

**FAMILY MEDICINE ASPECTS OF DEMENTIA IN
OLD AGE:**

**Examination of the attitudes and role of GPs in the
recognition and care of dementia and their views on the
barriers and enablers to dementia care**

PhD thesis

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Motto: “ ... people with dementia go an important way from the intellect through the emotion to the soul. What’s important remains, and only what’s not really important disappears. If society understood this, it would respect and treasure people living with dementia. ”

(Christine Bryden, dementia activist)

INTRODUCTION

At the beginning of my doctoral studies in 2013, I focused on the study of the general medical aspects of dementia in old age. During my work as a family physician, I have often faced the difficulties of caring for patients with dementia, the limitations of the care system, and the families’ carrying capacity.

Dementia in old age, the most common cause of which is Alzheimer's disease, is a growing health, social and economic challenge worldwide. The WHO predicts that the number of people with dementia will double by 2030 and triple by 2050.

In Hungary, as in other European countries, society has to take care of more and more older people, as the proportion of people suffering from cognitive decline associated with ageing will increase. The number of people with dementia in Hungary is estimated to be between 100,000 and 500,000. In many cases, they do not need hospital treatment, but care in the classical sense of the word. The burden falls largely on families and the primary care system. Currently Hungary does not have an adopted National Dementia Strategy and unfortunately, there is no well-functioning national professional association for dementia.

The role of general practitioners (GPs) is paramount in many countries, especially where the National Dementia Strategy adopted gives them a primary role in recognizing dementia and coordinating patient care. Despite its now well-defined role, several studies show that dementia in primary care is an under-diagnosed, under-recognized, poorly communicated, under-treated and under-cared-for condition. According to international recommendations, GPs have a key role to play in the following areas:

1. Recognize and diagnose dementia
2. Post-diagnostic care and support
3. Long-term care

Until recent years, we did not have any data on the role and opportunities of general practitioners in dementia care in Hungary. According to the data in the literature, neither in Hungary nor in Central Europe has a comprehensive, large-scale survey been carried out before nor has a study been published examining the role, tasks and attitudes of GPs in dementia care. Thus, getting to know and studying the role and attitude of family physicians came to the forefront of my interest.

OBJECTIVES

1. To get to know the attitude of Hungarian GPs towards dementia care and people with dementia. What do they think about dementia care, and how do they see their role and participation in it?
2. Explore the diagnostic and therapeutic habits in dementia care that characterize the daily routine of general practitioners in Hungary.
3. To get to know the enabler and barrier factors that, in the opinion of GPs, play a role in the timely recognition and modern management and care of dementia.
4. To study the possibilities and the role of education and training related to dementia in the context of GP involvement.
5. Using the study results, to formulate the tasks of GPs in modern dementia care.
6. Make recommendations for guidelines and educational programs to improve the role and attitudes of GPs in dementia care.

First research (2014) / First sub-study

GP opinion on primary care for dementia: GP attitudes towards the diagnosis, screening, therapy and care of dementia

Objectives

Screening, diagnosing, and caring for dementia is a growing challenge for primary care physicians worldwide due to the growing number of patients. This tendency can also be seen in Hungary in recent years. Due to their role as gatekeepers, the involvement of GPs is undisputed in terms of early diagnosis and screening. The focus of the first study was to assess the current daily practice of Hungarian GPs in relation to dementia care and to get to know their opinion on it. We have set the following goals:

1. Getting to know the daily routine and opinion of general practitioners in Hungary regarding the recognition and diagnosis of dementia.
2. Exploring the attitudes of GPs towards dementia screening.
3. Opinions of GPs on the therapy and care of people with dementia.

