

# Analysis of knowledge, attitudes, and practices of physicians and nurses regarding the experiences of family caregivers of older adults with dementia: a KAP study

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### **Abstract**

Objective: To analyze the Knowledge, Attitudes, and Practices (KAP) of healthcare professionals during the care of older individuals living with dementia, concerning the caregiving situations experienced by informal caregivers, and its association with sociodemographic and professional factors. Method: A cross-sectional analytical KAP study was conducted in the municipality of Tangará da Serra, Mato Grosso, with 20 nurses and 20 physicians from Family Health Units. Data were collected through interviews using an instrument developed based on the available literature on KAP studies. Descriptive analysis and bivariate analysis of the association between the knowledge, attitudes, and practices of healthcare professionals and sociodemographic and professional variables were performed using the Fisher's exact test, with a significance level of 5%. Results: Healthcare professionals demonstrated satisfactory knowledge and favorable attitudes towards caregiving situations experienced by informal caregivers of older individuals living with dementia. However, 65% of professionals exhibited insufficient practices directed at caregivers, including guidance, support groups, and health education. No significant association was found between knowledge, attitudes, practices, and sociodemographic or professional variables. Conclusion: Despite healthcare professionals possessing satisfactory knowledge of caregiving situations and positive attitudes towards informal caregivers, their practices are inadequate in meeting their needs. This deficiency does not contribute to enabling caregivers to cope with the various challenges that arise during the course of the disease for both the older individual and the caregivers themselves.

Keywords: Knowledge. Attitudes and Practice in Health. Healthcare Personnel. Caregivers. Older Adults. Dementia.

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There was no funding for the execution of this work.

The authors declare that there is no conflict in the conception of this work...

### INTRODUCTION

Dementia affects 55 million people worldwide<sup>1</sup>. Projections indicate that by 2030, this number will rise to 78 million, and by 2050, it will reach 139 million individuals living with some form of dementia<sup>1</sup>. However, it is estimated that approximately 75% of individuals with dementia globally remain undiagnosed<sup>2</sup>. In Brazil, it is believed that there are two million people living with some form of dementia; nevertheless, underdiagnosis remains a significant issue<sup>3</sup>.

As dementias, being progressive and irreversible conditions, impact the ability of older individuals to carry out Activities of Daily Living (ADLs). Over time, elderly individuals become increasingly dependent, necessitating care<sup>4</sup>. Typically, family members, particularly wives, daughters, and daughters-in-law, assume this role, and they are referred to as informal caregivers (ICs)<sup>5,6</sup>.

Over time, the continuous caregiving demands, coupled with increased domestic responsibilities, family reconfiguration, changes in the health status of the older individual living with dementia (OILD), and shifts in the personal and work life of the caregiver, often lead to various consequences. These consequences encompass physical, mental, social, and emotional repercussions, including physical exhaustion, burden, depression, anxiety, and social isolation, which can even affect the caregiver's self-care<sup>7</sup>.

Researchers, organizations, and institutions have recommended that healthcare professionals involved in dementia care not only provide care for the older individual with living with dementia but also extend their attention to the caregivers. This approach aims to offer assistance and support for the various caregiving-related issues<sup>1,8</sup>. In this regard, there is a growing body of research focusing on OILDs and their caregivers<sup>9-11</sup>.

Nevertheless, regarding the relationship between healthcare professionals and caregivers of OILDs, the evidence remains limited. Studies conducted with healthcare professionals indicate that they acknowledge the burden experienced by caregivers and their need for care. However, assistance may not always be readily available to them<sup>6,12</sup>. Consequently, there is a recognized need to allocate more time for the care of OILDs and their ICs.

Following searches in various databases, it was observed that there is a paucity of studies in the literature that have aimed to investigate the knowledge, attitudes, and practices of healthcare professionals regarding the caregiving situations experienced by ICs. In this context, the objective of this investigation was to analyze the knowledge, attitudes, and practices of healthcare professionals while providing care to OILDs concerning the caregiving situations experienced by ICs and to assess their association with sociodemographic and professional factors.

