### ORIGINAL RESEARCH

# Medical Problems Referred to a Care of the Elderly Physician: Insight for Future Geriatrics CME



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#### **ABSTRACT**

#### **Purpose**

Family physicians provide the majority of elderly patient care in Canada. Many experience significant challenges in serving this cohort. This study aimed to examine the medical problems of patients referred to a care of the elderly physician, to better understand the geriatric continuing medical education (CME) needs of family doctors.

#### Methods

A retrospective chart review of patients assessed at an urban outpatient seniors' clinic between 2003 and 2008 was conducted. Data from 104 charts were analyzed and survey follow-up with 28 of the referring family physicians was undertaken. Main outcomes include the type and frequency of medical problems actually referred to a care of the elderly physician. Clarification of future geriatric CME topics of need was also assessed.

#### Results

Preventive care issues were addressed with 67 patients. Twenty-four required discussion of advance directives. The most common medical problems encountered were osteoarthritis (42), hypertension (34), osteoporosis (32), and depression or anxiety (23). Other common problems encountered that have not been highly cited as being a target of CME included musculoskeletal and joint pain (41), diabetes (23), neck and back pain (20), obesity (11), insomnia (11), and neuropathic, fibromyalgia and "leg cramps" pain (10). The referring family physicians surveyed agreed that these were topics of need for future CME.

#### **Conclusions**

The findings support geriatric CME for the common medical problems encountered. Chronic pain, diabetes, obesity and

insomnia continue to be important unresolved issues previously unacknowledged by physicians as CME topics of need. Future CME focusing more on process of geriatric care may also be relevant.

**Key words:** geriatrics, aging, elderly, family physicians, CME, needs assessment

#### INTRODUCTION

Canada's population is steadily aging, and the elderly (those 65 years of age and older) are projected to account for close to 25% of the population by the end of the 2030s, (1) critically affecting the delivery of primary health care. People aged 65 and older account for approximately 50% of the visits to office-based physicians. (2) Currently there are only 242 Royal College of Physicians and Surgeons of Canada certified internist geriatricians and 128 College of Family Physicians of Canada certified family physicians with care of the elderly designation, (3) meaning that much of the geriatric care in Canada is and will continue to be provided by generalist family physicians.

Due to barriers, such as a lack of exposure to geriatric medicine training, inexperience, and excessive amounts of time required to manage care, primary care physicians have felt overwhelmed. Some have tried to use consultants to cope, but inaccessibility to consultant specialist help was a factor. (4)

Many primary care physicians who find caring for elderly patients difficult limit the number of elderly patients in their practice. (5) When primary care physicians were interviewed in a previous study, several different reasons for this difficulty were identified. These reasons were grouped into three major domains including medical complexity, administrative burden, and personal/interpersonal challenges (communication barriers). (4)

The first domain seems to be the one most appreciated by physicians. In 1996, Pereles and Russell<sup>(6)</sup> interviewed family physicians in Calgary who reported that geriatric

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Continuing Medical Education (CME) priorities should focus on increasing education about medical management, medications, and mental health issues in the elderly. Key informants in the community who work with the elderly established the same priorities.<sup>(7)</sup>

However, when the family physicians' elderly patients were interviewed, a perceived greater need for attention to process of care issues (e.g., communication, time management, and attitudes) was indicated. Frank *et al.* found that physicians' personalities and communication skills affected whether geriatric patients were satisfied with their care.

There are clearly multiple important domains that contribute to the difficulty family physicians face in caring for the elderly. Since medical complexity appears to be the educational priority for family physicians, this study examined the patients referred to a care of the elderly physician to more clearly define this domain and shed light on future geriatric CME needs for family physicians.

#### **METHODS**

From 2003 to 2008, in an outpatient seniors' clinic at an urban academic teaching hospital in Toronto, 104 care of the elderly consultations were completed on patients who participated in a 16-week outpatient interdisciplinary program at this site. The family physicians practicing in the surrounding area, who referred their senior patients to this program, were asked whether they would like their patient to also have a consultation with a care of the elderly physician to address any medical issues.

The elderly patients referred were able to discuss their medical problems over a one-hour visit. Language interpretation service was provided, if necessary. A patient-centred approach was used, with agreement over the topics to be dealt with at the consultation visit.