Methods

In order to explore the situation in Hungary, a research collaboration was established in 2014 with the participation of experts from the Institute of Primary Health Care of the University of Pécs and the Department of Psychiatry of the University of Szeged in order to carry out a nationwide survey. The “GPs’ Opinion on Primary Care for Dementia” project aimed to gather GPs' attitudes, daily routines, and opinions about the care of people with dementia, their views on screening, and their knowledge of dementia. The questionnaire containing 78 questions included the following topics: (1) Socio-demographic data, characteristics of the praxis, (2) Referral, (3) Examination, (4) Follow-up, (5) Therapy, (6) Screening, (7) Collaboration with caregivers, (8) Knowledge about dementia. The survey was conducted in 2014 over a ten-month period. All GPs actively involved in adult practices who participated in national GP conferences and mandatory trainings received the questionnaire, which then was completed anonymously, and free of charge. The results of the extensive study were processed in accordance with the research collaboration.

Statistical analysis of the results was processed using the IBM SPSS Statistics for Windows 24.0 program. The response rate varied from question to question (average completion rate: 91.8%), so this is presented separately for each point. Descriptive analysis and simple descriptive

statistics were used to process the questions. We examined frequencies for which we report item numbers (number of respondents) and percentage distributions.

Results

Of the participants, 402 GPs completed and returned the questionnaire to us. They represented every region and every county in the country. According to Central Statistics Office data, the number of GPs working in adult practices in 2014 was 4,850, so the completed questionnaires represented almost 10% of the GP community.

In our survey, with 6% missing respondents, the proportion was 50% female and 44% male. About half of the responding GPs worked in urban, 10% in the capital and 1/3 in the rural environment. More than half of the respondents were in the over-55 age group, and most were in the 56-65 age group.

Attitude about the circumstances of dementia diagnosis

GPs typically consider dementia only in case of severe symptoms. Dementia is most commonly thought to occur if the patient gets lost (312 cases, 77.6%), a relative recounts characteristic symptoms (301 cases, 74.8%), and in the case of a repeatedly reported memory complaint (246 cases, 61.1%). 95% of GPs think that dementia is only diagnosed in the moderate to severe stage. The referral routine of GPs is also characterized by the fact that the patient is referred to a specialist only in case of severe symptoms (37.3%), and at the explicit request of the patient (49.7%) or relatives (55.2%). Two-thirds of GPs (61.9%) stated that there were none or they do not know any memory clinics in their working environment. Assessed on a scale of 1 to 5, the majority of GPs consider the available specialist medical background to be rather not or only partially adequate (average: 2.78).

Attitudes towards screening for dementia

According to 86% of the Hungarian GPs interviewed, screening for dementia is an important task in primary care. 61% of GPs say screening or early detection, would lead to better therapeutic results. Opinions are divided on who is responsible for screening. Nearly 40% of respondents believe that this is a specialist task, and almost as many (36%) disagree with it, while 13% cannot decide whose task it is.

Attitudes towards the therapy and care of dementia

GPs' views on dementia therapy were measured using a five-point Likert scale. Based on this, the tasks related to therapy are assessed as more complicated than not (average 4.26). The therapy and care of patients with dementia are considered to be a task that requires a lot of attention (average 4.60). They know little about the medications used in the treatment of Alzheimer's disease. The proportion of GPs reporting this was 61.9% for Donepezil, 63.2% for Memantine and 64.4% for Rivastigmine. The vast majority of GPs prefer to use and recommend non-specific, circulatory and complementary medications for patients with memory impairment. Concerning home care, the managing the care of people with dementia and the exhaustion of caregivers is considered to be the most difficult situations to deal with.

Attitude towards dementia education and training

73% of respondents did not receive any dementia-related training, two years prior to the study. Also, of the remaining respondents, only 10% stated such participation, while 17% did not answer this question. Regarding the required forms of training, almost half of the respondents would consider a form of continuous medical education (CME) and one-fifth a special training method to be the most expedient for developing knowledge about dementia.