### METHODS

This is a cross-sectional analytical study of the Knowledge, Attitudes, and Practices (KAP) type. Such studies are commonly employed in health sciences, especially in public health, aiming to provide insights into knowledge, beliefs, perceptions, and health-related behaviors<sup>14</sup>. The fundamental stages of this type of study encompass identifying the research topic, selecting the target population, formulating KAP questions, providing response options, devising a scoring system for the instrument, and instrument validation<sup>14</sup>.

The study was conducted in the municipality of Tangará da Serra, located in the state of Mato Grosso (MT), Brazil, situated approximately 232 km from the capital, Cuiabá. As of 2021, the estimated population of Tangará da Serra was 107,631 inhabitants<sup>15</sup>. This location was chosen due to its status as a state hub for healthcare professional training. Currently, the municipality has 22 Family Health Units (Unidades de Saúde da Família, USF), each staffed with at least a physician, nurse, nursing technician and/or assistant, and community health agent (Agente Comunitário de Saúde, ACS).

During the research period, there were 53 healthcare professionals with higher education working in the units, and the research population consisted of all of them. In the study, 43 professionals were included, comprising 21 nurses and 22 physicians

who reported providing healthcare to OILDs in the USF. The final sample, after accounting for dropouts, consisted of 40 participants.

Data collection took place in the months of February and March 2022. Once the professional agreed to participate, a day and time were scheduled according to their availability for conducting the interview at the Family Health Unit, while adhering to the biosafety guidelines to prevent covid-19. After reading and signing the Informed Consent Form (ICF), a copy was provided to the research participant.

The interview was conducted using an instrument consisting of questions related to the healthcare

professional's sociodemographic and professional information, as well as questions formulated based on the available literature regarding the knowledge, attitudes, and practices of professionals in relation to caregiving situations experienced by ICs of OILDs<sup>5,16,17</sup> (Chart 1). For the Knowledge questions, professionals had three response options (correct; incorrect; I don't know), and for the Attitudes questions, they had three options (agree; disagree; undecided). As for the Practices questions, they had three response options (yes; no; sometimes) for six practice options presented. Furthermore, professionals were asked to provide reasons for not implementing the practices or for only occasionally doing so (Chart 1).

**Chart 1.** Questions regarding the knowledge, attitudes, and practices of professionals in relation to caregiving situations experienced by informal caregivers of OILDs included in the data collection instrument.

### 1. KNOWLEDGE ABOUT INFORMAL CAREGIVERS OF OLDER ADULTS WITH DEMENTIA

Regarding informal caregivers of older adults with dementia, respond to the following statements:

- 1. Typically, caregivers have sufficient knowledge about what dementia is.
- 2. Caregivers can experience loneliness and a sense of familial abandonment.
- 3. Due to caregiving, caregivers may suffer physical consequences such as body pain and insomnia.
- 4. Commonly, caregivers have insufficient knowledge about dementia treatments.
- 5. Because of caregiving, caregivers may experience mental and/or emotional consequences such as anxiety, stress, and depression.
- 6. In general, caregivers are adequately trained to care for individuals with dementia.
- 7. As a result of caregiving, caregivers may face social consequences such as job loss, decreased income, and social isolation.
- 8. Generally, caregivers do not have difficulties in self-care.
- 9. It is common for caregivers to have difficulties in caring for the older individual with dementia (e.g., not knowing how to handle the behavioral changes of the older individual).

### 2. ATTITUDES TOWARDS INFORMAL CAREGIVERS OF OLDER ADULTS WITH DEMENTIA

Regarding informal caregivers of older adults with dementia:

- 1. I believe that, in general, they have sufficient knowledge about what dementia is.
- 2. I think caregivers have insufficient knowledge about dementia treatments.
- 3. I consider that, due to caregiving, caregivers may suffer physical consequences such as body pain and insomnia.
- 4. I assume that, because of caregiving, caregivers may experience mental and/or emotional consequences such as anxiety, stress, and depression.
- 5. I believe that, as a consequence of caregiving, caregivers may face social consequences such as job loss, decreased income, and social isolation.
- 6. I believe that, in general, caregivers are not adequately trained to care for individuals with dementia.
- 7. I consider that caregivers often have difficulties in self-care.
- 8. I suppose that the healthcare professional attending to the older individual with dementia should provide caregivers with information about the disease, care, and support services.
- 9. I believe it is important to support and guide caregivers regarding dementia and care for the older individual.

