— Extended Abstract —

Evaluation of satisfaction with treatment for chronic pain in Canada

Marguerite L. Sagna, Ph.D. and Donald Schopflocher, Ph.D.

University of Alberta

Introduction

For millions of people living with chronic pain every day worldwide, the amount of suffering, disability, and psychological distress is quite substantial. Chronic pain is associated with impairments in quality of life, social activities, occupational functioning and emotional wellbeing.[1-7] A global study has found that people with chronic pain were more likely to report 3 or more days of incapability to carry out daily activities and, were 4 times more likely to suffer from depression or anxiety than those without pain.[2] Using a large Canadian population survey, Ramage-Morin and Gilmouur [8] have found that over two thirds of people with chronic pain experience serious limitations to physical and mental health as they were less likely to accomplish daily activities, to socialize and were more likely to suffer from anxiety, depression symptoms, and to report a negative sense of community belonging than respondents with no pain. It has been acknowledged that chronic pain induces more disability than other chronic illness without pain.[9] As such, using the short form 12, a measure of health-related quality, a study demonstrated that individuals with Osteoarthritis experience the lowest overall quality of life than those with heart failure.[10]

Along with the tremendous toll of suffering and disability, chronic pain is associated with excess of health care utilization and considerable loss of work productivity. Chronic pain such as arthritis, neuropathy and associated comorbidities emerge as the most common

reason people seek health care.[11] Using a population sample of Canadian adults, a study demonstrated that chronic pain sufferers have 4 times higher number of medical consultations, 4 times higher rates of hospitalization and 6 times the average number of medication taken than those without pain.[12] People with chronic pain were also found to be more than twice as likely to be unproductive at work.[2] They also recorded high rates of absenteeism and faced increased risk of losing a job.[8]

The excess health care utilization and loss productivity are costly and account for a sizeable financial burden to society. A study based on data from the National Population Health Survey and various administrative sources in Canada estimated that each chronic pain sufferer cost to the health care system an additional Can$3500 per year, which results into a yearly burden of more than Can$ 400 million.[13]

Given that pain is physically debilitating, psychologically depressing, and financially costly, appropriate diagnosis and optimal treatment are critical and could help lessen these burdens. However, there is growing evidence that pain remains a misunderstood and mistreated symptoms of acute and chronic illness.[14] A previous research estimated that more than 80% of pain sufferers are receiving insufficient pain relief, mostly due to extremely conservative pharmacologic treatment.[15] Concern among clinicians of potential addiction to prescription drugs often influences the way pain is treated. Lack of awareness about treatment options for chronic pain in the medical community and patients' health seeking behaviors or ways of coping with the pain may influence the adequacy of pain management. The purpose of this study therefore is to examine factors associated with satisfaction with treatment for chronic pain in a sample of Canadian adults.

Data and Methods

Data for this analysis come from independent telephone surveys conducted by Nanos Research, a Canadian market research company, in 2007 and 2008. Each survey was undertaken using random digit dialing to gather information on the issue of chronic pain in Canada. Participants were recruited from six separate regions in Canada including Atlantic Provinces, Ontario, Quebec, Prairie Provinces, Alberta, and British Columbia. For each survey, 400 respondents were recruited from each of Ontario and Quebec, and 300 were recruited from each of Atlantic Provinces, Prairie Provinces, Alberta and, British Columbia, for a total sample size of 2,000 respondents. Eligible participants were at least 18 years old and reported suffering from pain from an illness, accident or medical condition.

Our study sample is restricted to the responses of 600 participants who have been administered an in-depth questionnaire in both the 2007 and the 2008 Nanos survey.

All statistical analyses including descriptive and multivariable logistic regression were conducted in SPSS, version 19.0.

Preliminary results

Findings reveal that only 54% of chronic pain sufferers reported being satisfied with the management of their pain. Logistic regression analyses (as shown on Table 1) reveal that satisfaction with chronic pain management is significantly associated with age, region of residence, pain duration and consultation with a pain specialist. Further findings demonstrate satisfaction with treatment is negatively correlated with anxiety/depression, health care utilization and poor general health.

Table 1. Logistic regression of selected factors on satisfaction with treatment of chronic pain, Nanos survey 2007/08 (n~600)

	Odds ratio	S.E.	P-value
Age			
18-25 (ref)			
26-35	1.370	0.383	0.412
36-45	4.480	0.350	**0.000**
46-55	2.577	0.342	**0.006**
56-65	3.558	0.372	**0.001**
66 and over	3.463	0.376	**0.001**
Gender			
Male (ref)			
Female	1.210	0.186	0.306
Region			
Atlantic	0.636	0.382	0.236
Quebec (ref)			
Ontario	0.426	0.239	**0.000**
Manitoba/Saskatchewan	0.676	0.411	0.340
Alberta	1.014	0.338	0.968
British Columbia	0.829	0.314	0.550
Cause of pain			
Arthritis (ref)			
Muscles	1.117	0.334	0.741
Back/Spine	1.221	0.253	0.429
Trauma	1.083	0.277	0.773
Other	1.546	0.288	0.130
Pain intensity			
Moderate (ref)			
Severe	0.839	0.210	0.403
Duration of pain			
6 months to 1 year (ref)			
1-5 years	0.494	0.332	**0.034**
Over 5 years	0.383	0.317	**0.002**
Time course of pain			
Constant (ref)			
Intermittent	0.686	0.229	0.100
Tolerance to pain			
No tolerance (ref)			
Little tolerance	0.714	0.222	0.128
Quite a bit of tolerance	0.902	0.263	0.696
More tolerance	1.052	0.416	0.902
Consulted a pain specialist			
Ever consulted	2.922	0.231	**0.000**
Never consulted (ref)			

	Odds ratio	S.E.	P-value
Taking medications			
None (ref)			
Over the counter	1.061	0.253	0.816
Narcotic	1.087	0.213	0.695
Drug plan coverage			
Adequate drug plan	1.309	0.243	0.267
Non adequate drug plan (ref)			

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