First research (2014) / Second sub-study

Examination of GPs' attitude towards people living with dementia and the importance of education in shaping their role

Objectives

The determining factor of GP involvement is the emotional background and the attitude of GPs relates to their patients with dementia. To explore this, the objectives of the second partial study were to:

1. Exploring the emotions and attitudes of general practitioners in Hungary towards their patients living with dementia.
2. Assessing GPs' daily routine of examining dementia in patients with suspected dementia.
3. Mapping the situation and possibilities of training related to dementia for general practitioners, assessing the participation rate.

4. Analysis of the impact of dementia-related training programs on the development of GP's attitudes and roles.

Methods

To explore the objectives of the study, we used ten questions from the extensive study material of the project "GPs' Opinion on Primary Care for Dementia" described in the first research / first sub-study. Simple-choice, multiple-choice, and five-point Likert-scale questions were used.

In order to show the exact correlations of the questions asked in the objective, only those questionnaires were selected in this sub-study in which both the attitudes describing the emotions and the questions about education were fully answered by the GPs. Following this set of criteria, the analysis was carried out in this sub-study by selecting 277 questionnaires.

For statistical analysis of test results, we used the IBM SPSS Statistics for Windows 24.0 program. Descriptive statistical methods (mean, relative frequency, frequency series, and distribution) were used to analyze the questions. To clarify the role of education, we performed comparative cross-tabulation analyzes. The level of correlation between education and willingness to test was determined by the Fisher-exact test, and the relationship between emotional attitudes and education was demonstrated by the ANOVA test. The results of the tests were considered statistically significant at $p < 0.05$. The value of p is given exactly in each case.

Results

In the second sub-study, the distribution of men and women was almost the same. Regarding the location of the practice, 2/3 of the respondents work in urban practice and 1/3 in rural practice. Nearly half of the GPs were over 55 years old. In most of the practices examined, the daily patient load was between 40 and 60 people.

GP testing practice in case of suspicion of dementia

Nearly half of the GPs surveyed (138 = 49.8%) stated that they would perform some form of tests to examine cognitive function in patients with a suspected dementia complaint. The 138 GPs performing tests will use the following test(s) to confirm the suspicion of cognitive impairment. Most, 81.2% use the clock drawing test, 58.7% use the MMSE test, and 56.5% ask space-time orientation questions. The writing as test is used by 26.1 % of GPs who perform any test, while a small 2.9% use other specific tests (eg TYM test). GPs who did not test (n = 132)

explained the lack of testing for the following reasons: 50% feel that they do not have time to do so during the office hours, 14.4% feel that they do not have enough knowledge about testing, 8.3% think that this is a specialist task, and 4.5% do not consider it important to perform such an examination.

Attitudes and feelings of GPs about people with dementia and therapy, and their relationship to training

The most common feelings associated with patients were regret (mean = 3.33), helplessness (mean = 3.28), and sadness (mean = 3.07). Regarding the difficulty of the therapy, the vast majority of the examined GPs (89.6%) stated that they find it difficult or very difficult to treat and care for patients living with dementia. Of the responding GPs, 225 (81.2%) had not been trained in dementia in the two years prior to the study, compared with only 52 (18.8%) who had participated in a training program on this topic.

Further analysis of the data showed that GPs who had received training in dementia showed a greater willingness and activity to take cognitive tests if they encountered a patient with suspected cognitive impairment (68.8%). While physicians who were not in this type of training were less motivated to test cognitive function in a similar situation (47.3%) The difference between the two groups was found to be significant (Fisher-exact test, $p = 0.010$).

The relationship between regret as an emotion and participation in education was not found to be significant (ANOVA test, $df = 1$, $F = 1.620$, $p = 0.303$). However, in the case of the second most dominant emotion, the feeling of helplessness, we found that this correlated with the participation in the training. It was stronger in those who did not have such training (ANOVA Test, $df = 1$, $F = 6.823$, $p = 0.009$).

