



# Medical practice for the management of dementias in the municipalities that are center of residency in family healthcare in Minas Gerais

Nicolle Cardoso Nobre<sup>1</sup> Thalita Silveira Novais<sup>1</sup> Pedro Arthur Carvalho Lima dos Santos<sup>1</sup> Erica Costa Lima<sup>1</sup> Ellen Mara Reis Malta<sup>2</sup> Lucinéia de Pinho<sup>1,2</sup>

## Abstract

**Objective:** To analyze the practice of medical professionals in Primary Health Care (PHC) in municipalities that are centers of Residency in Family Healthcare in Minas Gerais (MG), Brazil. **Method:** This is a cross-sectional and analytical study carried out from March to October 2018 with doctors and resident doctors who worked in the Family Health Strategy teams in eight municipalities in MG. The sociodemographic characteristics, participation in specific training for dementia, and practices of doctors in caring for the old person with dementia were evaluated. **Results:** Among the professionals, most were female (63.4%) aged 30 years or less (57.7%), and did not participate in training for dementia (60%). It was observed that most doctors diagnosed the pathology in the moderate to the severe stage (67.5%). Among the difficulties in identifying cases of dementia, the following stood out: poor use of complementary exams (26.8%) and difficulty in differentiating signs and symptoms of dementia from their main differential diagnoses (50%). Participation in training influenced the difficulties in identifying the cases ( $p=0.019$ ), differentiation of signs and symptoms ( $p=0.018$ ), confidence in the diagnosis ( $p<0.001$ ), responsibility for the diagnosis by the specialized service ( $p=0.019$ ), and low availability of time by professionals ( $p=0.015$ ). **Conclusion:** Practical education in dementia provided to health professionals during medical training is still incipient and requires improvement, demanding educational interventions with the PHC team, and improvement of protocols aimed at early diagnosis and management of dementia.

**Keywords:** Dementia.  
Inservice Training. Health  
Personnel. Education.  
Primary Health Care.

<sup>1</sup> Centro Universitário FIPMoc de Montes Claros, Departamento de Medicina. Montes Claros, MG, Brasil.

<sup>2</sup> Universidade Estadual de Montes Claros, Centro de Ciências Biológicas e da Saúde, Programa de Pós-Graduação em Cuidado Primário em Saúde, Montes Claros, MG, Brasil.

The authors declare no conflicts in the development of the present study.

There was no funding for the development of the present study.

Correspondence  
Lucinéia de Pinho  
lucineiapinho@hotmail.com

Received: September 19, 2020

Approved: March 11, 2021

## INTRODUCTION

Medical training requires a close relationship between theoretical and practical teaching and public health services to enable students to become familiar with the main health problems of the community<sup>1</sup>. All scenarios of the medical practice must be present during the training process, so there must be an effective performance in Basic Healthcare Units (UBS), specialty outpatient clinics, and hospitals. This should be a priority in the educational and social spheres as it will allow the development of a professional profile familiarized with the public health problems and health policies in the country. It also identifies the need for training based on social responsibility along with educational activities to promote improvement to different scenarios of the professional practice<sup>2</sup>.

Primary Health Care (PHC) was developed based on a high decentralization and became the entry to the healthcare services through the UBS, which maintain communication between the community and the other levels of health care<sup>3</sup>. Its importance is based on the possibility of offering easy access to the public healthcare system, also providing a resolute response to most of the population's health problems<sup>4</sup>.

It is necessary to establish direct contact with the PHC through actions to prevent diseases and promote health. This allows an eventual discussion on the curricular improvement of such practices<sup>5</sup>. Strengthening of intersectoral integrations promotes greater effectiveness of primary care, which requires not only better medical performance but also from government sectors<sup>6</sup>.

In this context, the Family Healthcare Residency programs are PHC settings, contribute to the development of more assistance and humanized professional profile to meet the healthcare needs of individuals, family, and the community<sup>7</sup>. The institutionalization of the teaching-service-community relation through these programs, in addition to expanding the learning environment, helps the Unified Health System (SUS) improve the care provided to the population<sup>8</sup>.

Population aging is recognized worldwide, and the Brazilian Institute of Geography and Statistics (IBGE) estimates that in 2050 the share of the old population in Brazil will be about 58.4 million, representing approximately 26.7% of the Brazilian population. An important fact of this process is the prevalence of chronic non-communicable diseases, which contribute to an increase in the number of deaths, hospitalizations, institutionalizations, and decreased individual's functional and cognitive capacity. Among these diseases is dementia, which has become a public health problem<sup>9</sup>.

