

PRACTICE OF FORMAL CAREGIVERS IN MEDICATION MANAGEMENT OF ELDERLY PEOPLE, IN A HOME CONTEXT

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Abstract: Objective: To characterize knowledge and practices of formal caregivers regarding the medication regimen of elderly people, in a home context. **Method:** Exploratory, descriptive study with a quantitative approach. The target population consisted of formal caregivers from institutions providing Home Support Services in a municipality in the southern region of Portugal. The data collection instrument is a self-designed questionnaire to characterize caregivers and their perception of training and practices, in a work context, regarding medication management. To process the data, Microsoft® software, Excel®, was used. All ethical procedures were complied with in accordance with the Declaration of Helsinki on Ethics in Research Involving Human Beings. **Results:** It was found that there were some gaps in the knowledge and practices carried out by formal caregivers regarding the medication management of elderly people. There was a need for in-service training on the topic of medication management. **Conclusions:** The lack of training in the area of medication management for elderly people may eventually compromise their safety, due to bad practices and/or lack of knowledge. **Keywords:** Formal Caregiver, Elderly Person, Medication Management, Professional Training, Community Health Nursing.

INTRODUCTION

The world population has been aging for several decades. Currently, most people expect to live 60 or more years. According to projections made in 2019 by the United Nations, the population aged 65 or over will reach two billion in 2070 (UN, 2029, p.17).

With regard to Portugal, according to the latest projections made by the National Statistics Institute, between 2018 and 2080, the population will increase from the current 10.3 to 8.2 million people. However, the number of

people aged 65 and over will increase from 2.2 to 3.0 million. This way, the Aging Index in the national territory will almost double, going from 159 to 300 elderly people for every 100 young people, in 2080 (National Institute of Statistics, 2020, p.1). In relation to the average of OECD countries, Portugal has a higher average life expectancy at birth, however, it is one of the countries with the lowest number of years of healthy life lived after the age of 65. Lifestyles and health behaviors continue to be the main risk factors for the loss of years of healthy life (Ministério da Saúde, 2028, p.5).

The biology of aging translates into the accumulation of multiple molecular and cellular damages that occur over time and which lead to a gradual decrease in physical and mental capabilities, as well as an increasing risk of diseases. These changes are neither linear nor consistent and are only slightly associated with age, as while some 60-year-old people enjoy excellent health, others of the same age are already frail and need help (Martineau, 2028, p.67).

There will inevitably be, as we continue to exceed the limits of average life expectancy, an increase in difficulties for elderly people. The probability of people experiencing some adversity increases proportionally with advancing age. Chronic degenerative diseases are an example of this. Chronic non-communicable diseases are responsible for 88% of years of life lived with disabilities (YLD – Years Lived with Disability) in Portugal (Varela et al, 2016, p.12). Thus, responsible for the increase in medication consumption by the elderly population, chronic diseases represent a challenge for professionals, a challenge that, due to its complexity, requires transversal strategies across society.

Around 60% to 90% of elderly people are drug users, of which a third use five or more medications simultaneously. Sometimes, the complexity of therapeutic plans, visual deficit,

hypoaacusis and cognitive degradation make the appropriate use of medications in this population even more intricate (Barbosa, 2009, p.364) It is, therefore, crucial to rationalize expenses and promote gains in health, making appropriate use of medicines. It can be read in Order No. 12427/2016 that projects the National Strategy for Active and Healthy Aging 2017-2025 that:

“... the prevention of adverse events, the rational use of medication, the promotion of adherence and support for medication management, based on each individual case, may represent an imperative for future interventions in this component of elderly people’s health.” (Ministry of Health, 2015)

Therefore, it is crucial to find solutions within society that can respond to the needs and promote the well-being of elderly people. Therefore, institutions must focus on the quality of the services provided, promoting a permanent bond between providers and users, based on rights and values, on methodologies based on security, transparency and cooperation between professionals, as well as the dissemination of knowledge.

Medicine is a priority area of Health Literacy intervention and is one of the general objectives regarding the adoption of healthy lifestyles. In this context, Health Literacy will always be an aspect that will seek to create a significant impact on cognitive, social skills and motivation, uniting them with the aim of generating behavioral changes in citizens (Sørensen et al, 2012, p.3). Health Literacy is, nowadays, a public health priority and at the same time a challenge for society in terms of disseminating knowledge and using it, allowing better health choices in everyday life (Almeida et al, 2019, p.5).