Second research (2019) / First sub-study

Changes in the attitudes of GPs towards the diagnosis, screening and care of dementia in the period 2014-2019

Objectives

In Hungary, starting from 2015, as a result of many committed professional, civil, social and state initiatives, a range of opportunities to help and support dementia care has started to improve. With the present research, we aimed to assess the effects of ongoing positive initiatives at the level of family medicine by asking the following questions regarding participation in education, activity in dementia care, and GPs' attitudes:

1. Has the availability of dementia-related training programs and participation rates changed among GPs ?
2. What is the daily routine of general practitioners in Hungary in 2019 with regard to testing related to the recognition and diagnosis of dementia?
3. Is there a change in GPs' attitudes towards dementia screening?
4. What is the awareness of GPs about the possibilities helping and supporting dementia care?

Methods

To clarify the objectives of the study, we developed a self-administered questionnaire for GPs, in which we used certain questions from our first research in 2014, and supplemented them with questions to clarify our objectives. The questionnaires were distributed to all GPs in 2019 as part of the obligatory, post-graduate training course organized for general practitioners by the Institute of Basic Health Care of the University of Pécs.

The responses were processed with the IBM SPSS Statistics for Windows 24.0 program. A descriptive statistical analysis of the questions was performed. To support the importance of education and training, and to compare the changes in the answers to the same questions of the 2014 and 2019 surveys, we performed cross-tabulation analyzes. The level of correlations was examined by the Chi-square test or Fisher-exact test, depending on the number of items. The level of significance was set at $p \leq 0.05$, and the p value is given accurately in each case.

Results

247 of the GPs participating in the post-graduate training completed and returned the questionnaire to us. Slightly more than half of the responding GPs were women, with nearly forty percent the men. In terms of age distribution, the older age group typically dominated, with three-quarters of respondents in the over-45 age group. In terms of practice location, the ratio of general practitioners working in the capital/county seat cities, other cities and villages was approximately one third.

Changes in GPs' participation rates in dementia-related training programs

In 2019, 44.9% of respondents stated that they had participated in such trainings, while 52.6% did not. Compared to the results of our first research, the proportion of GPs who have received training on a dementia topic has more than doubled in five years. The increase is significant (Chi-square test 62.543, $df = 2$, $p = 0.001$).

Changes in GPs' testing practices

With regard to cognitive testing habits, in 2019 we found that 55.1% of GPs participating in the study performed some form of cognitive testing in the event of a complaint or suspicion of cognitive impairment. Statistically comparing the results for 2014 and 2019 by cross-tabulation analysis, the change in testing activity was not found to be significant (Chi-square test 3.991, $df = 2$, $p = 0.136$). Participation in training and education related to dementia also showed a correlation with the willingness of GPs to test in our 2019 study. Among participants in such trainings there was a higher proportion of GPs who carried out testing for suspicion (67.0%) than among those who did not attend any dementia-related training (Fisher-exact test, $p = 0.002$).

In our 2019 study, we examined with a separate question whether GPs perform testing on a screening basis. In the asymptomatic state, only 14.6% of GPs perform a cognitive function test.

Changing in attitudes toward dementia screening

The general practitioner's attitude related to the diagnosis and screening of dementia was examined with three five-point Likert-scale questions. 90.7% of GPs believe that screening and examining cognitive function is an important task in primary care. 85.8% of GPs believe that early screening for dementia leads to better therapeutic outcomes. More than half of GPs

(56.7%) completely or somewhat disagree that screening and diagnosis would be primarily a specialist's task.

The values for the screening attitude were compared with the results obtained in our 2014 survey for the same questions. The importance of dementia screening in primary care was already considered high in 2014 (86.3%), so this value showed only a slight increase to 90.7%. The difference was not significant but was close to it (Fisher's exact test, $p = 0.107$). A greater change can be observed in that screening and early diagnosis can lead to better therapeutic outcomes. Among respondents, agreement with this statement increased from 61.4% to 85.8% (Fisher-exact test, $p = 0.001$). Furthermore, there has been a significant shift in attitudes towards GPs' involvement in screening. In 2014, only 35.8% of GPs disagreed with the statement that screening would be primarily a specialist task, this proportion rose to 56.7% in 2019 (Fisher-exact test, $p = 0.001$).