Dementia is a clinical condition comprising cognitive deficit that generates damage to memory, the notion of spatial vision, reasoning, and judgment<sup>10</sup>. The number of cases of dementia increased by 117% between 1990 and 2016 worldwide, going from 20.2 million in 1990 to 43.8 million in 2016, with an increase of 1.7% in prevalence by age in the same period<sup>11</sup>. Also, about 47 million people have dementia, almost 60% in low- and middle-income countries. In 2030, there are a projected 75 million people with dementia and 132 million in 2050<sup>12</sup>.

In Brazil, it is believed that dementia affects about 2 million old people, with an average of 40 to 60% due to Alzheimer's disease<sup>13</sup>. A Brazilian study carried out mainly in the southeastern region revealed a percentage of cases of dementia varying from 5.1 to 17.5% in the country<sup>14</sup>. Among the main psychiatric morbidities analyzed during hospitalization of old people in the country between 2008 and 2014, dementia contributed with the highest number of deaths, with the Southeast being the region with the highest mortality rate<sup>15</sup>.

It is important to emphasize that dementia syndromes are the main causes of loss of autonomy in old age, requiring constant care during this disease which without early diagnosis and adequate treatment results in total patient dependence since there is no cure or treatment to effectively change the course of the disease<sup>16</sup>.

Regarding the approach of dementia in basic healthcare units, the training offered by medical schools provides students with incipient knowledge

on cognitive changes through a theoretical basis that may be efficient, but further training focusing on the diagnosis and early recognition of changes suggestive of dementia in this environment is still necessary<sup>17</sup>. The qualification of PHC healthcare professionals can help in the early and favorable diagnosis of dementia, thus allowing an appropriate follow-up<sup>3</sup>.

The importance of prior recognition of the signs and symptoms of dementia is justified by its great social impact and the benefits of an early therapeutic intervention<sup>18</sup>. Thus, it is necessary to identify what are the main difficulties that PHC professionals face in screening for dementia syndromes. Studies aimed at evaluating the knowledge of these healthcare professionals appear as a tool to improve protocols and conducts in the management of dementia<sup>3</sup>.

This study aimed to analyze the practice of medical professionals in PHC in municipalities centers of Family Healthcare Residency in Minas Gerais, Brazil.

## METHODS

This is a cross-sectional and analytical study carried out at the PHC of municipalities that are centers of Family Healthcare and Community Medicine Residency and Multiprofessional Residency in Family Healthcare of Universidade Estadual de Montes Claros (UNIMONTES). The study was carried out with the population of PHC doctors and residents who worked in the UBS teams in the municipalities of the north of Minas Gerais: Montes Claros (158 teams), Taiobeiras (15 teams), Salinas (17 teams), Pirapora (17 teams), Janaúba (24 teams), Porteirinha (17 teams), Coração de Jesus (13 teams), and Bocaiúva (13 teams). During the study period, the population of approximately 274 medical professionals in the staff of these municipalities and 122 residents was estimated. This survey considered the number of teams registered in the National Registry of Health Facilities (CNES) and registered in the vacancies offered in the calls for bid for Family Healthcare and Community Medicine residency and Multiprofessional Residency in Family and Community Healthcare. The inclusion criterion used was being a professional

working in PHC, and the exclusion criterion used was being away from work activities due to leave or any other reason and being on vacation.

Data were collected from March to October 2018 in scheduled visits to the Basic Healthcare Units. The professionals had been identified in their workplaces and invited to participate in the study. Professionals who were not present on the day of the visit received the questionnaire via e-mail.

For data collection, the instrument *Health Care for Dementia: the view of Primary Care* was applied in the version for doctors. The original instrument was developed and applied in Dublin by the *Dementia Services Information and Development Centre*. This instrument was adapted to the Brazilian context following the international standards of cross-cultural adaptation, and for that, the steps of translation, synthesis, back translation, review by a committee of experts (judges), and pretests were used<sup>3</sup>. For the present study, questions were used to contemplate the sociodemographic characteristics of gender (male or female), age (20 to 29, 30 to 39, 40 to 49, 50 or older), and self-declared skin color (white, black, brown, or yellow) in addition to the economic characteristic of income (minimum wages). Questions including the participation in specific training for dementia and the physician's practice in treating old people with dementia (screening and diagnosis methods) were also used.

