Why do older people seek help from a geriatrician in Poland?

Dlaczego w Polsce osoby starsze zwracają się po pomoc do geriatry?

Karolina Furgała¹, Natalia Hawryluk², Weronika Lebda¹, Michał Konieczny³, Tomasz Maroszczuk¹, Zuzanna Smuniewska¹, Michalina Knapik⁴, Maria Wdowik⁵, Kajetan Charzewski⁵, Radosław Środa⁵, Małgorzata Stompór²

- ¹ Students' Geriatrics and Gerontology Scientific Group, Medical Faculty, Collegium Medicum, University of Warmia and Mazury in Olsztyn
- ² Department of Family Medicine and Infectious Diseases, Medical Faculty, Collegium Medicum, University of Warmia and Mazury in Olsztyn

³ University Hospital of Karol Macinkowski in Zielona Góra

⁴ Department of Rheumatology, Medical Faculty, Collegium Medicum, University of Warmia and Mazury in Olsztyn

⁵ Medical Faculty, Collegium Medicum, University of Warmia and Mazury in Olsztyn

Abstract

Background. As society is undeniably aging, there has been a growing number of elderly patients with multimorbidity and multiple complaints. Aim. The aim of this study was to indicate which physical or mental disorders and their symptoms were the cause of admission to geriatric out-patient clinic. Materials and Methods. The study was retrospective. Data was collected based on medical records of 778 patients older than 60 years of age (588 women, 190 men) referred by general practitioners to the geriatric outpatient clinic in Dobre Miasto, Poland between 2015 and 2020. Chief complaints were grouped and then analyzed in order to draw conclusions. Results. Patients usually reported with many conditions. There were 1631 complaints on the admission in total. Symptoms of pain, cognitive impairment and depression were the most common. 178 patients came with only one health related problem. The remaining 600 people reported at least two issues. The largest number of complaints was seven. Conclusions. The vast majority of patients reported to a geriatrician with more than one health problem from various fields of medicine, which proves that geriatrics is an interdisciplinary field. Multimorbidity and the occurrence of cognitive disorders in the elderly make difficult for primary care physicians to conduct treatment. Gerontol Pol 2025; 33; 105-114) doi: 10.53139/GP.20253312

Keywords: geriatric outpatient clinic, elderly, multimorbidity, complaints

Streszczenie

Wprowadzenie. Społeczeństwo niewątpliwie się starzeje, co wiąże się ze wzrostem liczby starszych pacjentów z wielochorobowością. Cel. Celem niniejszego badania było wskazanie, które zaburzenia fizyczne lub psychiczne oraz ich objawy były przyczyną skierowania do poradni geriatrycznej. Metody. Badanie miało charakter retrospektywny. Dane zebrano na podstawie dokumentacji medycznej 778 pacjentów powyżej 60. roku życia (588 kobiet, 190 mężczyzn), skierowanych przez lekarzy rodzinnych do poradni geriatrycznej w Dobrym Mieście w Polsce w latach 2015–2020. Główne dolegliwości zostały pogrupowane, a następnie przeanalizowane w celu wyciągnięcia wniosków. Wyniki. Pacjenci zazwyczaj zgłaszali wiele dolegliwości. Łącznie przy przyjęciu odnotowano 1631 skarg zdrowotnych. Najczęściej występowały objawy bólowe, zaburzenia poznawcze oraz depresja. 178 pacjentów zgłosiło tylko jeden problem zdrowotny. Pozostałe 600 osób zgłosiło co najmniej dwa problemy. Największa liczba zgłoszonych dolegliwości wynosiła siedem. Wnioski. Zdecydowana większość pacjentów zgłaszała się do geriatry z więcej niż jednym problemem zdrowotnym, pochodzącym z różnych dziedzin medycyny, co potwierdza, że geriatria jest dziedziną interdyscyplinarną. Wielochorobowość oraz obecność zaburzeń poznawczych u osób starszych stanowią istotne wyzwanie dla lekarzy podstawowej opieki zdrowotnej, utrudniając im skuteczne prowadzenie terapii. Gerontol Pol 2025; 33; 105-114) doi: 10.53139/GP.20253312

Słowa kluczowe: poradnia geriatryczna, osoby starsze, wielochorobowość, dolegliwości

Adres do korespondencji / Correspondence address: 🖃 Weronika Lebda, Wyszyńskiego 24/116, 10-455 Olsztyn 🖳 lebda.weronika@gmail.com

Introduction

Nowadays, an aging population is a challenge for healthcare worldwide, especially in Global North countries. It was calculated that the number of elderly people had tripled from 1950 to 2007, and it is likely to triple again by 2050 [1]. These demographic changes in societies are of significant interest and concern to many scientists [2]. The World Health Organization, along with numerous other organizations and governments, have created a program called "The United Nations Decade of Healthy Aging (2021-2030)". One of its priorities is to adjust the healthcare to meet the needs of the older adults to enable them receiving optimal care and stay physically fit and retain their mental abilities [3].