Awareness of dementia care support services

Nearly half of the family physicians surveyed (44.5%) are familiar with daily-care that provides dementia care in their work environment. One-third indicated to be familiar with the availability of nursing services or Alzheimer's Cafés. A nearly similar proportion (29.1%) said they did not know of any dementia care services. Of those who attended dementia-specific training programs, 38.7% were aware of the Alzheimer Café option, compared with only 21.5% of those who did not. The difference is significant (Fisher-exact test, $p = 0.004$).

Second research (2019) / Second sub-study

Survey of enablers and barriers to the diagnosis and care of dementia in old age among Hungarian general practitioners

Objectives

Dementia is one of the most underdiagnosed diseases worldwide, meaning that the disease is often not recognized in its early stage. We can report similar experiences in Hungary, which is supported by our previous research results. There may be several reasons for the lack of early recognition and diagnosis.

In the present study, we examine these barriers in terms of personal aspects of GPs and system-level factors:

1. To get to know the point of view of Hungarian GPs regarding the factors that help and inhibit the screening, diagnosis and care of dementia.
2. Assess who, in the opinion of GPs, can be held primarily responsible for late diagnosis?
3. Assessing perceptions of external factors influencing dementia care:
 - lack of effective treatment
 - effect of diagnosis on the patient
 - financial support
 - time available
 - stigma
 - access to specialist care services
4. Assessment of factors that may be related to internal characteristics influencing dementia care:
 - a. frustration vs. experience of success
 - b. knowledge
 - c. communication skills

Methods

To clarify the questions above, we used the relevant questions of the self-administered questionnaire described in the first sub-study of the second research. Next to a simple-choice question, 8 five-point Likert-scale questions and 3 four-point Likert-scale questions were used. The responses were processed with the IBM SPSS Statistics for Windows 24.0 program. A descriptive statistical analysis of the answers was performed for each question. Frequencies

were calculated, element numbers (number of respondents) and percentage distributions were reported. To examine the correlations between the level of knowledge and communication skills related to education, we performed cross-tabulation analyzes and examined the extent of the correlations using the Fisher-exact test. The significance level was set at $p < 0.05$, and the p value was reported in each case.

Results

Demographic data were presented during the second research / first sub-study.

Responsibility for late diagnosis

Regarding the issue of responsibility for the late diagnosis, nearly 40% of responding GPs believe that relatives can be held responsible for this, a quarter agree that it depends on the involvement of GPs, while only 5% think it would be the responsibility of patients.

Opinions of GPs on the factors that help and inhibit dementia care

More than half of GPs (56%) feel that treating dementia is more frustrating than successful.

38.1% of GPs believe that screening for dementia is not important because of the absence of effective treatment. In contrast, almost two-thirds (59.8%) completely or somewhat disagree with this statement.

The majority of GPs (81.2%) believe that an earlier diagnosis would be more helpful than disadvantageous for the patient and their family.

According to the opinion on financial support for dementia care, the responding GPs almost uniformly (86.6%) believe that more financial resources would be needed to care for people living with dementia.

Respondent GPs feel that they do not have enough time to screen for and care for dementia. They expressed the highest level of agreement with this statement (87%), while 12.6% indicated no agreement.

One of the most effective ways to treat the lack of time indicated by GPs is to involve external helpers into the dementia care process. 97.2% of the responding GPs agree with this statement.

According to two-thirds (67.2%) of GPs, the fear of stigmatization of patients and their families is still a significant obstacle to early diagnosis.

71% of responding GPs do not consider access to dementia specialist care services to be adequate.

Opinions of GPs about their knowledge and communication skills about dementia care

Half of the interviewed GPs consider their level of knowledge about dementia screening and diagnosis to be good and almost good. Examining the correlations, a cross-tabulation analysis shows that those who have been in dementia-related training programs rated their level of knowledge in this area as good. The difference was found to be significant (Fisher-exact test, $p = 0.000$).