to be continued

#### Continuation of Chart 1

- 10. I think that, in the care of older individuals with dementia, it is necessary for the healthcare professional to allocate time to listen to the caregiver's needs.
- 11. I believe that healthcare professionals should also be concerned about the caregiver during the care of the older individual with dementia.
- 12. I believe that healthcare professionals should expect caregivers to reach out because they are responsible for seeking help.
- 13. I believe it is common for caregivers to have difficulties in caring for the older individual with dementia (e.g., not knowing how to handle the behavioral changes of the older individual).

## 3. HEALTHCARE PROFESSIONAL PRACTICES REGARDING THE ATTENTION TO CAREGIVERS OF OLDER ADULTS WITH DEMENTIA

In my practice of caring for older individuals with dementia, I carry out certain actions with caregivers:

- 1. Home visits;
- 2. Team training;
- 3. Support groups;
- 4. Health education;
- 5. Caregiver consultations;
- 6. Providing information and/or guidance.

Reasons for not implementing these practices or doing them only occasionally:

- 1. Time constraints;
- 2. Communication difficulties;
- 3. Difficulty in managing family issues associated with dementia;
- 4. Struggles to meet family expectations;
- 5. Lack of training in providing care to OILDs and their caregivers;
- 6. Insufficient knowledge about support services for OILDs and their caregivers.

Source: Authors, 2022.

To accurately assess the studied phenomenon, the instrument was subjected to a committee of 17 judges selected based on predetermined criteria to validate its reliability and suitability, as recommended in the literature<sup>18</sup>. The Content Validity Index (CVI) of the instrument was 0.96.

To assess the applicability of the instrument and identify any unforeseen operational issues, a pilot test was conducted in a neighboring municipality with six healthcare professionals who met the inclusion criteria of the research. The questionnaire proved to be suitable for achieving the study's objectives.

The dependent variables in this study were knowledge, attitudes, and practices. The definitions of knowledge and attitudes were based on Kaliyaperumal<sup>6,12,19</sup>. The definition of practices was formulated by the authors, drawing from the relevant literature on the subject<sup>4,12,16,17</sup>.

The cutoff points for each variable were established arbitrarily, given the absence of specific criteria in the literature.

- Knowledge the healthcare professional's understanding of caregiving situations experienced by ICs of OILDs. The variable was classified as satisfactory or unsatisfactory. It was considered that the professional had satisfactory knowledge when they answered correctly to at least six out of the nine questionnaire questions.
- Attitudes the preconceived ideas, opinions, feelings, predispositions, and beliefs of healthcare professionals regarding ICs of OILDs that positively or negatively influence the professional's behavior or practice in relation to the caregiver. The variable was classified as favorable or unfavorable. An attitude was considered favorable if the professional answered in line with the expected response to at least eight out of the 13 questionnaire questions.

Practices - healthcare professionals' actions directed towards caregivers of OILDs, such as guidance, support services, and health education. The variable was classified as sufficient or insufficient. A practice was considered sufficient when the professional responded with "yes" to at least four out of the six practices listed in the questionnaire. The option "sometimes" was grouped with "no" because the practice was not carried out routinely.

The independent variables included sociodemographic factors: age, gender, and professional factors: occupation, years since graduation, highest degree earned, primary area of practice, training in geriatrics or gerontology, length of employment in the unit, receipt of content related to dementia and caregivers, types of content received, dementia training, and type of training received.

A descriptive analysis was conducted and presented in tables with absolute and relative frequencies for each variable. To assess the association between the dependent variables and the sociodemographic and professional variables, the Fisher's exact test was employed, with a significance level of 5%.