To address the challenge of the so-called 'silver tsunami' and the associated care burden, geriatrics was established as a separate medical specialty. According to the definition of 'The UEMS (European Union of Medical Specialists) Geriatrics Section', geriatrics is concerned not only with the physical health of patients but also with their mental issues, functional and social conditions [4]. They define a typical geriatric patient as a person over 65 years old who is characterized by multimorbidity and polypharmacy, atypical manifestation of various diseases and the presence of geriatric syndromes. Geriatrics is undoubtedly a multidisciplinary field [5-6]. General practitioners (GPs) often face difficulties in providing proper care for such patients, including iatrogenic complications like misdiagnoses, over- and undertreatment, drug interactions, or difficulties in creating a care plan [7-8]. Moreover, comprehensive geriatric assessment is definitely time consuming and very often impossible to conduct during routine GP visit. For these reasons, primary care physicians refer older adults to specialists – geriatricians [9].

In Poland, geriatrics outpatient clinics function as specialized medical services focused on elderly patients. These clinics provide comprehensive assessments and ongoing management of chronic conditions, emphasizing preventive care and the maintenance of functional independence. Patients need a referral from a primary care physician, and the waiting time for an appointment can range from several weeks to months, reflecting the non-emergency nature of these services. The comprehensive geriatric assessment have been adapted to various healthcare settings to meet a range of needs. These interventions share several core features that are key to their effectiveness. The main components are coordinated multidisciplinary assessment, specialized geriatric medical expertise, identification of medical, physical, social, and psycho-logical problems, creation of a comprehensive care plan, including appropriate rehabilitation [10].

Patients are often admitted to geriatric outpatient clinics for a variety of reasons related to the complex health needs of older adults. Patients experiencing a decline in their ability to perform daily activities may be referred for a comprehensive evaluation to identify the underlying causes and to develop a plan to improve or maintain their functional status. Memory problems, dementia, and other cognitive impairments are common reasons for referral [11]. Frequent falls or difficulties with mobility can lead to admissions for evaluation and management. This may include physical therapy, assistive devices, or home safety assessments. Polypharmacy, or the use of multiple medications, is common in older adults. Geriatricians help in reviewing and optimizing medication regimens to reduce adverse effects and interactions. Social isolation, depression, anxiety, and other psychological issues are also common in older adults and can lead to referrals for geriatric care. Unintended weight loss, malnutrition, or difficulty eating may prompt a referral to address dietary needs and to develop a nutrition-al plan.

As society is undeniably aging, there has been a growing number of elderly patients with multimorbidity and multiple complaints. Older adults with multiple dis-eases are exposed to lower quality of life. We should provide appropriate care mostly for this group of patients. An important factor in this issue is open access to specialized geriatric care.

Aim

The aim of this study was to describe the physical or mental disorders and their symptoms that were the cause of admission to a geriatric outpatient clinic.

Materials and Methods

The study was planned as a retrospective analysis. Data were collected based on medical records of 778 patients older than 60 years of age (588 women, 190 men) referred by general practitioners to the geriatric outpatient clinic in Dobre Miasto, Poland (Warmian-Masurian Voivodeship, 10 000 inhabitants) between 2015 and 2020. The information of the patient's chief complaints at the first visit after being referred by GP was documented in medical records. The chief complaints were grouped and then analyzed to draw conclusions. GP referrals often included diagnoses such as 'senility' or 'hy-

pertension,' which provided limited insight into the patient's primary concern.

"Pain and paresthesia" included pain in various parts of the body, both acute and chronic, as well as symptoms of neuropathic pain and paresthesia (burning, tingling, etc.).

Symptoms of dementia, cognitive disorders (such as problems with concentration, recognizing and naming objects, etc.) or separately memory disorders (mainly short-term memory) lasting more than six months have been collected under the name "cognitive impairment and dementia".

"Behavioral and psychological symptoms of dementia" included a wide range of mental and emotional disorders, such as aggression, anxiety or psychosis, which were associated with previously diagnosed dementia.

Depressed mood reported by the patient, reluctance to perform everyday activities, loss of previous interests, and limiting contact with other people (symptoms lasting at least two weeks) or previously diagnosed depression were included in the "symptoms of depression" group.

Problems with repeated falls, the occurrence of fragility fractures of various bones and the often-associated osteoporosis were collected under the name "falls, bone fractures and osteoporosis".

"Sleep disturbance" included problems with falling asleep, frequent waking up at night, feeling tired despite a good night's sleep, and other sleep-related difficulties.