In terms of therapy and care, a higher proportion (61.2%) thought that their knowledge was less good or not good. The correlation with education was also significant here (Fisher-exact test, $p = 0.031$).

In terms of communication on dementia issues, nearly two-thirds (65.2%) of GPs rate their skills as good or very good. A positive correlation also exists for this question, i.e., those who had been in dementia-related education rated their communication skills better in this area as well (Fisher-exact test, $p = 0.014$).

THE RESULTS OF THE PhD DISSERTATION

1. In Hungary, the survey entitled “General Practitioner's Opinion on Primary Care for Dementia” was conducted as a gap-filling study in 2014. In this, we got an idea of the situation of dementia care in primary care and the attitude and daily routine of Hungarian GPs in this field.
2. The majority of Hungarian GPs only think about the existence of dementia in case of severe symptoms (eg getting lost). They see that the diagnosis of dementia is made only in patients with moderate to severe stages.

It is characteristic of the daily routine of GPs that 49% of them do not perform a special test for cognitive function, even if they suspect an impairment. This practice is somewhat contrasted with the GPs’ approach to screening, which believes that screening

is very important and timely recognition would lead to better therapeutic outcomes. The main reason of missing the examination was lack of time and lack of specific knowledge. A referral to a specialist is only initiated in the case of severe, marked symptoms or at the explicit request of relatives. The opinion of GPs is divided in half as to whether or not testing cognitive functions is a specialist task. Two-thirds of GPs are not aware of or do not know any special memory clinics in their work environment. Most of them do not or regard the available specialist backup only partially adequate. Hungarian GPs find the treatment of dementia complicated and consider the management and care of patients living with dementia to be a difficult task that requires attention task. Specific therapies are hardly known, according to their statements.

3. Feelings of helplessness and regret are the determining emotional factors that shape the attitudes of Hungarian GPs towards dementia care.
4. More than 80% of GPs did not attend dementia-specific training programs for two years prior to the 2014 survey. There was a correlation between education and daily routine as well as their attitude. GPs who participated in dementia-specific training programs showed a higher proportion of testing activity and were less likely to feel helplessness.
5. In the year of our second research in 2019, almost half of the interviewed GPs stated that they had participated in any training or education related to dementia care in the two years prior to the study. This represents an increase of nearly 30% compared to our 2014 survey results. The effect of this has also triggered a change in the attitudes and daily practices of GPs.

Slightly more than half of GPs test for cognitive function if dementia is suspected. Still very few GPs still perform such tests on a screening basis. Lack of time remains the main obstacle in the implementation of dementia screening in primary care.

It points in the direction of a change of attitude that almost all GPs still feel that dementia screening and testing is an important task in primary care, but the proportion of those who believe that screening and early recognition can lead to better therapeutic results

has increased significantly. In addition, the proportion of those who do not consider screening to be primarily a specialist's task is significantly higher.

Based on our study, our previous hypothesis that training on dementia has highlighted the importance of shaping the attitudes, knowledge, and more active role of GPs has been established. Our results confirm that a higher proportion of GPs who take part in training test for dementia in case of complaints. Many of them are familiar with such forms of support services as the Alzheimer Café. They are also less likely to believe that diagnostic tests and screening should be exclusively done by a specialist.

6. Regarding the enablers and barriers in dementia care it is identified, that there is a lack of time in primary care to screen for dementia and provide an appropriate level of care. Furthermore, there is a consensus among GPs that the involvement of external helpers and more financial support into the system would be needed in order to provide higher quality care. They agree with the finding that an earlier diagnosis is more helpful than disadvantageous for both the patient and the family. In contrast, two-thirds still consider stigmatization as a major problem. All of these factors result in an attitude that most GPs find their role in dementia care more frustrating than successful.