The data was organized, tabulated, and later coded. Absolute frequencies (n) and relative frequencies (%) were calculated. To analyze the possible association between the variables, the Pearson's chi-square or the Fisher's exact tests were used. The level of significance adopted was 95%.

The research project is following Resolution No. 466/2012 and Resolution No. 510/2016. The present study was approved by the Research Ethics Committee (REC No. 2,483,632) and approved by the PHC Coordination and/or the health managers of the municipalities through the Institution's Informed Consent Form (ICF). Research participants were given or sent the Terms of Informed Consent Form (ICF).

## RESULTS

138 physicians were participating in the present study, of which 35.5% (49) were attending a residency in Family Healthcare. The response rate was 34.8%. Among the doctors, 65.2% (90) were female, 38.4% (53) aged up to 39 years, 51.4% (71) self-declared white skin color, and 59.4% (82) had an income of 5 to 10 minimum wages.

Regarding education, 44.2% (61) were graduated, 27.5% (38) with specialization, 22.5% (31) residency, and 5.8% (8) master's or doctorate. Among the doctors interviewed, 97.8% (135) considered it important to carry out specific training activities in dementia. However, 60.9% (84) of the respondents denied having participated in training aimed at the diagnosis and management of dementia syndromes.

Regarding the frequency of diagnosing dementia, 52.9% (73) of the respondents stated that they had never/rarely been diagnosed. However, when they do, 67.8% (94) of doctors do it at a moderate/severe stage of the disease. Among the doctors who participated in the study, 15.9% (22) do not diagnose and refer the patient to a specialist.

Regarding the difficulties found in identifying a case of dementia, 61.6% (85) reported difficulties in differentiating the signs and symptoms of dementia compared to their main differential diagnoses, and 26.1% (36) identified the poor use of the complementary exams as a major difficulty. Participation in training in dementia significantly influenced the difficulties in identifying a case of

dementia and in differentiating signs and symptoms of dementia (Table 1).

Table 2 shows the main aspects of the difficult diagnose of dementia. Of the doctors interviewed, 59.6% (81) reported little confidence in the diagnosis, 38.7% (53) considered that a specialized service should diagnose, and 87.5% (63) complained about the low availability of time to diagnose. These aspects were associated with the variable participation in training ( $p < 0.05$ ). It was observed that 13.8% (19) of the professionals stated that no aspect hinders the diagnosis.

Regarding the regular use of tests to assess the cognitive function, 71% (98) of the doctors interviewed used the mini-mental state exam, 27.5% (38) used the verbal fluency test category animal and/or fruit, and 34.1% (47) used the clock-drawing test. Participation in training was significantly associated with the use of the verbal fluency test category animal and/or fruit ( $p = 0.017$ ), and the use of the clock drawing test ( $p = 0.015$ ) (Table 3).

Considering the tests to assess functional capacity, 69.6% (96) claimed not using any tests. Regarding the complementary exams requested to diagnose the subtype of dementia, the following stood out: 68.6% (94) of blood counts, 63.5% (87) biochemistry with glycemia, 67.9% (90) thyroid-stimulating hormone, 69.3% (95) vitamin B12, 51.8% (71) folic acid. Among the physicians interviewed, 27.5% (35) reported not diagnosing the subtype of dementia and referring the patient to the specialist.

**Table 1.** Difficulties found in identifying a case of dementia by doctors in Primary Health Care. Montes Claros, MG, 2018.

Variables	Total	Participated in training	<i>p-value</i>
	N (%)	n (%)	
Identify a case of dementia*			0.019
Yes	119 (86.2)	42 (35.3%)	
No	15 (10.9)	10 (66.7%)	
Differentiate signs and symptoms of dementia*			0.018
Yes	85 (62.5)	26 (30.6)	
No	51 (37.5)	26 (51.0)	
Apply memory tests considering their low specificity			0.558
Yes	27 (19.9)	9 (33.3)	
No	109 (80.1)	43 (39.4)	
Apply complementary exams considering their poor use			0.057
Yes	36 (26.5)	9 (25.0)	
No	109 (73.5)	43 (43.0)	

\*Presence of missing data.