Statistical analysis

Data were analyzed using descriptive statistics. The chi-square test was used to compare the prevalence of the most frequently reported complains (Pain and paresthesia, Cognitive impairment and dementia, Symptoms

of depression and Comprehensive Geriatric Assessment) in given age ranges (60-69, 70-79, 80-89, 90+). Differences of average number of complaints between age groups, without considering gen-der were assessed with Kruskal-Wallis ANOVA. Differences between cumulative number of reported chief complaints between females and males in a given age range were assessed using the t-Student test for independent groups or Mann–Whitney U test. A p-value of < 0.05 was considered significant. All calculations were preceded by Shapiro–Wilk and Levene tests. The analysis was performed using Statistica (data analysis software system), version 13, http://statistica.io (accessed April 2024) TIBCO Software Inc., Krakow, Poland (2017).

Ethics approval

The study protocol was approved by the Ethics Committee at the Warmian – Masurian Medical Chamber in Olsztyn (permission 27/2021/VIII).

Results

Among the 778 patients who reported to the geriatrician, there were 1631 chief complaints at the first visit.

The group consisted of 588 women and 190 men. The arithmetic mean age of the patients was 76.2 (SD=8,52). The percentage distribution of age groups of patients is presented in table I.

Patients usually reported not with one but many conditions. There were 1631 complaints on the admission in total. The most common were symptoms of pain, cognitive impairment and depression. 178 patients came with only one health related problem. The remaining

Table I. Age groups of the respondents

Age	Female (%)	Male (%)	All patients (%)
60-69	149 (19.15%)	58 (7.45%)	207 (26.61%)
70-79	205 (26.35%)	62 (7.97%)	267 (34.32%)
80-89	201 (25.84%)	58 (7.46%)	259 (33.80%)
90-98	33 (4.24%)	12 (1.54%)	45 (5.27%)

Table II. Distribution of number of reported complains for females, males and all patients

Number of reported complaints	Females (n=588)	Males (n=190)	All patients (n=778)
1	41.7% (244)	43.2% (81)	42.0% (327)
2	39.3% (231)	41.6% (79)	39.8% (310)
3	15.6% (92)	13.2% (25)	15.0% (117)
4	3.2% (19)	2.1% (4)	3.0% (23)
5 or more	0.3% (2)	0.2% (1)	0.4% (3)

600 people reported at least two issues, with the highest number of problems which was: seven (including: type 2 diabetes, hypertension, hyperlipidemia, sleep disturbance, loss of appetite, symptoms of depression, cognitive impairment). Detailed results are presented in table II.

Pain and paresthesia and Cognitive impairment were the most frequent reasons for visiting a geriatrician followed by Symptoms of Depression and Dizziness, vertigo. A significant group of patients reported a willingness to undergo a comprehensive geriatric assessment—they usually asked for a 'checkup,' felt that being older than 60 years they should see a geriatrician, and wanted to discuss health promotion, current treatment, and/or care plans. The diagnosis established by the GP in these cases was usually 'senility.' The rarest reasons for reporting were classified as "others" (for instance, cough, vitamin D3 deficiency, dysphagia, dyspnea, hypotension, and other single causes). Detailed results are presented in table III.

To analyze the data we grouped the complaints first into four age groups. Then, to further analyze the data, we grouped the complaints into four age groups for each gander. Detailed results are presented in tables IV-VI.

Table III. The distribution of the chief complaints at the first visit of the patients who reported to a geriatrician

Type of chief complaint	Number of complaints N=1631 (some patients reported more than one complaint)	Percent of all complaints	Percent of all patients	
Pain and paresthesia	419	25.7%	53.9%	
Cognitive impairment and dementia	341	20.9%	43.8%	
Symptoms of depression	141	8.7%	18.1%	
Dizziness, vertigo	95	5.8%	12.2%	
Comprehensive geriatric assessment	56	3.4%	7.2%	
Behavioral and psychological symptoms of dementia (BPSD)	49	3.0%	6.3%	
Falls, bone fractures and osteoporosis	46	2.8%	5.9%	
Sleep disturbance	42	2.6%	5.4%	
Loss of appetite and weight loss	40	2.5%	5.1%	
Urinary/stool incontinence	29	1,8%	3.7%	
Tinnitus	25	1.5%	3.2%	
Trembling	21	1.3%	2.7%	
Others	327	20.1%	42.0%	

Table IV. The distribution of the chief complaints at the first visit of the patients who reported to a geriatrician depending on age

