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by Leanne Findlay

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## Depression and suicidal ideation among Canadians aged 15 to 24

by Leanne Findlay

#### **Abstract**

**Background:** Among Canadians aged 15 to 24, the rate of depression is higher than at any other age, and suicide is the second leading cause of death. The current study provides detailed information about depression and suicidal ideation among young Canadians, including their use of mental health support. **Data and methods:** Data from the 2012 Canadian Community Health Survey–Mental Health (CCHS–MH) were used to describe rates and experiences of depression and suicidal ideation among Canadians aged 15 to 24, including psychosocial characteristics of those who had depression or reported suicidal thoughts. Characteristics associated with seeking professional support were also examined.

Results: About 11% of Canadians aged 15 to 24 had experienced depression in their lifetime; 7%, in the past year. Approximately 14% reported having had suicidal thoughts in their lifetime; 6%, in the past year. Lifetime depression and suicidal thoughts were moderately correlated (r = .34, p < .001). Individuals with lifetime depression had more than four times the odds of seeking professional support in the previous year, compared with those who did not have lifetime suicidal thoughts had more than three times the odds of seeking professional support, compared with those who did not have lifetime suicidal thoughts. Psychosocial factors such as negative social interactions and lower perceived ability to deal with stress were associated with depression and suicidal thoughts, although these associations differed for males and females.

Interpretation: The findings suggest that many young Canadians have depression and/or suicidal thoughts. Their odds of seeking professional support are significantly high.

Key words: Mental health conditions, mental health services, social determinants of health, youth

A ccording to the 2012 Canadian Community Health Survey—Mental Health, 15- to 24-year-olds had the highest rates of mood and anxiety disorders of all age groups. About 7% of them were identified as having had depression in the past 12 months, compared with 5% of people aged 25 to 64 and 2% of those aged 65 or older.<sup>1</sup>

Severe depression is associated with suicidal behaviour,<sup>2</sup> which is often conceptualized along a continuum from thoughts to plans to attempts/deaths.<sup>3</sup> As many as one in five teens report suicidal ideation in the past year.<sup>4</sup> Suicide is the second leading cause of death among young Canadians, accounting for almost one quarter of all deaths at ages 15 to 24.<sup>5</sup>

Adolescence and early adulthood are critical periods in the development of mental health.<sup>6-8</sup> Risk and protective factors may differentially influence this age group, and rates of depression peak during these ages.<sup>9</sup>

A variety of factors can influence mental health. For example, young women tend to be at risk for depression and suicidal ideation. Strong evidence supports associations between socioeconomic conditions, by psychosocial functioning and mental health. Psychosocial factors such as experiencing stress cor negative social behaviours (for instance, criticism, anger, bullying) are also risk factors for depression and suicidal ideation. Smoking is bi-directionally associated with depression, which may create a lifelong health risk. By contrast, participation in physical activity 15,16 and social support 17,18 may be protective.

A previous study found that 12% of 15- to 24-year-olds reported seeking professional mental health support in the past year, and 27% consulted informal sources. Among those with a mental health condition, half reported seeking professional support in the past year. However, according to another study, fewer than one-third of those with suicidal thoughts, plans or attempts sought professional support. 18

As outlined in Anderson's model of health care service use, <sup>20</sup> predisposing and enabling socio-demographic factors such as sex and immigration status, <sup>19</sup> as well as psychosocial correlates such as social support, <sup>21</sup> are associated with mental health service use among youth. Less is known about the factors related to service use among those with mental illness or suicidal ideation, or about interactions between factors like depression and social support. <sup>22</sup>

This article describes depression and suicidal ideation among Canadians aged 15 to 24 based on detailed population data from the 2012 Canadian Community Health Survey—Mental Health. Co-occurrence of depression and suicidal ideation is explored. Associations between depression and suicidal thoughts and the use of professional sources of mental health support are examined, with a focus on psychosocial factors such as emotional support.

#### **Methods**

#### Data source

The cross-sectional 2012 Canadian Community Health Survey—Mental Health (CCHS—MH) was conducted by Statistics Canada to gather information about mental health status and perceived need for formal and informal services and supports. The household population aged 15 or older in the 10 provinces was targeted; residents of reserves and other Indigenous settlements in the provinces, full-time members of the Canadian Forces, and the institutionalized population were excluded. Computer-assisted telephone and in-person interviews were conducted; proxy interviews were not permitted. The present analyses pertain to respondents aged 15 to 24 (n = 4,031, weighted to represent more than 4.4 million).