In Portugal, studies revealed that there is a high number of people with low levels of literacy, particularly elderly people, with chronic illnesses, with low levels of education and low income (Telo-de-Arriaga, et al, 2019,

p.6). There is strong evidence that Health Literacy contributes not only to health promotion and disease prevention, but also to the effectiveness and efficiency of health services. Low levels of Health Literacy are related to a greater number of hospitalizations and more frequent use of emergency services, as well as a lower prevalence of preventive attitudes in the field of health, leading to a decrease in quality of life. This way, it is necessary for health professionals, as determining agents in the promotion of Health Literacy, to develop initiatives that promote the *empowerment* of citizens, groups and communities, since user empowerment is defended as a way of improving health outcomes. health outcomes (Schulz, 2013).

The concept of *empowerment*, which emerged in 1995, was applied for the first time in the health field to describe the interaction between health professionals and users so that they gain control over the problems that most concern them (Anderson, 1991, p.584). However, this concept has been extended to the group of formal caregivers in recent years, as this group goes much further than providing care. Formal caregiver is understood as someone who provides care to the person, performing their role on a paid basis. Its functions are linked to the care provided, either by the user’s family or by health professionals. They are qualified to provide care and have a privileged position in contact with users, allowing the identification of problems, including assistance in medication management processes for elderly people, optimizing health gains. The empowerment of this group of caregivers allows, through proximity to the user, better management of the risks associated with the medication regimen, resulting in greater safety for elderly people, prevention of incidents, which are mostly avoidable (Ministry of Health, 2015, p.3882-2). Therefore, governed by the principle

of identification, evaluation and prioritization of the care needs to be provided, we seek to develop actions to improve the quality of care applied to the safety of users (Ministério da Saúde, 2015, p.3882-5). Therefore, our objective was to characterize the knowledge and practices of formal caregivers, from the Home Support Service [SAD] of a municipality in the south of Portugal, regarding the medication management of elderly people.

METHODOLOGY

To achieve the objective, an exploratory, descriptive study was carried out, with a quantitative approach, in order to collect data that allow characterizing the knowledge and practices of formal caregivers, regarding the medication regime of elderly people.

The target population was made up of formal caregivers who are part of SAD teams in a municipality in the south of Portugal, a total of 18 elements, providing care for 52 users.

A self-designed questionnaire, consisting of 21 questions, was used as a data collection instrument. The questionnaire consists of closed questions, with a Likert-type scale being applied to the last five, ranging from “never” (1) to “always” (4).

The first four questions correspond to the sociodemographic dimension where we seek to characterize formal caregivers. From question five to question ten, the aim is to understand each individual’s perception of training in the workplace. The last eleven questions refer to each participant’s knowledge and practices regarding medication management for elderly people.

The application of the questionnaire was preceded by a pre-test, which aimed to assess clarity and suitability for previously determined objectives. The results and conclusions of the study cannot be extrapolated to other contexts.

The statistical treatment of the data was processed using the Microsoft® Excel® program, carrying out descriptive analysis, in order to characterize the elements that participated in the study. Thus, a variable is a set of data for each element. Examples of this are age, socioeconomic class and gender, among others. Therefore, first of all, the variables involved in the study must be decided, as they will be fundamental to present the sample (Ulbricht, 2016).

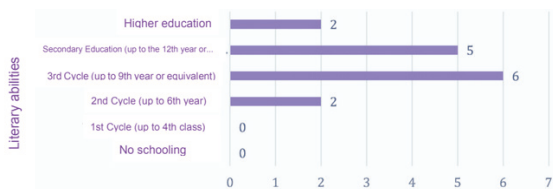
All ethical procedures (informed consent, confidentiality and anonymity) were complied with, in accordance with the Helsinki Declaration of Ethics in Research Involving Human Beings. To apply the questionnaires, authorization was obtained from the Management of the Institutions involved and a Favorable Opinion from an Ethics Committee.

Formal caregivers who were currently part of the home support service teams in the municipality under study were considered eligible for the study, and who agreed to participate in a free and informed manner, regardless of their employment relationship or length of time working.

RESULTS

After analyzing the data collected, we can conclude that the target population is entirely made up of women (18), with a third aged between 51 and 60 years old. The majority (11) have been caregivers for more than 5 years and 5 have performed these roles for less than 1 year.

With regard to educational qualifications, and although most caregivers have a 3rd cycle (up to 9th grade or equivalent), qualifications vary between 1st cycle (up to 4th grade) and Higher Education. None of the respondents presented themselves as not knowing how to read or write (Graph 1).