This research adhered to all ethical principles and was approved by the Research Ethics Committee in Health at the Universidade Federal do Mato Grosso (UFMT) under opinion number 5.057.043 and Certificate of Presentation of Ethical Appraisal (Certificado de Apresentação de Apreciação Ética - CAAE) number 47143021.5.0000.8124.

### DATA AVAILABILITY

The entire dataset supporting the results of this study is available upon request to the corresponding author, Monique Maira Maciel.

### RESULTS

Among the 40 participants in this study, half of them are nurses, with 90% of them being female, and 40% falling into the age group between 40 and 50 years. As for the physicians, 65.5% of them are female and fall within the age group between 30 and 34 years.

Regarding academic qualifications, 70% of nurses have nine to 17 years of undergraduate education, while 75% of physicians have two to eight years. Of the nurses, 80% have postgraduate degrees, while 55% of physicians hold such qualifications. Only one physician (5%) has training in geriatrics and gerontology, and no nurses (0%) have training in gerontology. A significant portion of nurses (85%) and physicians (95%) received content related to dementia through classroom-based instruction. Moreover, 90% of nurses and 95% of physicians did not receive content related to caregivers. The majority of nurses (90%) and physicians (60%) did not receive training on dementia after completing their education.

Regarding their work, the majority of nurses (70%) and physicians (85%) have worked longer in Primary Care. Furthermore, 80% of nurses and 90% of physicians have been employed in the same unit for less than three years.

In the classification of healthcare professionals' knowledge, attitudes, and practices regarding caregiving situations experienced by ICs of OILDs, according to the criteria established for this study, 100% of the healthcare professionals have satisfactory knowledge and favorable attitudes. As for practices, the vast majority (92.5%) have insufficient practices related to these situations (Table 1).

**Table 1.** Distribution of healthcare professionals according to the classification of knowledge, attitudes, and practices regarding informal caregivers of OILDs. Tangará da Serra - MT, 2022 (N=40).

Variable	n (%)
Knowledge	
Satisfactory	40 (100.0)
Unsatisfactory	0 (0.0)
Attitude	
Favourable	40 (100.0)
Unfavorable	0 (0.0)
Pratice	
Sufficient	3 (7.5)
Insufficient	37 (92.5)

Source: Authors, 2022.

Regarding healthcare professionals' knowledge about caregiving situations experienced by ICs of OILDs, 90% of the participants believe that caregivers lack sufficient knowledge about what dementia is and its treatments (95%). Additionally, all professionals believe that caregivers can suffer physical consequences such as body pain and insomnia due to caregiving, as well as mental and/ or emotional repercussions like anxiety, stress, and depression. Furthermore, 97.5% believe that there are social consequences for caregivers, including job loss, reduced income, and social isolation, and they may also experience loneliness and a sense of familial abandonment. Of the professionals in the study, 95% responded that caregivers are not adequately trained to care for individuals with dementia, 87.5% believe that caregivers have difficulties in self-care, and all are aware that it is common for caregivers to face difficulties in caring for individuals with dementia.

About healthcare professionals' attitudes toward caregiving situations experienced by ICs of OILDs, the majority believe that caregivers have insufficient knowledge about what dementia is (92.5%) and its treatments (97.5%). All professionals believe that as a result of caregiving, caregivers may experience physical and mental and/or emotional consequences, and 95% believe they may face social consequences. Overall, 97.5% believe that caregivers are not

adequately trained to care for individuals with dementia and that it is common for them to face difficulties in caring for OILDs. All professionals believe that healthcare professionals who provide care to OILDs should provide caregivers with information about the disease, care, and support services. They consider it important to support and guide caregivers about dementia and care for the elderly. They also believe that during the care of OILDs with dementia, healthcare professionals should take the time to listen to the needs of the caregiver and be concerned about them during the care of OILDs with dementia. Approximately 82.5% of professionals believe that caregivers have difficulties in self-care, and only 15% believe that caregivers are responsible for seeking help, while the rest believe that it is the responsibility of the healthcare professional to wait for this demand.