#### **Measures**

#### Sociodemographic characteristics

CCHS—MH respondents reported their sex, age, student status, immigration status, and geographic region (rural versus population centre). Population centres are areas with a population concentration of 1,000 or more and a population density of 400 or more per square kilometre. Respondents indicated if they were daily or occasional smokers (versus non-smokers) and if they had engaged in moderate or vigorous physical activity in the past seven days (active). Household-level infor-

mation was included as an indicator of socioeconomic status—highest level of education in the household (dichotomized as secondary graduation or less versus some postsecondary or more) and household income. Low household income was defined as being in the lowest income quintile, taking household and community size into account.

#### Depression

The CCHS-MH administered five modules of the World Mental Health—Composite International Diagnostic Interview 3.0 (WMH-CIDI), based on the *Diagnostic and Statistical Manual* 

Table 1
Description of depression and suicidal ideation, household population aged 15 to 24,
Canada excluding territories, 2012

		95% confi interv		
Characteristic	%	from	to	
Depression	'			
Lifetime	10.7	9.3	12.1	
Past 12 months	7.1	6.0	8.4	
Suicidal thoughts				
Lifetime	14.1	12.6	15.7	
Past 12 months	5.8	4.9	6.9	
Suicide plan				
Lifetime	4.9	4.1	5.8	
Past 12 months	2.2	1.6	2.9	
Suicide attempt				
Lifetime	3.5	2.8	4.4	
Past 12 months	1.0 <sup>E</sup>	0.6	1.7	
Ever (lifetime) consulted professional about				
symptoms of depression <sup>†</sup>				
No	39.4	33.1	46.1	
Yes	60.6	53.9	66.9	
Duration of worst episode of symptoms of depression <sup>‡</sup>				
Less than 1 month	15.1 <sup>E</sup>	10.5	21.0	
1 month to less than 6 months	52.3	44.5	60.0	
6 months to less than 1 year	14.3 <sup>E</sup>	9.8	20.4	
1 year or more	18.4	13.6	24.4	
Recency of depression <sup>‡</sup>				
Past month	21.4 <sup>E</sup>	15.0	29.6	
1 to 6 months ago	40.9	32.9	49.5	
More than 6 months ago	37.7	29.9	46.1	
		Standard	Mini-	Maxi-
	Mean	error	mum	mum
Symptoms of depression <sup>‡</sup> interfered with:				
social life	6.3	0.2	0	10
close relationships	5.2	0.2	0	10
ability to attend school	5.2 5.1	0.4	0	10
activities at home	4.6	0.4	0	10
ability to attend work	4.0	0.2	0	10
		0.0	Ü	. 0
Number of days in past year unable to work/carry out regular activities because of symptoms of depression <sup>‡</sup>	24.8 <sup>E</sup>	4.8		

<sup>...</sup> not applicable

Source: 2012 Canadian Community Health Survey-Mental Health.

of Mental Disorders, Fourth Edition,<sup>23</sup> to detect six disorders: depression; bipolar disorder; generalized anxiety disorder; and alcohol, cannabis and substance abuse/dependence. Diagnostic algorithms identified respondents who met the criteria for each disorder; this study considered only depression (past 12 months and lifetime).

Those who experienced symptoms of depression in the past 12 months reported the duration and recency of their worst episode, the number of days that they were unable to work or carry out regular activities, and the degree to which depression interfered with their daily lives. This interference pertained to social life, close relationships, school attendance, home responsibilities and employment (0 indicated no interference; 10, severe interference).

Information from the WMH-CIDI was also used to examine *suicidal ideation*. Respondents were asked about: suicidal thoughts in their lifetime and in the past 12 months; having "made a plan for committing suicide" (lifetime/past 12 months); and having "attempted suicide or tried to take your own life" (lifetime/past 12 months). Given the small numbers who reported a plan or attempted suicide, most of the analyses reflect only suicidal thoughts.

#### Psychosocial factors

Three psychosocial correlates were investigated: negative social interactions, emotional support and self-reported ability to deal with stress.

Based on the Negative Social Interactions Scale,<sup>24</sup> responses to four questions (for example, felt others were angry or upset with you) were summed to produce a *negative social interactions* score ranging from 0 to 12, with higher scores indicating more negative social interactions.

Items based on the Social Provision Scale<sup>25</sup> showed the degree to which the individual felt *emotional support*; scores ranged from 10 to 40, with higher scores reflecting more support in five domains: attachment, guidance, reliable alliance, social integration and reassurance of worth.