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	60-69 (n=391)		70-79 (n=553)		80-89 (n=586)		90-98 (n=101)	
(N=1631)	Pain and pares- thesia	31.71% (124)	Pain and par- esthesia	26.22% (145)	Cognitive impairment and dementia	27.99% (164)	Pain and par- esthesia	26.73% (27)
patients (N	Cognitive impair- ment and de- mentia	12.78% (50)	Cognitive impairment and dementia	20.07% (111)	Pain and par- esthesia	20.98% (123)	Cognitive impairment and dementia	15.84% (16)
All pati	Symptoms of depression	9.97% (39)	Symptoms of depression	8.31% (46)	Symptoms of depression	8.02% (47)	Behavioral disorders (BPSD)	4.95% (5)
	Other	45.01% (176)	Other	45.21% (250)	Other	43.00% (252)	Other	38.61% (39)

Table V. The distribution of the chief complaints for women at the first visit of the patients who reported to a geriatrician depending on age

	60-69 (n=280)		70-79 (n=420)		80-89 (n=467)		90-98 (n=76)	
(N=1243)	Pain and pares- thesia	31.79% (89)	Pain and paresthesia	23.10% (97)	Cognitive impairment and dementia	27.19% (127)	Pain and par- esthesia	28.95% (22)
	Cognitive impair- ment and dementia	12.50% (35)	Cognitive impairment and dementia	20.48% (86)	Pain and paresthesia	22.48% (105)	Cognitive impairment and dementia	18.42% (14)
Women	Symptoms of de- pression	11.43% (32)	Symptoms of depression	10.48% (44)	Symptoms of depression	7.71% (36)	Behavioral disorders (BPSD)	6.58% (5)
	Other	44.28% (124)	Other	45.94% (193)	Other	42.62% (199)	Other	46.05% (35)

60-69 80-89 70-79 (n=133) (n=119) (n=25)(n=111)Cognitive im-Pain and pares-31.53% 36.09% 31.09% Pain and 20.00% Pain and pairment and thesia (35)paresthesia (48)(37)paresthesia (5)dementia Men (N=388) Cognitive impair-Cognitive im-Coanitive im-13.51% 18.80% Pain and par-15.13% 8.00% ment and depairment and pairment and (15)(25)esthesia (18)(2) mentia dementia dementia 8.00% Symptoms of depression (2) Comprehensive 8.11% 5.26% Symptoms of 9.24% geriatric assess-Dizziness Loss of ap-(9)(3)depression (11)8.00% ment petite and (2) weight loss 46.85% 39.85% 44.54% 56% Other Other Other Other (52)(57)(53)(14)

Table VI. The distribution of the chief complaints for men at the first visit of the patients who reported to a geriatrician depending on age

Although the provided table offers a comprehensive overview of the prevalence of complaints within a designated age range and gender, our investigation aimed to check whether the differences were statistically significant. Initially, we evaluated differences between given complaints (Pain and paresthesia, Cognitive impairment and dementia, Symptoms of depression, and Comprehensive Geriatric Assessment) across age groups, employing the Pearson Chi-square test (table VII). As an example, we wanted to check whether Pain and paresthesia occurs statistically more often in one age group than in the other age groups. Notably, Cognitive impairment and dementia exhibited statistically higher prevalence in the 80-89 age group compared to both the 60-69 group (p<0.01) and the 90-98 group (p<0.01).

Table VII. Differences in prevalence of complaint across age ranges

Chief complaint	Results
Pain and paresthesia	χ2=4.68, p=0.20
Cognitive impairment and dementia	χ2=33.88, p<0.01
Symptoms of depression	χ2=3.01, p=0.38
Comprehensive Geriatric Assessment	χ2=5.81, p=0.12

Subsequently, we examined disparities in the same complaints between females and males, however none of these disparities reached statistical significance (Table VIII). As an example, we wanted to check whether Pain and paresthesia occurs statistically more often in females than in males. For these analyses, we specifically selected the 4 most prevalent complaints to ensure that the compared cell counts remained above 5, thus maintaining the reliability of the Pearson Chi-square test. Our findings demonstrated that none of the examined complaints were more frequent in one gender than in the other gender.

Table VIII. Differences in prevalence of complaint in females and males

Chief complaint	Results
Pain and paresthesia	χ2=0.04, p=0.85
Cognitive impairment and dementia	χ2=0.55, p=0.46
Symptoms of depression	χ2=0.41, p=0.52
Comprehensive Geriatric Assessment	χ2=2.14, p=0.14

Additionally we analyzed the average number of complaints per patient depending on age. Detailed results are presented in table IX. Upon evaluating the differences in average number of complains solely by age ranges, without considering gender, the differences between groups were statistically not significant in the Kruskal-Wallis ANOVA (H=7.37, p=0.06). The lowest p-value in the multiple comparison of p-values was found between the 60-69 and 80-89 age groups (p=0.08). This leads to a conclusion, that on average, older patients do not present more complaints to a geriatrician than the younger ones on their first visit. Considering the low, but not statistically significant, p=0.08 such assumptions should be further investigated.

