



8-Year Incidence Proportion of Major Depression in Canadian Community Dwelling Seniors

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Background

- Depression is characterized by depressed mood, fatigue, lack of motivation and interest, feelings of hopelessness [1], and is associated with increased morbidity and mortality [2]
- The World Health Organization (WHO) ranked depression as the fourth greatest cause of disease burden worldwide in 1990, and the third greatest in 2001 [3, 4]
- The proportion of Canadians aged 65 years of age and older is increasing rapidly [5]
- The annual prevalence of major depression in Canada: 5% [6], estimates in seniors are less conclusive, but prevalence appears to decline with age
- Very little research has been conducted on incidence or longitudinal risk factors for MDE in seniors, less so in Canada

Objectives

- Today
- (1) Describe demographic/socioeconomic characteristics of Canadian community dwelling seniors
 - (2) Estimate 8-year incidence proportions of MDE in Canadian seniors
- Future work
- (3) Investigate cross-sectional association between social support and MDE
 - (4) Investigate longitudinal association between social support and MDE

Methods

- Study Design:
 - The National Population Health Survey, Cycles 3 (1998) – 7 (2006)
 - Longitudinal survey
- Sample
 - Restricted to those age 65+ at “baseline”
 - Baseline was established as cycle 3
 - Cycle 3 was the first cycle to include the MOS Social Support Survey
 - Free of current MDE at baseline
- Outcome of Interest: Depression, as assessed by the Composite International Diagnostic Interview Short form for Major Depression (CIDI-SDMD), DMS-IV criteria
- Analytical Approach
 - Demographic characteristics tabulated, compared using Chi2 statistics
 - Incidence proportions
 - Numerator: At risk group who develop MDE in cycles 4-7
 - Denominator: All those free of MDE at baseline, aged 65+
 - All estimates bootstrap weighted
 - STATA 11.0
- Ethics
 - Study Approved by University of Calgary Conjoint Health

Table 1. Demographics

		%	95% Confidence Interval		
Sex	Male	41.34	39.57	43.11	
	Female	58.66	56.89	60.43	
Education	<HS	48.96	46.19	51.74	
	HS+	51.04	48.26	53.81	
Employment	Employed	6.20	4.85	7.54	
	Not Employed	93.80	92.46	95.15	
Income	Low	32.65	19.20	23.88	
	Middle/High	78.46	76.12	80.80	
Marital Status	Married/Common Law	59.13	56.42	61.83	
	Widowed/Div/Sep	40.87	38.17	43.58	
Living Arrangement	Alone	36.57	33.99	39.16	
	With Partner	53.37	50.61	56.14	
	With Others	10.05	8.14	11.96	
Smoking Status	Smokes	13.32	11.60	15.04	
	Does Not Smoke	86.68	84.96	88.40	
Physical Activity	Active	38.95	36.32	42.58	
	Inactive	61.05	58.42	63.68	
Childhood Traumatic Event	No	58.13	55.52	60.74	
	Yes	47.87	39.26	44.48	
Health Utility Index - Mobility	No Problem	88.48	86.97	90.00	
	Problem	11.52	10.00	13.03	
Health Utility Index - Dexterity	No Problem	97.25	96.43	98.07	
	Problem	2.75	1.93	3.57	
Health Utility Index - Pain	No Problem	75.61	73.33	77.88	
	Problem	24.39	22.12	26.66	
Any Restriction to Activity	No	63.94	61.66	66.22	
	Yes	36.06	33.78	38.34	
Chronic Condition	No	19.21	16.98	21.44	
	Yes	80.79	78.56	83.02	
Tangible Social Support	High	78.23	76.17	80.30	
	Low	21.77	19.70	23.87	
Affection Social Support	High	70.39	67.83	72.95	
	Low	29.61	27.05	32.17	
Positive Social Interaction	High	73.38	71.05	75.70	
	Low	26.62	24.30	28.95	
Emotional/Informational Social Support	High	75.70	73.48	77.93	
	Low	24.30	22.07	26.53	
Structural Social Support	High	63.14	60.56	65.71	
	Low	36.86	34.29	39.44	

- The majority of respondents were female, not employed, living with a partner and married.
- 80% of respondents reported having a chronic condition, though only 25% of respondents reported having mobility, dexterity or pain problems.
- 8-year depression incidence in this sample was calculated to be 4.45% (3.00-5.89)
- Due to the small number of cases, no conclusions can be reached on the basis of confidence intervals.

Results

Table 2. 8-Year Incidence Proportion

		%	95% Confidence Interval		
Overall		4.45	3.00	5.89	
Sex	Male	2.95	0.95	4.99	
	Female	5.38	3.54	7.22	
Education	Less than high school	4.06	2.19	5.93	
	High school or more	4.79	2.66	6.92	
Employment	Employed	5.34	0.43	10.25	
	Not Employed	4.42	2.91	5.92	
Income	Low	6.14	2.43	9.86	
	Middle/High	3.92	2.34	5.50	
Marital Status	Married/Common Law	4.51	2.70	6.32	
	Widowed/Div/Sep	4.56	2.16	6.96	
Living Arrangement	Alone	4.57	2.25	6.89	
	With Partner	4.52	2.63	6.42	
	With Others	3.38	-0.57	7.32	
Smoking Status	Smokes	2.42	0.39	44.51	
	Does Not Smoke	4.74	3.13	6.35	
Physical Activity	Active	3.74	1.59	5.89	
	Inactive	4.94	3.07	6.80	
Childhood Traumatic Event	No	3.44	1.80	5.07	
	Yes	5.91	3.26	8.56	
Health Utility Index - Mobility	No Problem	4.33	2.82	5.84	
	Problem	5.75	1.73	9.77	
Health Utility Index - Dexterity	No Problem	4.31	2.87	5.74	
	Problem	10.60	-1.76	22.96	
Health Utility Index - Pain	No Problem	3.70	2.11	5.29	
	Problem	7.04	3.87	10.20	
Any Restriction to Activity	No	2.70	1.40	4.00	
	Yes	7.59	4.56	10.62	
Tangible Social Support	High	3.65	2.26	5.05	
	Low	7.33	3.40	11.26	
Affection Social Support	High	3.94	2.39	5.49	
	Low	5.79	2.84	8.75	
Positive Social Interaction	High	4.20	2.55	5.85	
	Low	5.33	2.60	8.07	
Emotional/Informational Social Support	High	4.19	2.56	5.81	
	Low	5.57	2.63	8.51	
Structural Social Support	High	3.77	2.08	5.46	
	Low	5.75	3.25	8.25	

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