E use with caution

<sup>†</sup> among those with lifetime depression

<sup>\*</sup> among those with depression in past 12 months

For *dealing with stress*, responses to two questions ("In general, how would you rate your ability to handle the day-to-day demands in your life?" and "In general, how would you rate your ability to handle unexpected and difficult problems?"), rated on a five-point scale from excellent to poor, were summed. Respondents also identified the major contributor to their feelings of stress: time pressures, own physical or mental health problem(s), financial or work situation, school, personal relationships, other or nothing.

Information about these scales is available in the Canadian Community Health Survey—Mental Health User Guide.<sup>26</sup>

#### Sources of support

All respondents were asked if, during the past 12 months, they had seen or talked on the telephone with various professional and informal sources of support about problems with their emotions, mental health, or use of alcohol or drugs. Professional sources were: psychiatrists, family doctors/general practitioners, psychologists, nurses, and social workers/counselors/psychotherapists. Informal sources were: family members, friends, co-workers/supervisors/bosses, teachers/school principals, resources (online diagnoses, finding help, discussing with others/online therapy/ other), self-help groups, telephone helplines, and other. For sources that were not self-help, respondents were asked the degree to which the source was helpful, which was dichotomized into "a lot or some" versus "a little or not at all."

#### **Analysis**

Descriptive analyses (frequencies, means) examined the socio-demographic and psychosocial characteristics and the prevalence of lifetime and past-12-month depression and suicidal ideation among 15- to 24-year-olds. Detailed characteristics of the experiences of those with depression were also explored.

Table 2
Selected characteristics of sample, by lifetime depression, household population aged 15 to 24, Canada excluding territories, 2012

	No life	No lifetime depression		Lifetime depression			
		95% confidence	dence		95% confidence interval		
Characteristic	%	from	to	%	from	to	
Sex							
Male <sup>†</sup>	91.4	89.2	93.2	8.6	6.8	10.8	
Female	87.2	85.0	89.1	12.8**	10.9	15.0	
Age group							
15 to 18	91.9	89.9	93.5	8.1**	6.5	10.1	
19 to 24 <sup>†</sup>	87.6	85.4	89.5	12.4	10.5	14.6	
Geography							
Rural	91.5	88.4	93.8	8.5	6.2	11.6	
Population centre <sup>†</sup>	89.0	87.2	90.5	11.0	9.5	12.8	
Immigrant status							
Non-immigrant <sup>†</sup>	89.0	87.3	90.5	11.0	9.5	12.7	
Immigrant	91.8	87.8	94.5	8.2 <sup>E</sup>	5.5	12.2	
Student status							
Not student	86.3	83.4	88.8	13.7**	11.2	16.6	
Student <sup>†</sup>	91.3	89.6	92.7	8.7	7.3	10.4	
Highest level of education (household)							
Secondary or less	89.3	85.3	92.3	10.7 <sup>E</sup>	7.7	14.7	
At least some postsecondary <sup>†</sup>	89.4	87.6	90.9	10.6	9.1	12.4	
Household income							
Lowest income quintile	89.3	86.4	91.6	10.7	8.4	13.6	
Higher <sup>†</sup>	89.3	87.6	90.9	10.7	9.1	12.4	
Smoking							
Not current smoker <sup>†</sup>	91.2	89.6	92.6	8.8	7.4	10.4	
Daily or occasional smoker	81.7	77.5	85.2	18.3***	14.8	22.5	
Physical activity	20.0	00.0	00.0	40.4	40.0	47.0	
Not active	86.9	83.0	90.0	13.1	10.0	17.0	
Moderately/Vigorously active in last 7 days†	89.8	88.1	91.2	10.2	8.8	11.9	
Suicidal thoughts (lifetime)	00.7	00.0	040	0.0			
No <sup>†</sup>	93.7	92.3	94.9	6.3	5.1	7.7	
Yes	62.5	56.9	67.8	37.5***	32.2	43.1	
Suicide plan (lifetime)	01.6	00.0	00.0	0.4	71	0.0	
No <sup>†</sup>	91.6	90.2	92.9	8.4	7.1	9.8	
Yes	45.0	36.6	53.7	55.0***	46.3	63.4	
Suicide attempt (lifetime) No <sup>†</sup>	00.0	89.4	00.1	0.0	7.0	10.6	
	90.8		92.1	9.2 50.4***	7.9	10.6 62.4	
Yes	49.6	37.6	61.6	50.4		02.4	
	Mean	Standard		Moon	Standard		
N 0 111 0 1		error		Mean	error		
Negative social interactions <sup>‡</sup> Emotional support <sup>‡</sup>	3.1	0.1		4.8***	0.2		
Overall	36.7	0.1		34.6***	0.4		
Attachment	7.4	0.0		7.0***	0.1		
Guidance	7.5	0.0		7.1***	0.1		
Reliable alliance	7.5	0.0		7.1***	0.1		
Social integration	7.2	0.0		6.7***	0.1		
Reassurance of worth	7.1	0.0		6.7***	0.1		
Stress <sup>‡</sup>							
Ability to handle unexpected problem	3.6	0.0		3.0***	0.1		
Ability to handle day-to-day demands	3.8	0.0		3.4***	0.1		

<sup>&</sup>lt;sup>E</sup> use with caution

Source: 2012 Canadian Community Health Survey-Mental Health.