Table IX. Average number of complains on first visit for all participants depending on age

Age	Average number of complains for all participans
60-69	1.69, SD=0.81
70-79	1.77, SD=0.74
80-89	1.87, SD=0.81
90+	1.82, SD=0.92

Furthermore, when comparing the differences in the number of complaints between females and males within the same age range with Mann-Whitney U test, none of the findings were statistically significant. This results imply that across all age groups no gender presents more complains than the other on their first visit. Detailed results are presented in table X.

Table X. Average number of complains on first visit for females and males depending on age

Age	Average number of complains for:		
	female	male	
60-69	1.69, SD=0.79	1.67, SD=0.76	
70-79	1.79, SD=0.83	1.72, SD=0.79	
80-89	1.89, SD=0.84	1.82, SD=0.75	
90+	1.91, SD=0.88	1.58, SD=0.99	

Discussion

Multicenter studies confirm that geriatricians are well prepared to deal with the most common health problems in the elderly population. Standard geriatric care includes performance of the Comprehensive Geriatric Assessment (CGA) and (based on the results) the treatment plan which is introduced at the first visit to the geriatric outpatient clinic. It is obvious that many times there is more than one health – related problem, and moreover, not only related to physical but also mental and social status. CGA is the first step of implementing other parts of Geriatric Evaluation and Management strategies (GEM) [12]. Every visit to the geriatrician should include a medication review to avoid the consequences of polypharmacy. It is definitely time consuming, but it allows geriatricians to diagnose and treat elderly patient who possibly suffers from Giant Geriatrics Problems (5-I's of geriatrics: incontinence, immobility, instability, iatrogenic complications, intellectual impairment). The goal of geriatric care is holistic approach which for many reasons is not commonly applied at other specialist visits.

The results from this research clearly show how many patients had the need to discuss complaints with a geriatrician. Most patients (600 out of 778 patients) reported more than one chief complaint – the largest number of them was seven.

This brings us to the discussion of whether GPs can care for elderly patients with multimorbidity and polypharmacy in light of the insufficient number of family doctors who cannot solve their numerous problems. In Poland, the number of all doctors per 1,000 inhabitants is the lowest in Europe (overall 2,4/1000 people, compared with 5,3/1000 people in Austria) [13]. There are also large differences in access to a doctor depending on the place of residence – in the Warmian-Masurian Voivodeship, where the study was conducted, the number of outpatient clinics visits per 1 inhabitant per year in 2021 was 7.5, one of the lowest in Poland [14]. The study has

been performed specifically in regions with similar demographics.

Among many causes of visiting geriatrician, the most common was pain in various parts of the body, which is definitely frequent health – related problem among the elderly worldwide. The prevalence of chronic pain among the elderly is high, estimated at 25 to even 85% [15]. In the study nearly 26 % of the chief complaints were related to pain. Available data from the Central Polish Statistical Office in Poland show an even higher frequency of pain as a main cause for visiting a doctor [16]. Among top five reasons there were: lower back pain (25.8 %), hypertension (26.5 %), neck pain (16,1%), middle back pain (15.7%) and arthrosis (15.5%). In the nationwide survey Pol-Senior 2 conducted in 2020, 47 % of elderly people reported chronic pain [17]. Pain lowers the patients' mood and withdraws them from some daily activities. Moreover, it can lead to depression and disability. The chronic nature of the pain is often associated with the irreversible anatomical changes caused by musculoskeletal diseases which in many cases accompany patients for the rest of their lives [18-19]. The most common obstacle to effective pain treatment in the elderly is diagnosing the cause (multiple pathological changes in joints and other musculoskeletal structures) and the nature of the pain. It is essential to determine whether it is nociceptive or neuropathic. Establishing the correct diagnosis is crucial because the treatment for both mechanisms of pain varies. Using particular drugs (like NSAIDs or opioids) to treat neuropathic pain might be ineffective and harmful to the patients. Additionally, choosing pain relief medications among older adults is more complicated than in younger people due to multimorbidity and possible drug side effects or interactions [20-22].

The next most frequent reason for reporting was cognitive impairment – particularly memory impairment. Cognitive disorders significantly impact the functioning of older adults in many areas, affecting relationships with others, views, feelings, and leisure activities [23]. Cognitive impairment might be reversible (e.g., in thyroid function disorders, vitamin B12 deficiency, electrolyte imbalance - hyponatremia, etc.) but can also be caused by vascular or neurodegenerative disorders and progress into dementia. In the elderly population, Alzheimer's disease is the leading cause of dementia, but Lewy body disease, frontotemporal dementia, and vascular dementia can also be diagnosed and treated. As with pain management, establishing the proper diagnosis is essential for many reasons. The first is the possibility of introducing proper treatment to delay the progression of symptoms and improve the quality of life of elderly

patients and their families. The second is starting the discussion of prognosis and advance care planning, as well as family support, because dementia is a progressive illness with a poor prognosis [24-25]. General practitioners in Poland are not prepared to diagnose patients with dementia, partly due to limited access to many diagnostic tests and procedures.