Concerning the healthcare professionals' practices in relation to caregiving situations experienced by ICs of OILDs, as shown in Table 2, 67.5% of professionals responded that they occasionally provide information or guidance to caregivers, 65% occasionally conduct home visits, 82.5% do not provide team training, 72.5% do not provide health education, 50% sometimes conduct consultations with caregivers, and none of the professionals provide caregiver support groups.

**Table 2.** Types and frequency of actions performed by healthcare professionals during the care of OILDs and types of information/guidance provided to caregivers by healthcare professionals. Tangará da Serra - MT, 2022 (N=40).

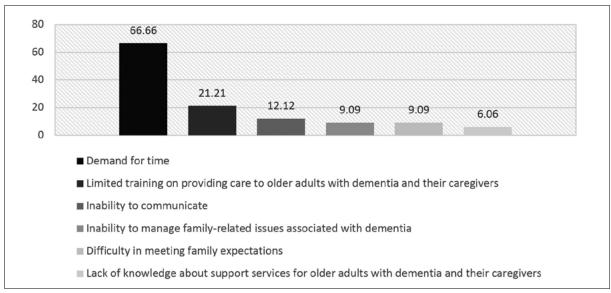
T 6 .:	Yes	No	Sometimes	
Type of action	n (%)	n (%)	n (%)	
Information/guidance	12 (30.0)	1 (2.5)	27 (67.5)	
Home visits	8 (20.0)	6 (15.0)	26 (65.0)	
Team qualification	1 (2.5)	33 (82.5)	6 (15.0)	
Support group	0 (0.0)	40 (100.0)	0 (0.0)	
Health education	3 (7.5)	29 (72.5)	8 (20.0)	
Consultation with the caregiver	4 (10.0)	16 (40.0)	20 (50.0)	
The office we still a feet days	Yes No	Sometimes		
Type of information/guidence	n (%)	n (%)	n (%)	
About the disease	10 (25.0)	9 (22.5)	21 (52.5)	
About diagnosis	3 (7.5)	27 (67.5)	10 (25.0)	
About treatment	8 (20.0)	14 (35.0)	18 (45.0)	
About support services	10 (25.0)	30 (75.0)	0 (0.0)	
About caregiving for OILD	12 (30.0)	5 (12.5)	23 (57.5)	
About books, websites, papers on dementia	4 (10.0)	33 (82.5)	3 (7.5)	

Source: Authors, 2022.

As for the information/guidance provided by healthcare professionals to caregivers, Table 2 also shows that 52.5% of professionals occasionally provide information about the disease, 67.5% do not inform about the diagnosis, 45% occasionally provide information about treatment, 75% do not inform about support services, 57.5% sometimes provide information

about caregiving for OILDs, and 82.5% do not recommend sources of information about dementia.

The reasons why healthcare professionals do not provide or only occasionally provide information/guidance and do not perform or only occasionally perform actions for caregivers are shown in Image 1.



**Figure 1.** Reasons why healthcare professionals do not provide or only occasionally provide information/guidance and do not perform or only occasionally perform actions for caregivers. Tangará da Serra - MT, 2022.

Source: Authors, 2022.

**Table 3.** Percentage distribution of the classification of healthcare professionals' practices regarding informal caregivers of older adults with dementia, according to personal and professional data. Tangará da Serra, MT, 2022 (N=40).

W 111	Unsatisfactory Practice	Satisfactory Practice	
Variable	n (%)	n (%)	Value of p1
Age (in Years)			0.218
26 - 29	4 (10.8)	0 (0.0)	
30 - 34	17 (46.0)	1 (33.3)	
35 - 39	6 (16.2)	2 (66.7)	
< 40	10 (27.0)	0 (0.0)	
Sex			0.455
Female	28 (75.7)	3 (100.0)	
Male	9 (24.3)	0 (0.0)	
Profession			0.500
Nurse	19 (51.3)	1 (33.3)	
Physician	18 (48.7)	2 (66.7)	
Years of education (in Years)			0.538
2 - 8	19 (51.3)	2 (66.7)	
9 - 17	18 (48.7)	1 (33.3)	
Highest degree			0.704
Graduation	12 (32.4)	1 (33.3)	
Postgraduate diploma	25 (67.6)	2 (66.7)	
Area where they worked the most			0.455
Primary Care	28 (75.7)	3 (100.0)	
Others	9 (24.3)	0 (0.0)	
Education in geriatrics and gerontology / gerontology			0.925
Yes	1 (2.7)	0 (0.0)	
No	36 (97.3)	3 (100.0)	
Years working in the unit			0.394
Up to 3	32 (86.5)	2 (66.7)	
More than 3	5 (13.5)	1 (33.3)	
Received content on dementia			0.723
Yes	33 (89.2)	3 (100.0)	
No	4 (10.8)	0 (0.0)	
Received content on caregivers		·	0.786
Yes	3 (8.1)	0 (0.0)	
No	34 (91.9)	3 (100.0)	
Participated in dementia training			0.149
Yes	8 (21.6)	2 (66.7)	
No	29 (78.4)	1 (33.3)	