**Table 2.** Aspects to hinder the diagnosis of dementia by doctors in Primary Health Care. Montes Claros, MG, 2018.

Variables	Total	Participated in training	<i>p-value</i>
	N (%)	n (%)	
Low diagnostic reliability*			<0.001
Yes	81 (59.6)	21 (25.9)	
No	55 (40.4)	32 (58.2)	
Make the specialized service responsible for carrying out the diagnosis*			0.019
Yes	53 (38.7)	14 (26.4)	
No	84 (61.3)	39 (46.4)	
Negative effect on the patient's biopsychosocial context*			0.631
Yes	11 (8.0)	5 (45.5)	
No	126 (92.0)	58 (38.1)	
Low availability of time to diagnose*			0.015
Yes	87 (63.5)	27 (31.0)	
No	50 (36.5)	26 (52.0)	

\*Presence of missing data.

**Table 3.** Tests used to assess the cognitive function in the practice of Primary Health Care doctors. Montes Claros, MG, 2018.

Variables	Total	Participated in training	<i>p-value</i>
	N (%)	n (%)	
Mini-Mental State Examination			
Yes	98 (71.0%)	42 (42.9)	0.160
No	40 (29.0%)	12 (30.0)	
Functional cognitive assessment scale (FUCAS)			
Yes	26 (18.8%)	11 (42.3)	0.713
No	112 (81.2%)	43 (38.4)	
Verbal fluency test, animal and/or fruit category			
Yes	38 (27.5%)	21 (55.3)	0.017
No	100 (72.5%)	33 (33.0)	
Clock-drawing test			
Yes	47 (34.1%)	25 (53.2)	0.015
No	91 (65.9%)	29 (31.9)	
Montreal Cognitive Assessment (MoCA)			
Yes	7 (5.1%)	3 (42.9)	0.564
No	131 (94.9%)	51 (38.9)	
CERAD* word list			
Yes	12 (8.7%)	6 (50.0)	0.419
No	126 (91.3%)	48 (38.1)	
IQCODE**			
Yes	11 (8.0%)	5 (45.5)	0.442
No	127 (92.0%)	49 (38.6)	

\*Consortium to Establish a Registry for Alzheimer's Disease (CERAD); \*\*Informant Questionnaire on Cognitive Decline (IQCODE).

Among the physicians participating in the study, 81.2% (112) stated that they had difficulties in caring for patients with severe dementia considering complex pharmacological treatment as the main difficulties 51.4% (71), and the lack of specialized care support 40.6% (56). Regarding the treatment and monitoring of patients with dementia in Primary Care, the main difficulties were the use of specific drugs 59.4% (82), antidepressants 13% (18), antipsychotics 29.7% (41), benzodiazepines, sedatives, and hypnotics 22.5% (31), management of stiffness, tremor and other neurological disorders 38.4% (53), support the needs of the caregiver and/or the family 52.9% (73), lack of time to monitor and treat the patient 42.0% (58).

Of the doctors interviewed, 4.3% (6) claimed not having any difficulties.

Regarding the frequency of planning specific monitoring for the caregiver of the patient with dementia, 67.0% (87) of the physicians reported that they had never/rarely done so. Regarding the influence factors for the physician not to inform the patient about the diagnosis of dementia, 31.9% (44) do not inform for the reason of the patient being at an advanced stage of the disease, 47.1% (65) are not able to understand the diagnosis information, and 21.7% (30) due to the family not wanting the patient to know their diagnosis.

## DISCUSSION

In the present study, the medical practice in the face of dementia in PHC was evaluated, and it was demonstrated that most of the professionals interviewed did not participate in specific training activities in dementia and had difficulties not only in the diagnosis but also in the management and monitoring of patients with dementia, which shows an incipient understanding of dementia. The strategies used for cognitive evaluation were diverse, showing the knowledge of these professionals about the tests available. However, tests for functional evaluation had limited use. Besides, most doctors reported difficulties in treating severe cases of dementia and reported little planning for the follow-up of these patients.

The lack of knowledge about dementia by health professionals affects the understanding of the clinical progression of this pathology, in addition to postponing diagnosis and treatment which are essential for the mitigation of symptoms and delay of the disease<sup>11</sup>. Despite the growing demand for dementia treatment, little has been done in terms of professional training on this subject, since in many countries there are no educational programs focused on this topic<sup>10</sup>. The curricular guidelines of the Medicine course broadened the discussion on medical training, signaling the importance of PHC in this process, which requires new institutional arrangements and the expansion of strategies to train healthcare professionals committed to resolving and quality practices<sup>2</sup>.

