cabinet for first aid cases, but when you begin to store medications that do not consume the medicine cabinet, the storage process begins. It can cause misuse of the medication, causing negative effects on the restoration of health in the patient (Arias, Ruiz, & Gallardo, 2009).

Under the concept of health, it is important to know the management and consumption of medications that users carry out in different health situations. The objective of this work was to determine the relationship between the use of medication and the family first aid kit in parents in an Educational Institution in Ica/ Peru.

A home medicine cabinet is a device that contains essential first aid items such as alcohol, hydrogen peroxide, bandages needed to treat minor ailments; Which must be located in a space in the home (Reyes Diaz, et al., 2023).

Patient understanding of medications is essential for disease management and healthcare. According to the World Health Organization, more than 50% of medicines are prescribed or dispensed incorrectly and half of patients use them incorrectly. Non-compliance and medication errors may be related to a poor understanding of health information, so the appropriate use of the medication is necessary to relieve or cure the symptoms from which one is suffering (Roca Liñan & Inca Ramos, 2019).

The pharmacist has the responsibility of carrying out continuous pharmaceutical

monitoring and guiding the patient to avoid inappropriate use of the medication that gives rise to its low effectiveness in the patient or may give rise to the appearance of other health problems. health, the prevalence of these negative outcomes can be considered a public health problem (Salmerón Rubio, García-Delgado, Iglésias-Ferreira, Mateus-Santos, & Martínez-Martínez, 2015).

According to the WHO, it maintains that “no matter how effective and safe a product is intrinsically, it can only fulfill its function if it is used correctly,” hence the need to have timely information about the medication(s) to achieve rational use of the product. medication, which allows achieving better results related to medication (García Delgado, Gastelurrutia Garralda, Baena Parejo, Fisac Lozano, & Martinez Martinez, 2009).

Jiménez-Martínez C, Liens-Valdés L, Almaguer-Laguna Y (2019) mentions that of 72 pharmaceutical services technician students, 39% keep medications in a drawer, 21% in a box. There is a large percentage that are stored in inappropriate places. being the group of analgesics and anti-allergy those that are stored. They dispose of these products in garbage deposits. They review them over a period of one month. There is little knowledge in managing the family medicine cabinet (Jimenez Martinez, Liens Valdés, & Almaguer Laguna, 2019).

According to Navarro I, Sáez-Torres B (2018) collected information from the first aid kits of 108 students at home. Most of them know the location of the medicine cabinet, have access to the medicine cabinet, and store medications inappropriately. 20.36% check the first aid kit three or more times a year (Navarro de la Fuente & Sáez-Torres de Vicente, 2018).

On the other hand, Alegría Aldana reports that the majority of participants have knowledge about the proper storage

of medications, but they do not put it into practice, as they are stored in the dining room and kitchen and are affected by changes in temperature. The medications stored in homes are pain relievers, NSAIDs, antihistamines, among others (Alegria Aldana, 2021).

Chuchón (2021) determined that the level of knowledge about self-medication with antibiotics was significantly associated with the factors of age, sex, educational level, and occupation (Chuchon Miranda & Suga Chang, 2021).

Losada J, Jaramillo M, Perea N (2021) determined that the level of knowledge about their medications is 69.23%, 46.15% report having optimal knowledge and 23.08% have sufficient knowledge. Of the 30.77% who do not know about the use of the medication, 19.23% indicate insufficient knowledge, 11.54% do not know about the medication. Coming to determine that they do not know about their medication (Losada Ramirez, Jaramillo, & Perea, 2021).

METHODOLOGY

The study is basic, descriptive, correlational, cross-sectional, with a non-experimental design. The population was made up of 2965 parents, the sampling was intentional non-probabilistic, the sample was made up of 291 parents who signed the consent to provide information.

The technique was the survey that allowed the collection of data through the questionnaire structured and designed for the Independent Variable: Family medicine cabinet that consists of two dimensions: location of the medication and periodicity of the review of the family medicine cabinet and, for the Dependent Variable: Use of medicines, which consists of four dimensions: Self-medication, therapeutic objective, safety of the medicine and conservation of the medicine: which allowed the collection of information to

analyze the results and interpret the behavior of the variables using the Minitab 19 software, for the contracting of hypotheses. Pearson's r correlation was used.

RESULTS

In this study, 291 parents were analyzed, of which 235 were female (80.76%); 51.55% (150) of the subjects are within the range of 30 – 40 years. Regarding the level of secondary education, 43.30% (126) have completed their non-university higher education; 59.45% have an independent job; 38.83% (113) are married; 44.67% (130) of households have 5 members in their home. 59.11% (172) of households live with people who suffer from chronic diseases.