<sup>1</sup>Fisher's exact test. Source: Authors, 2022.

Due to the lack of variability in the responses to the questions related to the dependent variables of knowledge and attitudes, as 100% of the participants met the classification criteria for the answers established, bivariate analysis between the dependent and independent variables was only conducted with the dependent variable "Practices." As a result, it can be observed in Table 3 that after bivariate analysis, there was no significant association between the practices of healthcare professionals regarding informal caregivers of older adults with dementia and the personal and work characteristics of the professionals.

### DISCUSSION

According to the literature review conducted, no studies were found that aimed to investigate the knowledge, attitudes, and practices (KAP) of healthcare professionals regarding the care situations experienced by caregivers of older individual living with dementia (OILD). From what is known in the literature, there are several studies using the KAP methodology, but the focus is on the knowledge, attitudes, and practices of healthcare professionals regarding dementia or OILD<sup>20,21</sup>. In this sense, there is a scarcity of studies that allow for result comparisons. However, examining related literature, some conjectures can be made regarding the results.

The main result of this study shows that healthcare professionals, in their relationship with ICs during the care of OILD, have satisfactory knowledge and favorable attitudes but insufficient practices regarding caregivers and the care situations they experience.

Regarding knowledge, there is evidence from research that highlights a lack of knowledge among healthcare professionals regarding dementia<sup>16,17</sup>, diagnoses, and treatment. Studies indicate that professionals report deficiencies in content and training related to dementia during their education, which hampers their ability to care for patients with this condition. A systematic review of 19 studies found a significant deficit in the knowledge of nurses regarding care for OILDs<sup>21</sup>. Similarly, an integrative review of 38 studies revealed that the knowledge

of healthcare professionals about dementia, both in developed and developing countries, is moderate. This is linked to limited professional training and inadequate education<sup>22</sup>. This information aligns with the educational background of the participants in this study, who reported having limited education on dementia.

In this context, the finding that professionals have satisfactory knowledge about caregivers and the caregiving situations they experience is noteworthy. A comprehensive education on dementia should encompass not only disease-related content but all aspects of the experiences of individuals living with it. This way, healthcare professionals would theoretically understand the caregiving conditions for OILDs.

One possible explanation for the findings in this study is that the knowledge professionals claim to have about caregivers may come from their practical experience in caring for OILDs. This is supported by a study conducted in Beijing, where physicians and nurses stated that they gained experience in dementia care through clinical practice, books, and the internet<sup>17</sup>. Similarly, in another study in England, healthcare professionals reported ambivalence about the value of their dementia education as part of their professional qualification. They expressed that learning through experience and from their peers was more beneficial than relying solely on their formal education, suggesting that formal education could be either beneficial or not, as they learned more from practical experience and colleagues than from it<sup>23</sup>.

Likely, listening to caregivers' demands during healthcare encounters may have provided professionals with knowledge about their situation. This was observed in a study conducted in France on the clinical practices of physicians in dementia care. In that study, physicians reported that they perceived that families of patients felt helpless, isolated, and distressed, and they heard them talk about family loneliness, feelings of abandonment, and frustration in trying to understand social services<sup>24</sup>. Furthermore, in another study, healthcare professionals stated that they were aware that among the various burdens caregivers bear, the psychological burden is the most severe<sup>6</sup>.