<sup>\*\*</sup> significantly different from reference category (p < 0.01)

<sup>\*\*\*</sup> significantly different from reference category (p < 0.001)

<sup>†</sup> reference category

<sup>&</sup>lt;sup>‡</sup> reference category is those without lifetime depression

Lifetime depression and suicidal thoughts were examined by socio-demographic and psychosocial variables. This consisted of univariate associations (chisquare tests) to compare those who did and did not have depression, and who

did or did not have suicidal thoughts, and two multivariate logistic regression models. Although depression and suicidal thoughts were usually considered separately, experiencing both depression and suicidal thoughts was explored in cross-tabulations.

Table 3
Selected characteristics of sample, by lifetime suicidal thoughts, household population aged 15 to 24, Canada excluding territories, 2012

	No lifetime suicidal thoughts			Lifetime suicidal thoughts			
	<u>interval</u>		95% confidence				
Characteristic	%	from	to	%	from	to	
Sex							
Male <sup>†</sup>	88.0	85.8	89.8	12.0	10.2	14.2	
Female	83.8	81.4	85.9	16.2**	14.1	18.6	
Age group							
15 to 18	86.7	84.3	88.8	13.3	11.2	15.7	
19 to 24 <sup>†</sup>	85.4	83.2	87.3	14.6	12.7	16.8	
Geography							
Rural	88.7	85.0	91.6	11.3	8.4	15.0	
Population centre <sup>†</sup>	85.4	83.7	87.0	14.6	13.0	16.3	
Immigrant status							
Non-immigrant <sup>†</sup>	85.4	83.7	87.0	14.6	13.0	16.3	
Immigrant	89.1	84.7	92.3	10.9	7.7	15.3	
Student status							
Not student	84.8	82.3	87.0	15.2	13.0	17.7	
Student <sup>†</sup>	86.7	84.7	88.6	13.3	11.4	15.3	
Highest level of education (household)							
Secondary or less	82.0	77.6	85.8	18.0	14.2	22.4	
At least some postsecondary <sup>†</sup>	86.4	84.5	88.1	13.6	11.9	15.5	
Household income	00	00	00				
Lowest income quintile	84.6	81.6	87.2	15.4	12.8	18.4	
Higher†	86.4	84.5	88.1	13.6	11.9	15.5	
Smoking	00.4	04.0	00.1	10.0	11.0	10.0	
Not current smoker <sup>†</sup>	88.0	86.3	89.6	12.0	10.4	13.7	
Daily or occasional smoker	77.3	73.0	81.0	22.7***	19.0	27.0	
Physical activity	11.0	75.0	01.0	22.1	13.0	21.0	
Not physically active	81.6	77.1	85.4	18.4*	14.6	22.9	
Moderately/Vigorously physically active in last 7 days <sup>†</sup>	86.7	85.0	88.3	13.3	11.7	15.0	
Depression (lifetime)	00.7	03.0	00.5	13.3	11.7	13.0	
No <sup>†</sup>	90.2	00.7	91.4	9.8	0.6	11.3	
	50.5	88.7 43.4		49.5***	8.6 42.4	56.6	
Yes	50.5		57.6	49.5		30.0	
		Standard			Standard		
	Mean	error		Mean	error		
Negative social interactions <sup>‡</sup>	3.0	0.1		4.7***	0.2		
Emotional support <sup>‡</sup>							
Overall	36.8	0.1		34.6***	0.3		
Attachment	7.4	0.0		7.0***	0.1		
Guidance	7.5	0.0		7.1***	0.1		
Reliable alliance	7.5	0.0		7.1***	0.1		
Social integration	7.2	0.0		6.7***	0.1		
Reassurance of worth	7.1	0.0		6.6***	0.1		
Stress‡				***	***		
Ability to handle unexpected problem	3.6	0.0		3.1***	0.1		
Ability to handle day-to-day demands	3.8	0.0		3.4***	0.1		

<sup>\*</sup> significantly different from reference category (p < 0.05)

Source: 2012 Canadian Community Health Survey-Mental Health.

