

Uncovering inequities in access to health care among adult Canadians with chronic back disorders

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Low Back Disorders

- Public Health Problem/ High Costs
 - Leading cause of morbidity worldwide (Vos,2012)
 - \$4-6 billion health care costs in Canada (Bone & Joint Canada, 2011)
 - Indirect costs 2-3 x healthcare costs
- Physician Care Utilization
 - 14% of all encounters with GP (25% for MSK in general) (Jordan, 2010)



 High proportion of ortho/neuro surgeon caseload (Mackay, 2010)



Health Care Use

- Family physicians may not be most appropriate care provider to manage low back disorders:
 - relatively little MSK training (Pinney, 2001; Freedman, 2002)
 - low measured and self-perceived competence (Freedman, 2002 & Day, 2007)
- Physiotherapists and chiropractors have specialized training re. management of low back disorders
 - Manual therapy & exercise prescription- cost effective (Lin, 2011)
 - Early use of $PT \rightarrow$ less opiod use and imaging (Frogner, 2018)
 - Access may be limited due to current funding models





Gaps and Research Rationale

- Little is known regarding the comparative use of family physician, chiropractic and physiotherapy services in Canada
- Exploring these differences may help to identify potential gaps in access to care and may assist in the development of strategies to optimize equitable access





Objectives

1) Explore patterns of use of community-based family physician, chiropractor and physiotherapy services among adults with CBD

2) Profile the sociodemographic, lifestyle, and health factors associated with use of different health care providers among adults with CBD





Methods

- 2010 & 2011 Canadian Community Health Surveys
 - Statistics Canada's Research Data Centre
- Sample: Adults (18+) who self-report having: "...back problems, excluding fibromyalgia and arthritis" for 6 months or more (i.e. CBD) with no hospitalization in past year (N=22,106)
- Dependent variable: self-reported use of: family physician/ GP; chiropractor; physiotherapist in the past 12 months
- Independent variables: sociodemographic, lifestyle & general health
- Descriptive and multiple logistic regression analysis (bootstrap weights)





Patterns of Health Care Use Among Adult Canadians with CBD*



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Select factors associated with self-reported health care use

Variable	Family Physician (only)	Chiropractor (any)	Physiotherapist (any)
Age: 18-34 (ref)	-	-	-
35-49	^ 1.22	-	0.84
50-64	1.42	-	↓ 0.76
65+	^ 2.18	-	↓ 0.59
Sex: Female	^ 1.19	-	1.28
Income: 1-lowest (ref)	-	-	-
2	₩ 0.72	1.64	1.50
3	↓ 0.67	1.99	1.57
4	↓ 0.68	^ 2.10	^ 1.91
5 (highest)	↓ 0.59	^ 1.97	^ 2.40

Select factors associated with self-reported health care use (cont'd)

Variable	Family Physician (only)	Chiropractor (any)	Physiotherapist (any)
Education - less than secondary (ref)	-	-	-
- secondary graduation	0.87	1.48	1.14
- some post-secondary	0.93	1.40	1.03
- post-secondary graduation	↓ 0.82	^ 1.41	1.49
Residence - CMA or CA (urban)(ref)	-	-	-
- strongly influenced MIZ	-	-	↓ 0.62
- moderately influenced MIZ	-	-	↓ 0.71
 weak, uninfluenced MIZ & territories 	-	-	↓ 0.72

Select factors associated with self-reported health care use (cont'd)

Variable	Family Physician (only)	Chiropractor (any)	Physiotherapist (any)
No. of co-morbidities - none (ref)	-	-	-
- 1-2	1.27	0.87	-
- 3+	1.89	0.51	-
Pain / Function - no pain (ref)	-	-	-
 pain prevents no activities 	₩ 0.77	1.29	1.46
 pain prevents a few activities 	₩0.71	1.64	^ 2.15
 pain prevents some activities 	↓ 0.73	1.18	^ 2.57
 pain prevents most activities 	↓ 0.73	1.10	^ 3.56

Factors associated with use of each health care provider group

Family Physician	Chiropractor	Physiotherapist
• Older	Higher	Younger
• Women	education	• Women
Lower education	Higher income	Higher
Lower income	Caucasian	education
Immigrant	Non-smoker	Higher income
Current smoker	• No co-	• Urban
• More co-	morbidities	Other ethnicity
morbidities	More active	Non-smoker
Less pain limited	Moderate pain	Lower BMI
function	limited function	More active
Lower stress	Higher stress	More pain

- Lower overall health
- Higher overall health

limited function



Considerations

- Potential need ≠ health care use
 - People with high potential needs (e.g. older age, lower income, rural) may not be able to access chiropractic or physiotherapy services
- Unable to determine reason for health care use
- Number of visits not captured
- Survey does not include Indigenous people living on reserves





Conclusions

- Differential patterns of self-reported use among those with CBD are evident between provider groups
- Differences highlight potential inequities in access





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