Certainly, over time, experience provides several opportunities to get to know PWD and their caregivers, especially in Primary Care, where there are more chances for regular encounters between professionals and them, whether at the healthcare facility or during home visits. However, knowledge acquired solely through experience brings a lot of subjectivity, resulting in uncertainty, insecurity, delays, or a lack of problem resolution. The literature demonstrates that many of the caregivers' needs are not taken into account or are not addressed by professionals, and caregivers expect this from those who assist them<sup>22,25</sup>.

In light of this, it is advocated that healthcare professionals, instead of solely acquiring knowledge about dementia and individuals living with the disease through experience, seek scientific knowledge through training, education, specialized literature, and reputable organizations' websites to enhance the quality of their care for these individuals.

Regarding the finding of this study that healthcare professionals have favorable attitudes towards the situation of ICs providing care for OILDs, there are studies in the literature on healthcare professionals' attitudes towards dementia care that indicate they have positive attitudes towards caregivers.

Findings consistent with favorable attitudes demonstrate that healthcare professionals express empathetic attitudes in their communication with the patient and the caregiver and are concerned about the caregiver's suffering and burden arising from caring for OILDs<sup>6,16,26,27</sup>. According to the literature, professionals believe that caregivers need support and counseling<sup>20</sup>; they consider it important to dedicate time not only to the patient but also to the caregiver, assisting them in coping with the consequences of the disease<sup>16</sup>. Furthermore, professionals think they should provide knowledge about the disease to help caregivers deal with the condition's consequences<sup>13</sup>.

The result that the professionals in this study have favorable attitudes indicates that they may hold positive attitudes toward caregivers of OILDs. This is important because it contributes to the quality of care provided by physicians and nurses in dementia. Nevertheless, considering that the literature shows negative attitudes toward caregivers<sup>5,12,13,16,26,27</sup>, it

is essential that training programs include in their curricula not only content about dementia but also focus on educating professionals capable of having positive attitudes toward those living with the disease and its consequences.

The result of this study, indicating that the healthcare professionals' practices concerning the situation of ICs providing care to OILDs are insufficient, reveals a paradox between the knowledge and attitudes of the participants in this study regarding caregivers and their actual practices. These practices are not aligned with the needs identified in these caregivers and those that the professionals believe they have.

The finding of insufficient practices among healthcare professionals is consistent with the existing literature, particularly concerning information, guidance, and support. Studies involving professionals have shown that they offer little to no information or education about dementia to caregivers<sup>12,17,25</sup>, provide limited psychological help<sup>12,17</sup> and support, and offer some form of counseling<sup>20</sup>.

Similarly, there are studies in which caregivers report not receiving as much information as they would like<sup>12</sup> and receiving little to no information<sup>28</sup>. Furthermore, studies indicate that the information provided about the disease is not very clear<sup>11</sup> and that professionals tend to focus more on medications than on dementia, its implications, and care practices<sup>5</sup>.

When it was observed that both nurses and physicians are failing to perform essential practices, primarily related to providing information and guidance, as well as support and health education, it highlights a deficiency in the attention given by primary healthcare professionals to caregivers of OILDs. The inadequacy of these practices contributes to caregivers experiencing not only physical burden but also psychosocial distress. The literature underscores that caregivers express that the lack of attention from healthcare professionals leads to anxiety and stress<sup>11</sup>, confusion, tension, and uncertainty<sup>9</sup>.

Similarly, studies demonstrate that the more knowledge the caregiver has about the disease, the lower the burden they experience<sup>29</sup>, and that

providing information and guidance to caregivers of patients with dementia about the symptoms, disease progression, and treatment can improve depression and burden<sup>30</sup>.

In this regard, healthcare professionals and services, especially those in Primary Care, can rely on a body of scientific evidence that supports best practices in the care of OILDs and their caregivers<sup>30,31</sup>. These are studies that demonstrate the effectiveness of support groups for caregivers to better cope with the disease and its consequences.