Half of the general practitioners rate their knowledge of screening and diagnosis of dementia as good, while the other half do not consider it as good. Opinions about their level of knowledge about the treatment and care of dementias are worse, with almost two-thirds saying their knowledge is not good. In terms of communication skills related to dementia, however, the majority believe their knowledge and skills suitable. Both the assessment of the level of knowledge and the opinion on communication skills show significantly better results among GPs who received some form of dementia training prior to the study.

CONCLUSION

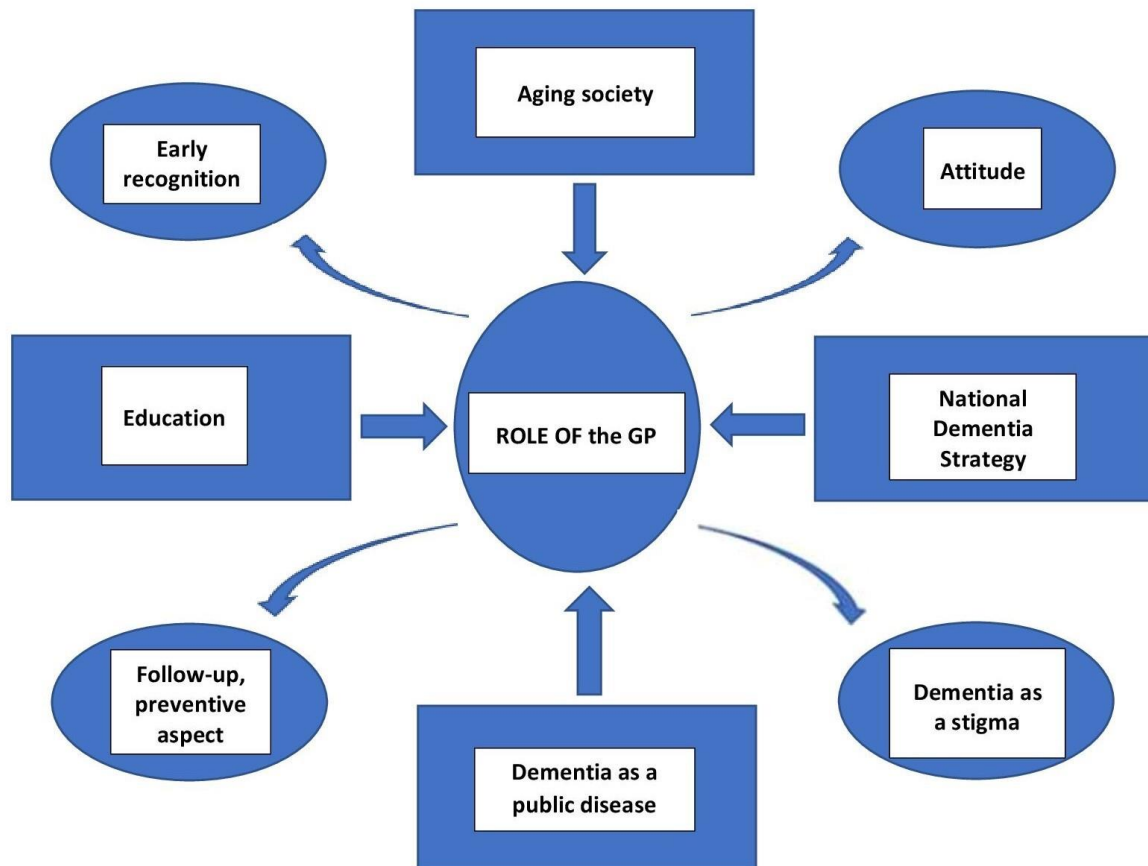
Alzheimer's Disease International summarizes their findings about the state of primary care, including the role of GPs, in the “World Alzheimer's Report 2016” as the following:

- Dementia today is an underdiagnosed, poorly recognized, poorly communicated, under-treated and under-cared condition in primary care.
- In many places, primary care does not provide continuous, high-quality care for people with dementia.
- With proper responsibility, GPs can achieve similar results in care as specialists.
- Recognition of dementia can be greatly improved in primary care by introducing appropriate educational programs.