Table 1 presents the use of medications in its two dimensions: Administration of the medication 62.20% (181), Therapeutic objective 70.45% (205), safety of the medication 62.20% (181) and conservation of the medication 70.45 % (205).

Table 2 shows the use of the family medicine cabinet and its two dimensions: Location of the medicine 59.11% (172), and Frequency of the medicine cabinet review 54.64% (159).

The descriptive analysis of the study variables is presented in Table 3, finding a high level of use of the medication 73.54% (214) and a high level of use of the family medicine cabinet 52.92% (154).

The information provided on the correlation analysis between the use of medications and its relationship with the family medicine cabinet, a value of the Pearson correlation coefficient ($r=.383$) was found that indicates the existence of a low direct, statistically significant relationship between the medication administration and use of the family medicine cabinet. The value of the Pearson correlation coefficient ($r=.450$) was found, which indicates the existence of a moderate direct, statistically significant relationship between the therapeutic objective

	Medicine administration	Therapeutic goal	Medicine safety	Medicine conservation
	Counting	Percentage	Counting	Percentage
High	181	62.20%	205	70.45%
Regular	89	30.58%	42	14.43%
Low	21	7.22%	44	15.12%

Table 1: Use of medications in their dimensions: administration of the medication, therapeutic objective, safety and conservation of the medication.

	Location of medicine		Periodicity of the first aid kit review	
	Counting	Percentage	Counting	Percentage
High	172	59.11%	159	54.64%
Regular	22	7.56%	65	22.34%
Low	97	33.33%	67	23.02%

Table 2: Use of the family medicine cabinet

Variables of study	Use of medicine		Use of the family medicine cabinet	
	f	%	f	%
High	214	73.54%	154	52.92%
Regular	67	23.02%	83	28.52%
Low	10	3.44%	54	18.56%

Table 3: Descriptive analysis of the study variables

of the medication and the use of the family medicine cabinet. The value of the Pearson correlation coefficient ($r=.516$) was found, which indicates the existence of a moderate direct, statistically significant relationship between the safety of the medication and the use of the family medicine cabinet. In relation to the conservation of the medication and the use of the family medicine cabinet, the value of the Pearson correlation coefficient ($r=.539$) indicates the existence of a moderate direct, statistically significant relationship between conservation of the medication and the use of the family medicine cabinet. (Table 4).

The level of correlation between the use of medications and the family medicine cabinet was determined using Pearson's r , the result of which was ($r=.602$), which indicates the existence of an acceptable, statistically significant direct relationship between the use of medications and their relationship. with the family medicine cabinet. (Table 5).

DISCUSSION

The results differ from those obtained by Losada, J. Jaramillo, M. & Perea N. (2021), which indicates that chronic patients treated at the Hospital Universidad del Norte do not know about the medication. According to Navarro, I. & Saez, B. (2018), they point out that the majority of fifth-year pharmacy students at the Complutense University of Madrid did not know the rules dictated by health organizations on the storage and composition of first aid kits. Also, it differs from the results obtained by Jiménez, C. Liens L & Almaguer, Y. (2019) who establish that students of the technical career in pharmaceutical services at the University of Medical Sciences have little knowledge in managing the family medicine cabinet.

CONCLUSIONS

A high percentage of student households in an Educational Institution in Ica/Peru have a high level of medication use in its four dimensions Medication administration; Therapeutic objective; Safety of the medicine and Conservation of the medicine. Likewise, there is a high level of use of the family medicine cabinet in its two dimensions: Location of the medication and Frequency of the medicine cabinet review. When performing a descriptive analysis of the variables, a high level of medication use and a high level of use of the family medicine cabinet were found. The result of the analysis of the variables use of medications and the family medicine cabinet is ($r=.602$), which indicates a direct positive relationship.

Type of co-relation		Pearson			
Rows used (291)	Rows used (291)	Rows used (291)	Rows used (291)	Rows used (291)	Rows used (291)
Medicine administration	Therapeutic objective of the medication	Medicine safety	Medicine conservation		
Use of the family medicine cabinet	0.383	Use of the family medicine cabinet	0.450	Use of the family medicine cabinet	0.516
				Use of the family medicine cabinet	0.539

Table 4: Correlation analysis between the use of medications and its relationship with the family medicine cabinet

Type of co-relation	Pearson
Rows used	291
Use of medicine	
Family medicine cabinet	0.602

Table 5: Level of correlation between the use of medications with the family medicine cabinet

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