Similarly, with the advent of technology, studies have demonstrated new possibilities for supporting these caregivers through the use of websites, videos, and apps<sup>28</sup>. For example, a meta-analysis aimed at examining the effect of web-based interventions focused on caregivers indicated positive effects on caregiver self-efficacy, self-esteem, and caregiver stress<sup>10</sup>. Additionally, another study that provided professional support to caregivers of OILDs via telephone showed an improvement in caregiver burden, depression, and caregiver self-efficacy<sup>32</sup>.

Furthermore, to provide more and better information, healthcare professionals can use tools and resources to assist caregivers such as brochures, books, and instructional materials<sup>5</sup>. Professionals can also consider the use of electronic resources, such as the internet, media, and smartphones, as sources of health information<sup>25</sup>.

Regarding the reasons presented by healthcare professionals in this study for not taking actions directed at caregivers, studies have shown similar reasons. These reasons include lack of time<sup>5,17,27,33</sup>, communication difficulties<sup>27</sup>, and challenges in managing family issues associated with dementia<sup>33</sup> and also family expectations<sup>16</sup>. Additionally, limited training on caring for OILDs patients and their caregivers<sup>16,17,22,26,33</sup>, as well as insufficient knowledge about support services<sup>5,27</sup>, contribute to these challenges.

It's evident that these reasons encompass both personal factors related to the professionals themselves, such as knowledge gaps and difficulties in managing familial issues associated with dementia, as well as systemic factors connected to the healthcare services and institutions where they work, including time constraints and inadequate training on caring for OILDs patients and their caregivers. These combined challenges underscore the need for comprehensive support and interventions for both professionals and the services they provide.

Absolutely, addressing these barriers is crucial to improving the care provided to both caregivers and OILD patients. Educational institutions should focus on better preparing nurses and physicians to meet the needs of these individuals, and healthcare services should invest in ongoing professional development for their staff. Initiatives like establishing support groups have been recommended as a cost-effective means of assisting caregivers and OILD patients, as they offer opportunities for learning and interaction while keeping financial costs low<sup>31</sup>.

The lack of association between the "practices" variable and the independent variables may indeed be influenced by the sample size and its homogeneity in terms of the professional and sociodemographic characteristics of the participants.

Furthermore, the fact that 100% of the professionals in the study demonstrated knowledge and favorable attitudes towards caregivers may suggest that the instrument used for this research had limited discriminatory power, despite the validation process it underwent. The explanation for all professionals in this study having knowledge and favorable attitudes towards caregivers may be related to their experience in providing care to OILDs. However, it's possible that there was a courtesy bias in this study, where people "tend to provide responses they believe are correct, acceptable, and appreciated when faced with a research question"34. Additionally, considering that attitudes are a construct that involves cognitive and affective components and a tendency to act<sup>35</sup>, and that they are "a relatively enduring belief system about a subject, object, or concept that predisposes a person to respond in a preferential way"14, it's possible that professionals made their attitude statements regarding caregivers in an effort to respond to the researcher in a manner that aligns with socially desirable responses. To reduce this type of bias in future research, it's recommended that

data collection be conducted through self-administered online or printed questionnaires.

### CONCLUSION

This study identified that the knowledge of healthcare professionals is satisfactory, their attitudes are favorable, and their practices are insufficient. The insufficient practices of physicians and nurses directly impact the lives of informal caregivers and the care of elderly individuals living with dementia. Therefore, there is a need to invest in the training and continuing education of healthcare professionals, particularly nurses and physicians, to improve their attention to both caregivers and elderly individuals living with dementia.

This research has some limitations. The first is related to the data collection instrument, which showed limited discriminatory power, even though it was validated by experts. The second pertains to the courtesy bias, which occurs when people provide responses they believe are correct or socially acceptable. The findings also provide insights for primary healthcare professionals to reconsider their caregiving practices, aiming to provide greater support to informal caregivers of elderly individuals living with dementia through home visits, caregiver consultations, and support group formation. A suggestive question for future studies is the need for interventions that promote better healthcare practices for this population.

### **AUTHORSHIP**

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Edited by: Priscila de Freitas Bastos Pazos

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