In assigning causes of a geriatric appointment in particular groups, we decided to extract psychological and behavioral complaints (BPSD – behavioral and psychological symptoms of dementia). These symptoms are a huge caregiver burden and very often require the introduction of psychotropic agents. This treatment might not be safe in the presence of other diseases and drugs and is difficult for GPs to start. Generally, memory impairment and BPSD counted for about 24% of the complaints that were the cause of the first geriatrician appointment, with BPSD representing about 3% of geriatrician visits. These findings are consistent with recently published results of the nationwide survey POLSENIOR 2 - the frequency of MCI (mild cognitive impairment) and dementia represents about 31% of the Polish elderly population, with 1.4% of people with dementia (out of 15%) having severe dementia, usually associated with BPSD development. The prevalence of dementia is increasing - EURODEM project results show a growing number of elderly with dementia, mostly among the oldest - from 1.6% in the group aged 65–69 up to 6.3–69.4% in those older than 84 years [26].

Another significant psychological problem in the elderly is a depressed mood, which may be related to chronic pain experiences. Physical distress can worsen patients' mood as well as depressed mood can increase pain. Moreover, there are many other masks of depression among older people like cognitive impairment, weight loss, panic attacks or sleep disorders. The diagnosis of depression is not always easy, as many patients underestimate this issue and do not discuss their mental state with a doctor, even though 20-30% of elderly might suffer from depression. In presented data, symptoms of possible depression accounted for 8,7 % of all complaints. Other dangers associated with depression among the elderly include a high risk of suicide and addiction to psychoactive substances (such as alcohol, benzodiazepines, opioids) [27-29].

By age group, there was an increase in memory and dementia-related complaints among older patients, with the highest prevalence of BPSD complaints among women aged 90-98 years. Among men, an increase in the frequency of complaints about de-pressed mood and other symptoms of depression after the age of 80 is note-

worthy, although their frequency is definitely lower than in women.

Panza et al. explored the bidirectional relationship between depressive symptoms and cognitive function among older adults without dementia or mild cognitive impairment. The study highlights how depression can act as a precursor to cognitive decline, demonstrating the complex interplay between these conditions. Integrating this research underscores the importance of addressing depression in the elderly, particularly in the context of its interactions with comorbidities such as chronic pain. This comprehensive approach emphasizes the dual impact of physical and psychological factors in late-life health management [30].

The reporting of other geriatric problems has seemed surprisingly low. In the presented data, not many older adults reported frailty symptoms, osteoporosis, falls and incontinence. However, similar results were obtained by the NIK (The Supreme Audit Office) in 2015. This audit focused on geriatric care and showed that the most common reasons for visits to the geriatric clinic were short-term memory disorders, dementia, mood deterioration and problems with walking [31]. Problems with walking might have been caused by osteoarthritis and chronic pain.

One of the interesting findings in presented research was that many patients re-ported in order to undergo a comprehensive geriatric assessment (CGA). They were asking for 'check-up', wanting to discuss health promotion issues like physical activity, vaccinations, dietary recommendations. Although it was only 3.4% of patients, it is a positive signal showing the growing need for health education among seniors, which cannot be met, under current conditions, by general practitioners [32].

This information is essential for creating a new paradigm of senior care based on geriatricians. Currently the benefit of geriatric care is time allocated to the visit. Geriatric outpatient clinics usually schedule longer appointments than in GP offices to ensure that all the needs of elderly people are met - not only their physical condition, but also their well-being and social functioning. A visit to a geriatrician may solve the problems of health promotion, increase the time of independence, detect Giant Geriatric problems and/or improve the patient's quality of life [33]. CGA together with GEM are the effective ways to establish a care plan. Moreover, many studies from different countries found that CGA and GEM can reduce the number of unplanned hospitalizations in elderly people and the total number of days spent in the hospital [34]. Among the studies conducted in Poland, it is worth quoting the results of the NIK report from 2015: post – hospital treatment of patients discharged from geriatric wards was definitely more cost-effective than patients discharged from internal medicine departments. Moreover, it was found that in patients treated in a geriatric ward, the number of prescribed drugs was reduced, in the extreme case – from seven to three [31]. At the same time, this report stated that only 32% of family doctors were willing to participate in additional training in the field of geriatrics.