The Ministry of Health has created permanent education proposals for health professionals to provide better development of the professional practice<sup>19</sup>. In this context, the expansion of knowledge about the referral and counter-referral system through these educational actions contributes to developing an integrated system with the rapprochement between primary healthcare professionals and those working at other levels of the healthcare service<sup>20</sup>.

The effective management of dementia is based on solid knowledge about pathophysiology, clinical manifestation, and pharmacotherapeutic among health professionals. Thus, the absence of early recognition is related to the lower levels of doctors'

knowledge about the symptoms involved in dementia, which causes a barrier to reach timely diagnoses, which can be achieved through educational interventions, as demonstrated in a study carried out in 2017 in the United Kingdom<sup>21</sup>.

In another study carried out in the state of Rio de Janeiro, six UBS teams from three municipalities were assessed regarding the work of health care for the old person. A total of 54 people were studied, being 30 community healthcare workers, 12 professionals with higher education, and 12 professionals with secondary education. The analysis of the content of individual interviews used analytical categories from the speeches. This study showed the deficiency in the healthcare provided to this group and the need for actions to value and include this population through effective improvement in training and greater integration of services and use of protocols to guide proper management and quality healthcare<sup>22</sup>.

It is important to establish a training model in line with the particularities of the medical practice aimed at the old people and their main comorbidities<sup>23</sup>. A study of 450 health professionals in China evaluated the knowledge and approaches of cases of Alzheimer's disease and other dementias, demonstrating the importance of continuous learning about the pathology. Short-term educational interventions hinder the necessary in-depth learning or clinical confidence to recognize the dementia syndrome, requiring a deeper investigation to create policies related to the adequate recognition of the disease<sup>24</sup>. Therefore, in the case of specific dementia training, it is recommended that educational strategies take place, such as seminars, case discussions, availability of study materials, and management programs aimed at dementia syndromes along with the PHC teams, as the PHC is a center for Residency in Family and Community Healthcare. These measures tend to demonstrate a significant advance in the ability to suspect and deal with cases of dementia by healthcare professionals<sup>19</sup>.

Besides, it was found that the dementia diagnosis is established most of the time when the clinical condition is moderate to severe. This is because patients with this disease already present cognitive deficits years before diagnosis. Although memory

impairments are relevant, the degree and speed with which other cognitive functions are impaired during the years preceding the clinical onset of the disease remain unclear<sup>25</sup>. Added to this is the fact that patients, family members, and/or caregivers seek healthcare services when this disease is no longer in its onset<sup>3</sup>. Another reason for the late diagnosis of dementia is that cognitive impairment is believed to be normal in old people, which compromises the screening for cognitive deficit in old age<sup>26</sup>.

Regarding the differential diagnosis, it is important not to confuse depression with the early stages of dementia or a mild cognitive impairment<sup>27</sup>. It is necessary to emphasize that there may be an association between cognitive disorders and depression, and depression may be a predictor for dementia<sup>28</sup>.

Regarding the difficulties of doctor-patient communication, it is important to note that inadequate communication implies a lack of information and autonomy for the patient or caregivers<sup>29</sup>. Patients have the right to have truthful information related to their diagnosis and treatment, as well as the right to participate in decisions about appropriate management of their pathology<sup>30</sup>. Therefore, healthcare professionals must be trained for good communication skills<sup>31</sup>.

Regarding treatment, physicians assisting the patient must institute a Singular Therapeutic Project (STP), with the monitoring of the patient and the periodic review of the prescribed drugs and their possible adverse effects being essential<sup>32</sup>. Monitoring by the multi-professional team is also essential, which reduces the burden on caregivers in addition to benefiting the treatment of dementia. Note that those who directly care for people with dementia become more susceptible to the development of chronic diseases. Therefore, it is important to preserve the physical and mental health of these caregivers, which can be done with programs that include psychotherapy and regular physical activities<sup>33</sup>.

The present study has the possibility of information bias as a limitation. Data generalization

is still limited by convenience sampling. The low response rate obtained must be considered and can be associated with the online nature of the survey. Even so, the results of this study are important because they come from a pioneering survey in the municipalities of northern Minas Gerais.

The information and evidence obtained in the present study should encourage healthcare professionals, especially those working in PHC, to be continuously updated on this topic. The data obtained also demonstrated the importance of investing in dementia training during medical training. Also, few studies have been devoted to the analysis of medical training for dementia in PHC, which corroborates the importance of the topic and the conduct of more research on the subject.

