

CARING FOR PEOPLE WITH COGNITIVE IMPAIRMENT (CI) DURING THE COVID-19 PANDEMIC

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INTRODUCTION

SARS-CoV2 infection has produced many changes in our lives, both through the rules of physical distance and isolation imposed, and through a series of restrictions in social and cultural life. Access to medical services was also limited, and patients often neglected their own illness, either for fear of becoming infected by going to hospitals, or because they could no longer afford their daily medication or to attend periodic consultations.

Patients with dementia or other cognitive impairment have also been affected by this pandemic, especially those living alone. For many people with cognitive impairment (CI), maintaining travel restrictions, physical distance, and wearing a face mask is a real challenge. It is estimated that about a third of people with dementia live alone, sometimes being helped by relatives (children, relatives, neighbors), sometimes lacking any help. A qualitative study conducted in the UK on a sample of 61 participants (30 people with dementia and 31 family members) sought to understand how patients living with dementia and their families experienced remote interaction with healthcare during the COVID-19 pandemic. The study's authors report, among other things, the reaction to avoid health services for fear of infection, as well as difficulties in accessing tele-consultations such as difficulties caused by memory problems, hearing disorders, difficulties in planning telephone consultations, with high reprogramming rates, difficulties arising from limited technology skills [1].

From the family doctors point of view, monitoring people with cognitive impairments during the pandemic was a challenge through the need to communicate remotely, by phone, email or other online technologies, physical contact being frequently restricted or limited. The elements that can easily escape during a teleconsultation are represented by the difficult identification of the progression of the disease, the episodic aggravations, the new problems appeared, the depression that is frequently present. Also, the detection of new cases is greatly hampered by the lack of a natural consultation framework. Even when the consultation takes place in the office, the stress, the fear of infection, the

At SARS-CoV2 infection has produced many changes in our lives, both through the rules of physical distance and isolation imposed, and through a series of restrictions in social and cultural life. Patients with dementia or other cognitive impairment have also been affected by this pandemic, international studies documenting a decrease in the rate of face-to-face consultations by up to 65% during this period. Currently, there is a lack of information on identifying new cases of cognitive impairment during the COVID-19 pandemic as well as the management of patients previously diagnosed in family doctors' offices in Romania. In this context, the present study aimed to describe the activity of identifying new cases of cognitive impairment at the level of family doctors' offices, their referral to specialized services and the management of these patients in evidence between March and December 2020. An electronic questionnaire developed by the authors was distributed via mailing lists over five days. The questionnaire was answered by 62 family doctors, who report a small number of new cases being identified between March and December 2020, of which only half have been referred for evaluation to the specialist. Regarding patients already diagnosed with cognitive disorders, about half of the respondents managed to consult over 70% of them. The majority of the family doctors continued to provide face to face services at the office and about half of them opted for a mix of teleconsultations and face to face consultations. The results of this study indicate the increase of undiagnosed CI cases and difficulties related to the management of existing cases during the pandemic, difficulties generated primarily by the limitations of teleconsultations, poor communication with specialists and the absence of medical letters. Given the fact that family doctors have constituted the first line of healthcare service provision during the pandemic, it is all the more important to update their knowledge in the field of cognitive disorders.

Keywords: SARS-CoV2, COVID-19, cognitive impairment, Romania

reduction of the consultation time, the general context actually increase the unnatural situation and often the patient hesitates to expose his problems. A qualitative study conducted in India in order to explore the experiences and barriers faced by physicians involved in dementia care during the pandemic, which included a sample of 50 family physicians, identified as difficulties during this period challenges in assessing and dementia screening (84%), drug overuse (67%), perceived dissatisfaction with healthcare (52%) and the need for virtual training (80%) [2].

Studies analyzing the management of periodic medication for patients with dementia or other cognitive disorders identify some specific features of family medicine and specific difficulties encountered during the pandemic under the following aspects: medication change, dose adjustment, introduction of new drugs in the treatment scheme. Patients who cannot go to the doctor may receive the medication regimen, prescription or other recommendations through various online means, but for many of them, these ways of communication are not familiar. Accessibility to the Internet and modern media is uneven [3, 4].

Other international studies document a decrease in the rate of face-to-face consultations by up to 65% during this period and draw attention to the fact that the decrease in the rate of direct presentation consultations may have an effect on both recognition and detection of new cases and on observation of chronic patients' deterioration, patients being in the evidence of the family doctors. [5].