Patients often brought a list of topics to discuss but, due to time constraints, prioritization was required. It is important to note that the prioritized list of geriatric medical problems encountered included only medical issues that either the referring family physicians or the patients themselves had significant complaints about, or that the care of the elderly physician identified as a problem. Therefore, the resultant lists focused on problematic and unmanaged medical problems only. Preventive care screening procedures such as mammography, DEXA bone mineral density scanning, and fecal occult blood testing or colonoscopy were also discussed. Inquiry into and discussion of advance directives were also completed, when applicable.

To help frame the current chart review, a MEDLINE literature search was completed using the subheadings 'geriatrics', 'family physicians', and 'needs assessment', and the "find similar" and "find citing articles" functions were used to create a search strategy. Articles were searched and reviewed for geriatrics topics selected by geriatric experts as being targets of geriatric education<sup>(9)</sup> and those topics most

frequently chosen by practicing physicians as areas they would be interested in or areas they believed their colleagues needed more information on. (10) The topics found helped classify the medical problems encountered in our chart review of all 104 consecutive consultation letters. This review was conducted from November 2008 to January 2009.

From the charts, data were also collected from an interdisciplinary assessment form (as self-reported by the patient) for subject age, gender, medical and mental health problems, number of prescribed medications, use of vitamins and herbal remedies, history of alcohol and tobacco use, difficulties with ADLs and IADLs, and whether the patient lived alone, had fallen in the past, and had difficulties with public transportation. Whether patients received annual flu shots and a pneumonia vaccination was also noted.

To substantiate and help clarify the conclusions from the chart review regarding future CME topics of need, structured surveys were administered with the referring family physicians from June to September 2011. Guided by the literature, the survey questions aimed to assess the referring physicians' motivations for seeking additional assistance with caring for their elderly patients. It was hoped their responses would inform whether CME topics of need relate more to disease-specific uncertainties, different approaches to presenting concerns and symptoms, or systemic barriers to providing sufficient care. At the time of surveying, only 61 of the 77 family physicians who referred patients for consultation were still active and could be located through the College of Physicians and Surgeons of Ontario database. Of this number, only 28 physicians (response rate of 45.9%) agreed to participate.

This study received initial approval from the Research Ethics Board at University Health Network in October 2008. Approval for conducting follow-up surveys with referring physician was received in September 2010.

#### RESULTS

#### **Demographics**

The age of the patients in this study ranged from 54 to 92, with a mean age of 70.3 years. Almost three-quarters of the patients seen were female (73.1%, n = 76) and 27.9% (n = 29) reported that they live alone. All patients reported having multiple co-morbidities, with over 50% of them citing current problems with osteoarthritis or joint pain, hypertension, or hypercholesterolemia. In addition, 93.3% (n = 97) of patients indicated that they were on prescription medications (ranging from one to sixteen medications), with the average being 4.6 prescription medications per patient. The majority of the patient population assessed (75%, n = 78) recalled having their yearly flu shot, 28% (n = 29) reported having difficulties with one or more ADLs, and 21% (n = 22) with one or more IADLs. Language interpretation service was frequently provided for patients in Chinese (36.5%, n = 38)and Portuguese (16.4%, n = 17).

## Geriatric Medical Problems Encountered by a Care of the Elderly Physician

From the chart review, Table 1 shows the medical problems encountered by a care of the elderly physician from 104 consultations. These medical problems are classified according to topics cited in the literature as being targets of geriatric education and those for which practicing physicians would like more information. Clinical problems encountered during the consultations that were not previously highly ranked by the literature are listed in Table 2. Tables 1 and 2 are not mutually exclusive lists. In other words, a patient noted as having joint pain in Table 2 may also be included under the topic of Osteoarthritis in Table 1.

Based on physician recall, Table 3 outlines the reasons why family physician referred their patients for consultation with a care of the elderly physician. The physicians were also asked to reflect on the importance of the novel CME topics that emerged from the chart review which had not been previously substantiated in the literature, as well as other topics related to processes of elderly care. Table 4 presents the physicians' level of agreement with these issues as future geriatric CME topics of need.