## CONCLUSION

The present study demonstrated that the practical teaching directed to dementia provided to healthcare professionals in the study scenario during medical training is still incipient and requires improvement. The results obtained may contribute to the knowledge in the area and discussions regarding the teaching and learning process in the medical field.

The early diagnosis of dementias allows for a better prognosis of the disease, a better quality of life for the patient and their caregiver, and makes it possible to reduce costs with hospital care. Therefore, it is necessary that educational interventions occur with the Primary Health Care Team, and that protocols are improved for early diagnosis and management of dementia.

There must be an improvement in the referral system of the specialist professional in secondary health care, with consequent counter-referral and organization of the healthcare network for the old person. Furthermore, further studies on dementia are needed, as there is a shortage of literature on the subject.

Edited by: Yan Nogueira Leite de Freitas



## REFERENCES

1. Souza CFTD, Oliveira DLLD, Monteiro GDS, Barboza HMDM, Ricardo GP, Lacerda Neto MCD, et al. A atenção primária na formação médica: a experiência de uma turma de medicina. *Rev Bras Educ Med.* 2013;37(3):448-54.
2. Brasil. Ministério da Educação. Resolução CNE/CES nº 116 de 3 de novembro de 2014. Institui Diretrizes Curriculares Nacionais do Curso de Graduação em Medicina. *Diário Oficial da União.* 03 abr. 2014; Seção 1:17.
3. Costa GDD, Souza RA, Yamashita CH, Pinheiro JCF, Alvarenga MRM, Oliveira MADC. Avaliação de conhecimentos e atitudes profissionais no cuidado às demências: adaptação transcultural de um instrumento. *Rev Esc Enferm USP.* 2015;49(2):298-308.
4. Melo GA, Marinho JS, Madruga MLLH, Carvalho SMCR, Lemos MTM. Unidades básicas de saúde: uma análise à luz do programa nacional de melhoria do acesso e da qualidade na atenção básica. *Rev Temas Saúde.* 2018;18(1):5-16.
5. Caldeira ES, Leite MTDS, Rodrigues-Neto JF. Estudantes de medicina nos serviços de atenção primária: percepção dos profissionais. *Rev Bras Educ Med.* 2011;35(4):477-85.
6. Gottlieb LM, Alderwick H. Integrating social and medical care: could it worsen health and increase inequity? *Ann Fam Med.* 2019;17(1):77-81.
7. Santos IG, Batista NA, Devicenzi MU. Residência multiprofissional em saúde da família: concepção de profissionais de saúde sobre a atuação do nutricionista. *Interface Comun Saúde Educ.* 2015;19(53):349-60.
8. Santos Filho EJD, Sampaio J, Braga LAV. Avaliação de um programa de residência multiprofissional em Saúde da Família e comunidade sob o olhar dos residentes. *Tempus.* 2017;10(4):129-49.
9. Silva ILCD, Lima GS, Storti LB, Aniceto P, Formighieri PF, Marques S. Sintomas neuropsiquiátricos de idosos com demências: repercussões para o cuidador familiar. *Texto & Contexto Enferm.* 2018;27(3):1-11.
10. Nascimento HG, Figueiredo AEB. Demência, familiares, cuidadores e serviços de saúde: o cuidado de si e do outro. *Ciênc Saúde Colet.* 2019;24(4):1381-92.
11. Nichols E, Szoek CE, Vollset SE, Abbasi N, Abd-Allah F, Abdela J. Global, regional, and national burden of Alzheimer's disease and other dementias, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet Neurol.* 2019;18(1):88-106.
12. World Health Organization. mhGAP training manuals for the mhGAP Intervention Guide for mental, neurological and substance use disorders in non-specialized health settings version 2.0 (for eld testing). Geneva: WHO; 2017 [cited 2021 Jan. 23]. Available from: <https://apps.who.int/iris/handle/10665/25916>.
13. Sociedade Brasileira de Geriatria e Gerontologia. Rio de Janeiro: SBBG; 2021. Em dia mundial do Alzheimer, dados ainda são subestimados, apesar de avanços no diagnóstico e tratamento da doença. 2019 [cited 2021 Feb. 14]:[1 screen]. Available from: <https://sbbg.org.br/em-dia-mundial-do-alzheimer-dados-ainda-sao-subestimados-apesar-de-avancos-no-diagnostico-e-tratamento-da-doenca/>.
14. Boff MS, Sekyia FS, Bottino CMC. Prevalence of dementia among Brazilian population: systematic review. *Med J.* 2011;129(1):46-50.
15. Santos VC, Anjos KF, Boery RNSO, Moreira RM, Cruz DP, Boery EN. Internação e mortalidade hospitalar de idosos por transtornos mentais e comportamentais no Brasil, 2008-2014. *Epidemiol Serv Saúde.* 2017;26(1):39-49.
16. Fagundes TA, Pereira DAG, Bueno KMP, Assis MG. Incapacidade funcional de idosos com demência. *Cad Ter Ocup UFSCar.* 2017;25(1):159-69.
17. Jacinto AF, Citero VDA, de Lima Neto JL, Boas PJFV, Valle APD, Leite AGRK. Knowledge and attitudes towards dementia among final-year medical students in Brazil. *Rev Assoc Med Bras.* 2017;63(4):366-70.
18. Hermam L, Atri A, Salloway S. Alzheimer's disease in primary care: the significance of early detection, diagnosis and intervention. *Am J Med.* 2017;130(6):1-10.
19. Costa GDD, Spineli VMCD, Oliveira MADC. Educação profissional sobre demências na atenção primária à saúde: revisão integrativa. *Rev Bras Enferm.* 2019;72(4):1086-93.
20. Protasio APL, Silva PB, Lima EC, Gomes LB, Machado LS, Valença AMG. Avaliação do sistema de referência e contrarreferência do estado da Paraíba segundo os profissionais da Atenção Básica no contexto do 1º ciclo de Avaliação Externa do PMAQ-AB. *Saúde Debate.* 2014;38:209-20.
21. Lliffe S, Wilcock J. The UK experience of promoting dementia recognition and management in primary care. *Z Gerontol Geriatr.* 2017;50(Suppl 2):63-7.
22. Motta LBD, Aguiar ACD, Caldas CP. Estratégia Saúde da Família e a atenção ao idoso: experiências em três municípios brasileiros. *Cad saúde Pública.* 2011;27(4):779-86.