Currently, there is a lack of information on identifying new cases of cognitive impairment during the

COVID-19 pandemic as well as the management of patients previously diagnosed in family doctors' offices in Romania. In this context, the present study aimed to describe the activity of identifying new cases of cognitive impairment at the level of family doctors' offices, their referral to specialized services and the management of the patients who were already monitored by the family doctors during the pandemic (i.e. March to December 2020).

MATERIAL AND METHOD

This observational study was conducted over a five-day period by distributing and completing a questionnaire in electronic format. The questionnaire was developed by the team of authors and subsequently distributed on the communication lists of National Society of family Medicine (SNMF). The questionnaire consisted of a series of 16 questions structured on 3 sections: a) demographic data and the size of the medical office (sex, environment of origin, age group, number of people on the list); b) questions regarding the identification of new cases of cognitive impairment (CI) and the management of cases under observation (number of consultations for suspected diagnosis of CI, number of referrals to the specialist, number of people with registered CI, percentage of patients with CI consulted during the reference period, ways of consultation - teleconference, face-to-face, at home), the reasons for requesting the consultation, the percentage of patients with CI who were re-evaluated during the reference period) and c) feed-back section regarding the challenges experienced and the need to train family doctors in the field of cognitive disorders (difficulties encountered during the reference period, interest in updating knowledge in the field). The data analysis was descriptive and was performed using SPSS 20 statistical software.

RESULTS

Participants

The questionnaire was answered by 62 family doctors, of which 93.5% were women. Regarding the environment of origin, 88.7% of the respondents practice family medicine in urban areas and 11.3% in rural areas. 48.4% of the respondents were between 45-54 years old, and 45.2% between 55-64 years old. Regarding the number of patients in the primary records, a percentage of 46.8% of the family doctors surveyed had capitation lists with more than 2000 patients, 33.3% had lists with 1500-2000 patients, and 19, 4% have between 1000-1500 patients. It should be mentioned that the 62 family doctors serve together a population of over 100,000 patients.

Identifying and referring of new cases of cognitive impairment

During the study period, 921 patients were suspected of having some form of cognitive impairment. Of these, 412 (44.73%) patients were sent for evaluation to physicians specializing in psychiatry or neurology (Table 1).

Management of patients with cognitive disorders in evidence

Despite the large number of people enrolled on the capitation lists of the vast majority of responding physicians, we

Table 1. Consulted persons and persons sent for evaluation to the specialist doctor

	N.	Min.	Max	Average/ Total	Standard deviation
Persons consulted	62	0	100	15.79 (921)	19.16
References for evaluation	59	0	50	7.13 (421)	9.67

found that the number of patients with cognitive impairment in the records of family physicians is low: 24.2% of family doctors have between 10-19 patients diagnosed with CI, 19.4% of family doctors have between 20-29 such patients in evidence. Cumulatively, 54.84% of GPs have less than 30 CI patients under surveillance and approximately 85% of physicians have less than 70 CI patients (Table 2).

Only 16.13% of family physicians stated that they were able

Table 2. People with cognitive disorders in the records of family doctors

No. of people with CI recorded	Relative frequency No (%)	Cumulative frequency No (%)
under 10	7 (11.29)	7 (11.29)
between 10 - 19	15 (24.19)	22 (35.48)
between 20 - 29	12 (19.35)	34 (55.84)
between 30 - 39	5 (8.06)	39 (62.90)
between 40 - 49	4 (6.45)	43 (69.35)
between 50 - 59	9 (14.52)	52 (83.87)
between 60 - 69	1 (1.61)	53 (85.48)
between 70 - 79	2 (3.23)	55 (88.71)
between 80 - 89	2 (3.23)	57 (91.94)
over 100 persons	5 (8.06)	62 (100)
Total	62 (100)	-

to consult at least once the patients with cognitive impairment that were in evidence between March and December 2020 and about half of them answered that over 70% of these patients benefited from services provided by the family doctor during March-December 2020, for various reasons (table 3).