TABLE 1. List and frequencies of commonly cited medical problems encountered by a care of the elderly physician (n = 104)

Problem	Frequency (n)	Percentage (%)
Preventive care issues	67	64.4
Osteoarthritis	42	40.4
Hypertension	34	32.7
Osteoporosis	32	30.8
Advance directives (durable POA)	24	23.1
Depression or Anxiety	23	22.1
Urinary problems	16	15.4
Dementia or memory problems	13	12.5
Cardiovascular disease	11	10.6
Gait disturbance or falls	10	9.6
Dizziness including vertigo / syncope	8	7.7
Sensory impairment (hearing / vision)	7	6.7
Family / social support	4	3.9
Stroke or transient ischemic attacks	2	1.9
Failure to thrive	1	0.96
Sexual dysfunction	1	0.96

#### **DISCUSSION**

The seniors' clinic in this study is an outpatient service that serves a relatively healthy group of elderly patients. A review of the sample's overall demographics reveals a highly functioning cohort, both cognitively and physically, as most were independent of all basic and instrumental activities of daily living. This is potentially a cohort that may be more motivated to pursue active care or treatment. The cohort may also be better medically managed as the result of being followed by family physicians that referred to a seniors' wellness program.

Although 75% of the study group recalled having had their influenza immunization shot, the majority of patients had other significant issues relating to preventive care procedures (64.4%). Freedman et al. (11) documented previously

TABLE 2. Additional list and frequencies of uncommon and non-cited medical problems encountered by a care of the elderly physician (n = 104)

Problem	Frequency (n)	Percentage (%)
Musculoskeletal and joint pain	41	39.4
Diabetes	23	22.1
Neck and back pain	20	19.2
Obesity	11	10.6
Insomnia	11	10.6
Neuropathic, fibromyalgic, "leg cramps"	10	9.6
Foot problems	6	5.8
Asthma / Chronic Obstructive Pulmonary Disease (COPD) (dyspnea NYD)	4	3.9
Gastroesophageal reflux (GERD)	4	3.9
Generalized weakness (fatigue)	4	3.9
Hypercholesterolemia	3	2.9
Skin problems	3	2.9
Headache	2	1.9
Leg edema (venous insufficiency)	2	1.9
Tuberculosis	2	1.9
Constipation	2	1.9
Tinnitus	1	0.96
Hot flashes	1	0.96
Systemic Lupus Erythematosus	1	0.96

TABLE 3. Reasons family physicians referred patients for care of the elderly consultation (n = 28)

Reason for Referral	Frequency (n)	Percentage (%)
Medical complexity	23	82.1
Required a second opinion	19	67.9
Patient requested the consultation	18	64.3
Required assistance with multiple coinciding medical problems	17	60.7
Time-management challenges	13	46.4
Required assistance accessing community services	10	35.7
Communication challenges	7	25.0
Other	9	32.1

TABLE 4. Referring physician agreement with literature and chart audit identified issues as geriatric CME topics of need (n = 28)

Geriatric CME Topic	Frequency (n)	Percentage (%)
Chronic pain in the elderly	26	92.9
Insomnia in the elderly	22	78.6
Neuropathic, fibromyalgic and "leg cramps" pain in the elderly	21	75.0
Time-management challenges with elderly patients	20	71.4
Approaches to care with the elderly	19	67.9
Diabetes in the elderly	15	53.6
Obesity in the elderly	14	50.0
Communication challenges with the elderly	13	46.4
Attitudes to the elderly	7	25.0
Other	8	22.4

that screening of elderly patients falls below desirable levels. Advance directives/durable Power Of Attorney (POA) issues were also commonly in need of discussion (23.1%).

Similarities were found between the medical problems dealt with during the care of the elderly consultations in this study and, per the literature, the geriatric topics and concerns that primary care physicians found to be most challenging.

The most common problems found in this study included osteoarthritis (40.4%), hypertension (32.7%), osteoporosis (30.8%), depression or anxiety (22.1%), urinary problems (15.4%), dementia or memory complaints (12.5%), cardiovascular disease (10.6%), and gait disturbance or falls (9.6%). As such, the executed chart audit examining geriatric medical problems supports future continuing medical education programs that address these topics.

Other medical problems encountered included complaints of dizziness (7.7%) and hearing and vision sensory impairment (6.7%); however, these problems in particular were often previously addressed by other specialty clinics, such as otolaryngology and ophthalmology.

Clinical problems commonly encountered in this study's chart review that were **not** highly cited in the literature as being of significant nature or of interest to primary care physicians included musculoskeletal and joint pain (39.4%), diabetes (22.1%), neck and back pain (19.2%), obesity (10.6%), insomnia (10.6%) and neuropathic, fibromyalgic and "leg cramps" pain (9.6%). It is believed that these topics, ones that family physicians had not previously requested for CME, still prove problematic for family doctors serving the senior population and should be covered by geriatric continuing education. The importance of these topics as targets for future CME were substantiated by the referring family doctors surveyed who agreed that the topics of chronic pain (92.9%), insomnia (78.6%), neuropathic, fibromyalgic and "leg cramps" pain (75%), diabetes (53.5%), and obesity (50%) should be addressed.