23. Brasil VJW, Batista NA. O ensino de geriatria e gerontologia na graduação médica. *Rev Bras Educ Med.* 2015;39(3):344-51.
24. Wang Y, Xiao LD, Luo Y, Xiao SY, Whitehead C, Davies O. Community health professionals' dementia knowledge, attitudes and care approach: a cross-sectional survey in Changsha, China. *BMC Geriatr.* 2018;18(1):122.
25. Zanini RS. Demência no idoso: aspectos neuropsicológicos. *Rev Neurociênc.* 2010;18(2):220-6.
26. Miranda LFJRD, Matoso RDO, Rodrigues MV, Lima TOLD, Nascimento AF, Carvalho FC, et al. Factors influencing possible delay in the diagnosis of Alzheimer's disease Findings from a tertiary Public University Hospital. *Dement Neuropsychol.* 2011;5(4):328-31.
27. Izquierdo I. Memória. Porto Alegre: Artmed; 2002.
28. Costa EC, Aguiar C, Blay SL. Diferenciação entre os quadros depressivos com comprometimento cognitivo na demência nos idosos. *Rev Debates Psiquiatr.* 2011;1(4):10-3.
29. Jorge R, Sousa L, Nunes R. Preferências e prioridades para os cuidados de fim de vida de pessoas idosas: adaptação cultural para o Brasil. *Geriatr Gerontol Aging.* 2016;10(2):101-11.
30. Vianna LG, Vianna C, Bezerra AJC. Relação médico-paciente idoso: desafios e perspectivas. *Rev Bras Educ Med.* 2010;34(1):150-59.
31. Harding R, Selman L, Beynon T, Hodson F, Coady E, Read C, et al. Meeting the communication and information needs of chronic heart failure patients. *J Pain Symptom Manage.* 2008;36(2):149-56.
32. Alves RP, Caetano AI. O papel do Médico de Família no diagnóstico e seguimento dos doentes com declínio cognitivo e demência. *Rev Port Med Geral Fam.* 2010;26(1):69-74.
33. Viale M, Palau FG, Cáceres M, Pruvost M, Miranda AL, Rimoldi MF. Programas de intervención para el manejo del estrés de cuidadores de pacientes com demência. *Neuropsicol Latinoam.* 2016;8(1):35-41.