Table 3. Patients with cognitive impairment consulted in family doctors' offices during March-December 2020

% of CI patients consulted between March and December 2020	Relative frequency No (%)	Cumulative frequency No (%)
100%	10(16.13)	10(16.13)
between 90 si 99%	5(8.06)	15(24.19)
between 80 - 89%	12(19.35)	27(43.55)
between 70 - 79%	7(11.29)	34(54.84)
between 60 - 69%	4(6.45)	38(61.29)
between 50 - 59%	5(8.06)	43(69.35)
between 40 - 49%	5(8.06)	48(77.42)
between 30 - 39%	3(4.84)	51(82.26)
between 20 - 29%	5(8.06)	56(90.32)
between 10 - 19%	3(4.84)	59(95.16)
under10%	3(4.84)	62(100.00)
Total	62(100)	-

The vast majority of family doctors continued to consult in the office, with only 17.74% of respondents offering exclusively teleconsultations or a mix of teleconsultations and visits to patients' homes. 19.35% of the respondents offered consultations exclusively at the office. Almost half of the respondents (46.77%) offered a mix of office consultations and teleconsultations (by phone and email). (table 4)

Table 4. Type of consultations offered by family doctors

Consultations were offered	No (%)
in the office	12(19.35)
in the office, at home	4(6.45)
in the office, by teleconsultation	29(46.77)
in the office, by teleconsultation, at home	6(9.68)
by teleconsultation	8(12.90)
by teleconsultation, at home	3(4.84)
Total	62(100.00)

Regarding the most common reasons why patients with cognitive impairment requested consultations, they were in order of frequency of responses provided by family physicians: prescriptions for cognitive impairment (91.93%), depressive disorder (90.32%), management of hypertension (hypertension) (85.48%), anxiety disorders (79.03%), requesting referrals to psychiatrists or neurologists (75.80%), management of diabetes (72.58%), Parkinson's disease (69.35%), acute conditions other than SARS-CoV2 infection (53.22%), suspected diagnosis with SARS-CoV2 (contact, symptoms) (46.77%), chronic kidney disease (40.32%), monitoring of the evolution of SARS-CoV2 infection (37.09%), diseases chronic respiratory (37.09%), administrative aspects (isolation, quarantine decisions) - related to SARS-COV2 (35.48%).

Of the patients with cognitive impairment already monitored, more than half of the respondents (54.84%) stated that less than 20% of these patients received a reassessment by a psychiatrist/neurologist between March and December 2020 (table 5).

Table 5. Patients who benefited from re-evaluation at a psychiatrist / neurologist

% of CT patients who received re-evaluation psychiatry / neurology	Relative frequency No (%)	Cumulative frequency No (%)
none	4(6.45)	4(6.45)
under 10%	23(37.10)	27(43.55)
between 10 - 19%	7(11.29)	34(54.84)
between 20 - 29%	6(9.68)	40(64.52)
between 30 - 39%	6(9.68)	46(74.19)
between 40 - 49%	2(3.23)	48(77.42)
between 50 - 59%	7(11.29)	55(88.71)
between 60 - 69%	3(4.84)	58(93.55)
between 70 - 79%	1(1.61)	59(95.16)
100%	3(4.84)	62(100.00)

Difficulties encountered in practice in the period March - December 2020

Regarding the difficulties identified in the management of patients with cognitive disorders, the main challenge

18 was the difficult access to specialized services

(59.68%), the lack of screening tools that can be used by family doctors (58.06%), respectively lack of medical letters (50%) (table 6).

Table 6. Difficulties encountered in the management of patients with cognitive disorders

Difficulties encountered during March-December 2020	No (%)
access to specialist consultation	12 (19.35)
access to specialist consultation, lack of medical letters	10 (16.13)
lack of medical letters	3(4.84)
lack of screening tools usable in teleconsultation at the level of the family doctor	16 (25.81)
lack of screening tools usable in teleconsultation at the level of the family doctor, access to specialist consultation	2(3.23)
lack of screening tools usable in teleconsultation at the level of the family doctor, access to specialist consultation, lack of medical letters	13(20.97)
lack of screening tools usable in teleconsultation at the level of the family doctor, lack of medical letters	5(8.06)

In addition to these challenges, family physicians had the option to freely answer the question "What other difficulties related to the management of patients with cognitive impairment did you encounter between March and December 2020?" The answers offered can be grouped into the following categories: a) difficulties related to accessibility to other specialized services: transformation of most hospitals into COVID support hospitals, reluctance of patients and relatives to physically access medical services for any fear of SARS-CoV2 infection; b) difficulties related to communication with patients and relatives - reluctance to assume the suspicion of diagnosis of cognitive impairment; c) the limits of teleconsultations, especially in the absence of screening tools at hand for family doctors; d) lack of medical letters - fact that made it impossible to further prescribe the treatment; e) discontinuation of treatment.