- Reasonable screening with appropriate tests will help establish a diagnosis in time.
- In dementia care, it is expedient to introduce care models that emphasize the division of tasks, where, with the appropriate definition of responsibilities, tasks can be transferred from specialists to generally trained professionals (specialist → GP → case manager/dementia coordinator).

In order to implement these recommendations, a more proactive approach to the care of dementia and those who are living with dementia has been launched in many countries around the world over the past decade. There is a need to raise the level of dementia care based on well-designed and managed research programs and awareness campaigns.

In recent years, several research programs and projects have been implemented in Hungary, which may be the basis for further development in the field of dementia care. In primary care, family physicians are at the centre of this change of attitude, so their preparation and training are key tasks. The ratification of a government-supported National Dementia Strategy, which sets out the role and cooperation of all sectors concerned, is an indispensable criterion for further development. Defining the role of GPs is an important element in improving care and shaping the desired change in attitude.



The introduction of a National Dementia Strategy and the strengthening of the role of primary care

Knowing the epidemiological predictions, there will be many challenges in the coming decades, even in developed economies, to achieve high-quality, comprehensive, safe, and cost-effective dementia care. The National Dementia Strategy should determine a planned and complex program to achieve this goal. Our research results can provide important data for the next steps in the development of the Hungarian National Dementia Strategy, which includes the role of general practitioners. It draws the attention of decision-makers to the urgent need for changes in primary care in order to develop high-level, quality and decent dementia care.

Establishing a timely dementia diagnosis and developing an integrated care system

Primary care, as the first line and centre of care, should not only act as an intermediate towards specialist care but should also play a coordinating role in bringing together and delivering services from the wider health and social system to the patient and his or her family. To this end, interdisciplinary collaborations need to be developed to provide high-quality dementia

management in both diagnostics and care. Innovative models view the course of dementia as a disability rather than a fatal illness. Accordingly, care is provided with a holistic, patient-centred approach, as well as with a positive attitude to maintain remaining abilities, and treating the patients and their families in a complex practice. This approach can be realized through the cooperation of several professionals from different fields, using interprofessional methods.

It is imperative that in Hungary a special network is being developed for dementia care with the participation of multiple disciplines using interprofessional methods. The access to this service must also be improved.

. The role of GPs would be greatly enhanced by the development of good interdisciplinary cooperation and collaboration with physicians in other relevant fields. In addition, it would be important for GPs to know local resources, and support organizations, and to have good access to and use of online information resources in their daily work. An important element of the National Dementia Strategy is to develop protocols and professional guidelines that address the challenges of primary care and apply the principles of integrated dementia care.

Specific training and further training of general practitioners in dementia

By increasing knowledge about dementia, we can positively influence the help-seeking behaviour of both society and the care system, including GPs. Dementia care is a complex task and there are many unique aspects to training that need to be tailored to these special needs. In the case of general practitioners, the most important areas to be developed in dementia education are the issues of creation of a timely diagnosis, disclose the diagnosis and the aspects of communication, as well as the wide knowledge of the help-support organizations and opportunities. Development requires a change of approach in education and the application of modern, innovative teaching methods in dementia training at both undergraduate and postgraduate levels.

My research can help raise awareness of the global problem of dementia among GPs and the whole medical community. The Hungarian care system, including general practitioners, must be prepared for this challenge. Ideally, the GP will act as a “gatekeeper”, playing a significant and unavoidable role in early detection, timely therapy, proper communication and family support . With my professional and social activities in the field of dementia care, I would like to contribute that in the future Hungary will join the ranks of “dementia-conscious” countries,

thus promoting higher quality, more humanistic and decent care for our patients living with dementia and their families.

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