Despite possibly not being medically complex, these relapsing problems can present high demands on the practicing clinician by requiring extensive counseling, education, and surveillance. In the past, family physicians have indicated that they did not need more education regarding health promotion for elderly patients, but rather cited inadequate time, remuneration, and finding accessible community resources as major hurdles in caring for the elderly. (6) The physicians surveyed in this study also indicated challenges associated with time management and access to community services as reasons why expert consultation was sought. Patients with these types of demanding medical problems may overwhelm the primary care physician and, therefore, may not have all of their issues addressed. These barriers might contribute to the significant lack of preventive care procedures being provided. Not surprisingly, 71% of the surveyed physicians identified a need for future CME regarding time-management challenges with the elderly.

The patients reviewed in this study were seen over onehour visits, allowing for more time to prioritize multiple issues and find common ground over which topics took precedence. The patient-centred approach taken to prioritize the medical problems often helped identify the reasons for the consultations in the first place, since some of the family physician referrals were quite vague. However, in some cases, it was the patients themselves who requested that their family physicians make a referral on their behalf. With a care of the elderly physician, patients may have felt more comfortable speaking about chronic age-related problems. Patient-centred interviewing has been shown to improve patient satisfaction, compliance, and physiological recovery, as well as reduce the need for consultation and investigations.<sup>(12)</sup>

Family physicians' elderly patients have previously indicated a need for attention to process of care issues. (7) Process of care issues include not only time-management skills, but also physician attitudes and communication skills. Akin to previous research, however, the surveyed family physicians did not indicate a strong need for future CME pertaining to communication challenges with the elderly or attitudes towards the elderly.

Although previous geriatric CME has focused on disease-specific presentations, such as chronic obstructive lung disease or pneumonia, Williams and Connolly<sup>(10)</sup> clearly found that practicing physicians requested more general topics for education programs, such as treating the frail elderly patient with multiple vague undifferentiated medical problems. Identifying normal physiologic changes of aging and atypical disease presentation in the elderly were other educational interests found. Most of the family physicians surveyed in this study indicated that they referred for assistance with patients having multiple coinciding problems, and identified clinical approaches to primary care of the elderly as future CME topics of need. Family physicians must be able to deal effectively with elderly patients presenting with multiple problems and be able to prioritize issues in a patient-centred way.

Several limitations were noted throughout this study. Although both the chart audit indicators measured and the survey questions posed to the referring family physicians were guided by previous studies and literature related to geriatric CME needs, such measures and indicators could have limited the amount of information gathered and may have inadvertently led to the exclusion of other pertinent information. While participating referring physicians were offered a copy of their patient's care of the elderly consultation letter to assist with accurate recollection of detail, the survey questions were certainly subject to their respective recall bias. Additionally, while great effort was put forth to conduct the surveys face-to-face, there were a few exceptions where surveys were conducted over the phone or through email. Additionally, the patients examined in this study had family physicians and attended a seniors' outpatient clinic, so the medical problems encountered may not be representative of a general urban-dwelling elderly population. There may be other topics of importance related to those not having a family doctor or those not referred to a seniors' program.

#### **CONCLUSION**

There were many similarities found between the type of geriatric medical problems seen in this study's care of the elderly consultations and those previously documented in the literature. The majority of the patients reviewed had significant issues relating to preventive care procedures. Other common clinical issues found in the audit, such as osteoarthritis, hypertension, osteoporosis, depression or anxiety, resonate with the topics of importance in the literature. In addition, despite not previously being identified by physicians as challenging and valuable geriatric topics in the literature, the chart review and referring physician surveys identified significant ongoing medical issues dealing with chronic pain, diabetes, obesity, and insomnia.

This study clarified medical problems of importance in a sample of geriatric patients referred to a care of the elderly physician to better define geriatric CME needs for family physicians. The findings support future CME programs that focus on the common problems encountered. The medical problems not previously noted in the literature as common geriatric medical problems of importance may point to other factors that need to be considered.

While medical knowledge of geriatric problems should continue to be addressed by current continuing medical education initiatives, per physician-indicated educational priority, further research into process of care factors, particularly time management and clinical approach in a family medicine context, should be considered in future geriatric CME programs for family physicians.

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#### CONFLICT OF INTEREST DISCLOSURES

The authors declare that no conflicts of interest exist.

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