The prevalence of general terms like "senility" in geriatric referrals often reflects systemic issues in the training and resources available to general practitioners (GPs). This terminology can simplify communication but often lacks specificity, leading to potential mismanagement or under-referral of treatable conditions like depression, dementia subtypes, or delirium. What is more, primary care environments often operate under significant time pressures, reducing opportunities for detailed assessments. This can result in the use of generalized terms instead of conducting comprehensive evaluations that might reveal specific geriatric syndromes.

Other problem is discrepancies in geriatric referrals and the prevalence of specific health issues in elderly populations. Brody et al. highlights medication discrepancies between home health referrals and plans of care, revealing risks for elderly patients [35].

Unfortunately, despite the clear advantage of geriatric care over other forms of care for seniors geriatric medical care system in Poland does not provide proper and sufficient care. This is mainly due to uncoordinated and fragmented actions in the development of geriatric care, which has been insufficient to create a comprehensive system. The lack of qualified staff (geriatricians and geriatric nurses) is another obstacle to developing high--quality care. These reasons cause unequal access to geriatric care, resulting in elderly residents of some regions of Poland being deprived of this form of assistance. It is clear that the healthcare system in Poland is still not focused on the needs of the elderly [36]. Incorporating more geriatrics into medical education, with a focus on identifying and categorizing specific conditions, can empower GPs to make accurate referrals. Providing guidelines and easy-to-use screening tools can help standardize evaluations before referral. Establishing closer collaborations between GPs and geriatric teams can ensure patients are referred with detailed clinical notes and initial assessments.

Conclusions

The vast majority of patients reported to a geriatrician with more than one health problem from various fields of medicine, proving that geriatrics is an interdisciplinary field. Multimorbidity and cognitive disorders in the elderly make difficult for primary care physicians to conduct treatment. It is worth noting that patients suffering from many diseases are exposed to a lower quality of life, therefore they should undergo combined treatment in terms of physical and mental disorders to improve their living conditions. Pain, memory impairment and depressed mood are the most common rea-sons for patients to see a geriatrician. The leading problems may be interrelated - the occurrence of pain and depressed mood mutually intensify each other. More and more patients are reporting to undergo CGA which can improve their treatment regimen and quality of life and get health promotion advices.