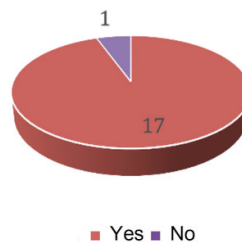


Graph 1 - Literary Qualifications

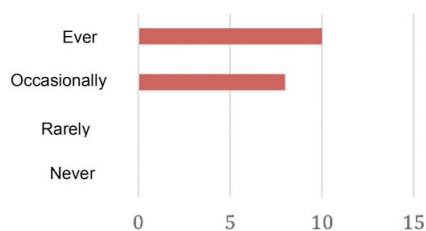
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With regard to individual perceptions about the importance of training in a work context, as well as the practices carried out by formal SAD caregivers (Table II), it is worth highlighting the fact that all respondents (18) consider training in a work context to be important. work, although 3 did not receive initial training in the area of care provision. Continuing training is attended by the majority of care providers (14), but 6 did so less than 6 months ago and 8 1 year or more ago. Of the 15 formal caregivers who received training (initial or ongoing), 7 responded that the topic of medication management was covered in the training. Only 8 of all the caregivers surveyed prepare medication for the users they care for and, when they do, 2 prepare them at the SAD facilities and 6 at the users' homes. When asked whether they knew the information contained in the therapy record sheet, the majority identified that it included the commercial name of the medicine (12), the name of the active ingredient (10), the dosage (13), the time/frequency of take (12) and the method of administration (13). Regarding the duration of treatment, opinions were divided, with 9 knowing and 9 not knowing.

In graphs 2 and 3 it can be seen that practically all respondents (17) report that they comply with the instructions contained in medical prescriptions. However, 8 of the caregivers only occasionally manage to relate the medicine they prepare with the pathology for which it is intended.

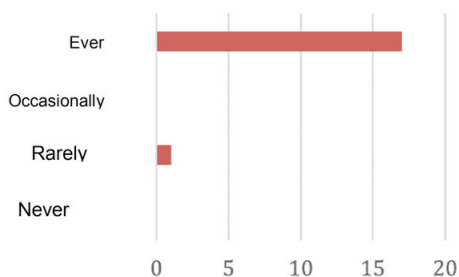


Graph 2 - When preparing medications, always follow the medical prescription instructions (treatment guide) "to the letter" Own elaboration



Graph 3 - Can you list each medication and the effect for which it is intended? Own elaboration

Graphs 4 and 5, which relate to checking the validity and dosage of medications respectively, show that the validity is always checked by 17 caregivers and only 1 report doing so rarely. Also, 11 of the respondents always check whether the dosage on the packaging corresponds to the dosage that the user has to take, with 4 doing so occasionally, 1 rarely and 2 never making this confirmation.

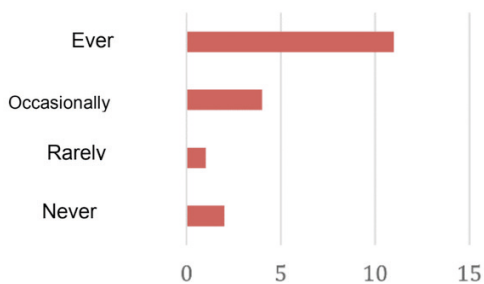


Graph 4 - When preparing medication, do you usually check the expiration date of the medication? Self elaboration

	n
Do you consider on-the-job training important?	
Yes	18
No	0
Did you receive initial formal training in the context of work in the area of care provision?	
Yes	15
No	3
Do you attend ongoing on-the-job training in the area of care provision?	
Yes	14
No	4
How long ago did you last undergo ongoing training in the area of care provision?	
Less than 6 months	6
1 year	4
More than 1 year	4
Was the topic of medication management covered in any of the training (initial or ongoing)?	
Yes	7
No	8
Do you usually prepare medication for users?	
Yes	8
No	10
Where does you prepare users' medication?	
Institution (SAD installations)	2
Users' home	6
Do you know the information contained in the registration sheet?	
Trade name of the medicine	
Yes	12
No	6
Name of the active ingredient	
Yes	10
No	8
Dosage	
Yes	13
No	5
Taking time/frequency	
Yes	12
No	6
Duration of treatment	
Yes	9
No	9
Form of administration	
Yes	13
No	5

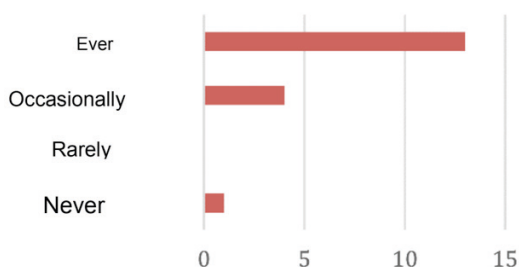
Table II – Perception regarding training and practices in a work context.