Regarding the interest of family doctors in updating knowledge in the field of cognitive disorders, all doctors included in the survey confirmed the increased interest in updating knowledge in the field of cognitive disorders, the vast majority of doctors opted for online courses (66.1%), webinars (54,8%), or specific sessions within the events organized by the family doctors (50%).

DISCUSSIONS

The phenomenon of underdiagnosis of patients with cognitive disorders in the family doctor office is pre-existing in the COVID pandemic and can be explained by a number of factors highlighted in the literature such as: lack of screening tools; a lack of up-to-date knowledge in the field of cognitive impairment, which often means that problems with cognitive impairment are detected late, only when relatives are no longer able to cope; difficult access to specialized services; a lack of education of the population in the field of cognitive disorders, both patients and relatives avoiding the diagnosis; difficult access to specialized services and investigations - with an impact on



both diagnosis and patient monitoring as well as a communication deficit within the team of patients with CI [6, 7].

On this "pre-pandemic context", the peculiarities of the pandemic period overlapped. First of all, this period generated an "explosion" of legislative regulations in order to adapt the medical activity to the new context, regulations that are often incoherent, sometimes even contradictory. This aspect has further burdened the work of family physicians, requiring additional time to update and integrate the new regulations into practice. Secondly, the introduction of remote consultations (teleconsultations) is an extraordinary facility for patients and doctors, ensuring access to the services provided by family doctors during this period. However, in the case of patients with cognitive impairment, teleconsultation allows only to a limited extent active screening to identify patients with such health problems. Thirdly, access to services in the outpatient clinic without a referral from the family doctor was allowed by Emergency Ordinance 720. This regulation is in favor of patients without a diagnosis of CI (those previously diagnosed fall under another regulation), but in the context of poor communication between the family doctors and doctors in other specialties, it resulted in insufficient information of the family doctors. In addition, during this period the access to hospital services was limited, many hospitals in Romania becoming COVID support hospitals, thus restricting the access of patients with non-COVID diseases to specialized services.

In this context, the results of the present study illustrate a number of foreseeable consequences, especially in terms of detecting new cases of cognitive impairment, a small number of new cases being identified by the family doctor between March and December 2020, of which only half being sent for evaluation to the specialist outpatient clinic. The long-term impact of this phenomenon is difficult to predict, but it is expected that these patients will "come to light" at some point, at an advanced stage and more difficult to manage, adding an additional burden to both families, as well as at the level of the health system.

Regarding patients already diagnosed with cognitive disorders, about half of the respondents managed to consult over 70% of them, which is a pretty good percentage considering the context generated by the pandemic. Most of the family doctors continued to provide services at the office and about half of them opted for a mix of teleconsultations and consultations at the office. The results are similar to those reported in international studies, which show a decrease of up to 65% in office consultations [5]. In the context in which patients with cognitive disorders have other comorbidities and go to the family doctor for different types of services, the most common reasons for consultation were prescriptions for cognitive disorders, depressive disorders, HTA management or anxiety disorders.

These results, correlated with a self-reported lack of communication between family physicians and psychiatrists / neurologists, indicate an deficient level of service provision to patients diagnosed with cognitive impairment. In addition, during this period, when patients accessed mainly the services provided by the family doctor, the lack of medical letters made impossible to transcribe the treatment that these patients had to follow. These difficulties have accentuated the need for doctors to update their knowledge in the field

and to identify screening tools that are easy to use in practice.

CONCLUSIONS

The results of this study indicate the increase of undiagnosed CI cases and difficulties related to the management of existing cases during the pandemic, difficulties generated primarily by the limitations of teleconsultations, poor communication with specialists and the absence of medical letters. The new context generated by the COVID-19 pandemic highlighted the lack of screening tools and the need to update knowledge related to CI identification and management. Given that family doctors remain the first line of providing medical services, it is all the more important to update their knowledge in the field of cognitive disorders. The pandemic also had positive effects, proving the feasibility of providing remote services (teleconsultation). On a long term, they can provide assistance to patients at home, especially for immobile patients or those who live long distances from the healthcare provider. Finally, the education of the population (relatives) is the foundation for early diagnosis and care of patients with cognitive impairment. The first signs of illness can be perceived by an authorized member, and the next step is to apply for specialized help. Given that the specific signs of cognitive impairment are rather assimilated with ageing, and the diagnosis of dementia or cognitive impairment is a stigma for both the patient, but especially for the family, it will be very difficult to diagnose patients with cognitive impairment and provide care to the highest standards.

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