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References

- United Nations. Department of Economic and Social Affairs. Population Division. 2007. https://www.un.org/ en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeingReport2007.pdf.
- Prakash P, Bhandari SK. Demographics and age changes in geriatric population- part 1. IP Indian J Anat Surg Head Neck Brain. 2020; 6(3): 75-81.
- 3. UN Decade of Healthy Ageing: Plan of Action. n.d. https://www.who.int/initiatives/decade-of-healthy-ageing
- Yoshikawa TT. Future direction of geriatrics: "gerogeriatrics". J Am Geriatr Soc. 2012 Apr; 60(4): 632-634.
- Bass SA, Ferraro KF. Gerontology Education in Transition: Considering Disciplinary and Paradigmatic Evolution. Gerontologist. 2000 Feb;40(1):97-106.
- Kotsani M, Kravvariti E, Avgerinou C, et al. The Relevance and Added Value of Geriatric Medicine (GM): Introducing GM to Non-Geriatricians. J Clin Med. 2021 Jul 7;10(14):3018.
- Adams WL, Mcilvain HE, Lacy NL, et al. Primary Care for Elderly People: Why Do Doctors Find It So Hard? In The Gerontologist. 2002 Dec;42(6):835-42.
- Kuo MC, Jeng C, Chen CM, Jian WS. Profile of elderly with multiple physician visits: advocacy for tailored comprehensive geriatric assessment use in clinics. Geriatr Gerontol Int. 2014;14(2): 372-380.
- Rainfray M, Bourdel-Marchasson I, Dehail P, Richard-Harston S. Comprehensive geriatric assessment: a useful tool for prevention of acute situations in the elderly. Ann Med Interne. 2002; 153(6): 397-402.
- 10. Aminzadeh F, Dalziel WB, Molnar FJ. Targeting frail older adults for outpatient comprehensive geriatric assessment and management services: An overview of concepts and criteria. Reviews in Clinical Gerontology. 2002;12(1): 82-92.
- 11. Seematter-Bagnoud L, Büla C. Brief assessments and screening for geriatric conditions in older primary care patients: a pragmatic approach. Public Health Rev. 2018 May 1;39:8.
- 12. Min L, Mody L. Inpatient notes: Four "GEMs"—Geriatric evaluation and management strategies when admitting an acutely ill older adult to the hospital. Annals of Internal Medicine. 2019;170(12).
- 13. https://stat.gov.pl/statystyki-eksperymentalne/kapital-ludzki/oszacowanie-zasobow-kadry-medycznejw-oparciu-o-zrodla-administracyjne-lekarze-i-lekarze-dentysci-wyniki-eksperymentalnej-pracymetodologicznej,14,1.html
- 14. https://stat.gov.pl/obszary-tematyczne/zdrowie/zdrowie/ambulatoryjna-opieka-zdrowotna-w-2021-roku,13,6.html
- 15. Stompór M, Grodzicki T, Stompór T, Wordliczek J, Dubiel M, Kurowska I. Prevalence of chronic pain, partic-ularly with neuropathic component, and its effect on overall functioning of elderly patients. Medical Science Monitor. 2019;25: 2695-2701.
- 16. https://stat.gov.pl/obszary-tematyczne/zdrowie/zdrowie/stan-zdrowia-ludnosci-polski-w-2019-r-,6,7.html
- 17. https://polsenior2.gumed.edu.pl/attachment/attachment/82370/Polsenior_2.pdf.
- 18. Kaye AD, Baluch A, Scott JT, Kaye AD. Pain Management in the Elderly Population: A Review. Ochsner J. 2010 Fall;10(3):179-87.
- 19. Welsh TP, Yang AE, Makris UE. Musculoskeletal Pain in Older Adults: A Clinical Review. In Medical Clinics of North America. 2020;104(5): 855–872.
- 20. Ali A, Arif AW, Bhan C, et al. Managing Chronic Pain in the Elderly: An Overview of the Recent Therapeutic Advancements. Cureus. 2018.
- 21. Potru S, Tang YL. Chronic Pain, Opioid Use Disorder, and Clinical Management Among Older Adults. Focus. 2021; 19(3): 294-302.
- 22. Giovannini S, Coraci D, Brau F, et al. Neuropathic pain in the elderly. In Diagnostics. 2021;11(4).
- 23. Parikh PK, Troyer AK, Maione AM, Murphy KJ. The Impact of Memory Change on Daily Life in Normal Aging and Mild Cognitive Impairment. Gerontologist. 2016;56(5): 877–885.
- 24. Arlt S. Non-Alzheimer's disease-related memory impairment and dementia. Dialogues Clin Neurosci. 2013;15(4):465-473.
- 25. Wang L, Lakin J, Riley C, Korach Z, Frain LN, Zhou L. Disease Trajectories and End-of-Life Care for Dementias: Latent Topic Modeling and Trend Analysis Using Clinical Notes. AMIA Annu Symp Proc. 2018;5: 1056-1065.
- 26. Krysinska K, Sachdev PS, Breitner J, Kivipelto M, Kukull W, Brodaty H. Dementia registries around the globe and their applications: A systematic review. Alzheimers Dement. 2017;13(9): 1031-1047.

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- 27. Bair MJ, Robinson RL, Katon W, Kroenke K. Depression and Pain Comorbidity: A Literature Review. Arch Intern Med. 2003;163(20): 2433–2445.
- 28. Tarakc E, Zenginler Y, Kaya Mutlu E. Chronic pain, depression symptoms and daily living independency level among geriatrics in nursing home. Agri. 2015;27(1): 35-41.
- 29. Pickett YR, Raue PJ, Bruce ML. Late-life depression in home healthcare. In Aging Health. 2012;8(3): 273-84.
- 30. Panza F, D'Introno A, Colacicco AM, et al. Temporal relationship between depressive symptoms and cognitive impairment: the Italian Longitudinal Study on Aging. J Alzheimers Dis. 2009;17(4): 899-911.
- 31. https://www.nik.gov.pl/plik/id,8319,vp,10379.pdf.
- 32. Mujica-Mota RE, Roberts M, Abel G, Elliott M, Lyratzopoulos G, Roland M, Campbell J. Common patterns of morbidity and multi-morbidity and their impact on health-related quality of life: evidence from a national survey. Quality of Life Research. 2015;24(4): 909–918.
- 33. Welsh TJ, Gordon AL, Gladman JR. Comprehensive geriatric assessment A guide for the non-specialist. In International Journal of Clinical Practice. 2014;68(3); 290–293.
- 34. Nord M, Lyth J, Alwin J, Marcusson J. Costs and effects of comprehensive geriatric assessment in primary care for older adults with high risk for hospitalisation. BMC Geriatrics. 2021;21(1):263.
- 35. Brody AA, Gibson B, Tresner-Kirsch D, et al. High Prevalence of Medication Discrepancies Between Home Health Referrals and Centers for Medicare and Medicaid Services Home Health Certification and Plan of Care and Their Potential to Affect Safety of Vulnerable Elderly Adults. J Am Geriatr Soc. 2016;64(11): 166-70.
- 36. Lee WC, Sumaya C. Geriatric workforce capacity: A pending crisis for nursing home residents. Front Public Health 2013;1:24.