Self elaboration

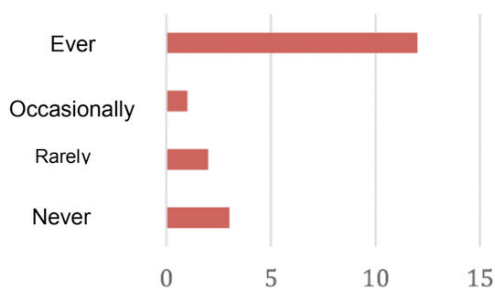


Graph 5 - When preparing medication, do you usually check whether the dosage written on the packaging corresponds to the dose of medication that the user has to take? Self elaboration

The side effects of medications are always read by the majority (13) of respondents, 4 do so occasionally and 1 never reads the side effects of the medication they prepare (Graph 6). The contents of the package are always confirmed with the respective packaging by 12 respondents, 1 confirms only occasionally, 2 rarely do so and 3 never confirm (Graph 7).



Graph 6 - Do you usually read the side effects of the medication you prepare? Own elaboration



Graph 7 - When preparing medication, do you usually check whether the contents inside the package correspond to the name on the package? Own elaboration

DISCUSSION

The formal caregiver teams at the institutions under study are entirely made up of female members. Over the years, the vast majority have been women who have performed roles in institutions designed to care for the elderly population. With regard to education, Stone (2004) mentions that, although there has been an evolution in recent years with an increase in the number of caregivers with higher education levels, there is still a low percentage of those who have higher levels of education, which could be verified in these groups under study. The data collected shows that, although caregivers recognize the importance of training in the workplace, the vast majority have deficits in both knowledge and good practices related to medication management for elderly people. The same is corroborated in the study carried out by Bjoerg O Simonsen (2011) in which it is demonstrated that there is insufficient knowledge about medication on the part of caregivers, representing an increased risk for the safety of users. In another study, carried out by Kavanagh (2017), where the factors that contribute to medication errors are analyzed, it is precisely the lack of knowledge about medication that is one of the main.

However, training is seen by SAD caregivers as being important and necessary for providing care to elderly people, showing openness and interest in attending training activities within the scope of medication management. They recognize that the acquisition of skills and the sharing of knowledge is fundamental to their performance and the quality of care provided to elderly people. In this study, it appears that the vast majority of caregivers received training in a work context, although the topic of medication was practically not addressed in any of them. We can question whether the lack of knowledge on the subject and the less correct practices in the process of medication

management for elderly people may somehow have to do with the lack of training. This fact is mentioned by Batista (2012), who states that the level of efficiency of the professional caregiver is related to the type of training he or she received.

In a study carried out by Aronson (2009), about medication errors, the author mentions how the error happens and how it can be avoided, with the lack of knowledge about medication being one of the main factors that contribute to the error. This study points precisely to the lack of knowledge and less appropriate practices of these caregivers, thus compromising the safety of elderly people.

The results of this study indicate that it would be pertinent to re-apply the instrument after a training cycle, in a work context, that addressed, among others, the topic of medication management.

CONCLUSION

The aim of this study is to diagnose the situation, in order to select the strategies that best suit the reality, with the aim of identifying who prepares and how medication is prepared for users of Home Support Services, in order to increase the knowledge/skills about medical prescriptions and medications, preventing errors in preparing medication and training formal caregivers so that they can help these users with medication management.

In the training of groups or communities, another strategy is the use of Training and Education for Health. The World Health Organization defines it as an action carried out on people, with the aim of modifying behaviors, in order to acquire and maintain health habits. healthy health, learn to use available health services and be able to make, individually or collectively, decisions that result in improved health status (WHO, 2015).

In this context, and according to McCarthy (2016), it is necessary to involve different

professionals in order to reduce discrepancies and errors that may occur throughout the medication management process. This way, cooperation between interprofessional groups is imperative, constituting an added value in the exchange of knowledge and exchange of experiences.

The focus will always be on quality professional performance, thus ensuring the quality of care and safety of users. At this point, institutions and their professionals play a fundamental role in this process (Machen, 2019, p.155).

The data analyzed in this study points to the potential positive impact of training groups of formal caregivers in the medication management of SAD users, representing great potential in health gains for elderly people who benefit from this service.

It is important to highlight that the limitation of this study is the very small sample. It is therefore understood that the data obtained cannot be generalized to other realities. Another fact worth mentioning is the scarcity of literature that focuses on formal caregivers with regard to medication management, with knowledge of other realities still limited. However, it serves to pave the way for other more comprehensive work, promoting the involvement, training and recognition of formal caregivers.

On the other hand, the bases have been created for the implementation of a community intervention project for this population, based on the diagnosis of the situation, and which, going through the remaining phases of health planning, supported by strategies, namely, partnerships in the community, work in a team and involving the management bodies and technical directors of the institutions in question, can respond to the problems identified.

In conclusion, projects of this nature will certainly contribute to promoting the health

literacy of formal caregivers and technical teams of Home Support Services, as well as improving the care provided to users and consequently their health status, using resources in a more efficient way. effective, rational and efficient.

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