The use of professional support for mental health problems by those who did and did not have depression or suicidal thoughts was examined. Multivariate logistic regressions were used to assess associations between depression or suicidal thoughts and professional consultations, while controlling for socio-demographic (age, sex, geography, immigrant status, household income, student status) and psychosocial (negative social interactions, emotional support, ability to deal with stressors) factors. Interactions between depression and psychosocial characteristics and between suicidal thoughts and psychosocial characteristics were tested. Moderating effects were determined based on significant interactions. Interactions were displayed using simple slopes analyses by plotting the adjusted odds ratio of the outcome (depression or suicidal thoughts) for the minimum and maximum values of each psychosocial variable.

SAS 9.3 was used for all analyses. Survey sampling weights were applied so that the results would be representative of the Canadian population aged 15 to 24. Bootstrap weights were applied using SUDAAN 11.0.1 to account for underestimation of standard errors due to the complex survey design.<sup>27</sup>

#### **Results**

Socio-demographic and psychosocial characteristics

About 85% of the sample of 15- to 24-year-olds lived in population centres; 64% were students; and 16% were immigrants. Most (84%) had been moderately or vigorously active in the past seven days, and 20% were daily or occasional smokers. Three-quarters (74%) lived in households that were above the lowest income quintile, and 86% were in households where a member had at least some postsecondary education.

The measure of *negative social interactions* among young Canadians was relatively low (mean score = 3.3; range: 0 to 12), and the measure of *emotional support* was relatively high (mean score = 36.5; range: 10 to 40). About a third (35%) reported that school was the

<sup>\*\*</sup> significantly different from reference category (p < 0.01)

<sup>\*\*\*</sup> significantly different from reference category (p < 0.001)

<sup>†</sup> reference category

<sup>‡</sup> reference category is those without lifetime suicidal thoughts

major contributor to feelings of stress, followed by financial pressures or work (26%), time pressures (8%), personal relationships (6%), a physical or mental health problem or condition (4%), or another source (10%). Approximately 10% indicated that nothing contributed to feelings of stress.

#### Depression

An estimated 11% of 15- to 24-year-olds had been depressed in their lifetime; 7% had experienced depression in the past year (Table 1). Among those with depression, 61% had talked to a professional about their symptoms in their lifetime.

About half of those with depression reported that their worst episode had lasted one to six months; for 18%, their worst episode had lasted more than a year. Almost two-thirds stated that their worst episode had occurred in the previous six months. Depression was most likely to interfere with social life, followed by close relationships, and attending school. On average, because of symptoms, those with depression had missed 25 days of regular activities in the past year.

Young Canadians with depression were more likely to be females, to be older, to smoke, and to report lifetime suicidal thoughts, plans or attempts; they were less likely to be students (Table 2). They also tended to have more negative social interactions and less emotional support, and were less likely to report being able to deal with stressors. Similar results were found in a multivariate analysis (except for non-significance of age and student status), suggesting that even when other socio-demographic factors were taken into account, being female, smoking, and having more negative social interactions, less emotional support and less ability to deal with stress were associated with lifetime depression.

#### Suicidal thoughts

An estimated 14% of 15- to 24-year-olds reported having had suicidal thoughts at some point in their life; 6% had had such thoughts in the past 12 months (Table 1). As well, in their lifetime, 5% had made a suicide plan (2% in the past year), and 3.5% had attempted suicide. Depression

and lifetime suicidal thoughts were moderately correlated (r = .34, p < .001).

The majority of young Canadians had never been depressed and never had suicidal thoughts. However, 5% had been depressed and had also had suicidal thoughts (an estimated 234,000); 5% had been depressed without suicidal thoughts; and 9% had suicidal thoughts, but had not been depressed.

Those reporting lifetime suicidal thoughts were more likely to be females and to smoke, and were less likely to be physically active (Table 3). They had more negative social interactions, less emotional support, and were less able to deal with stressors. Multivariate analyses suggested that even when the other factors were taken into account, being female, smoking, and having more negative social interactions, less emotional support and less ability to deal with stress were associated with lifetime suicidal thoughts.

Table 4
Use of professional and informal sources of support among 15- to 24-year-olds with lifetime depression or lifetime suicidal thoughts, by type of support, household population, Canada excluding territories, 2012

	lifetim % wh	Of those with lifetime depression, % who used source in past year			Of those who used source, % who perceived that they received a lot/some help			Of those with lifetime suicidal thoughts, % who used source in past year			Of those who used source, % who perceived that they received a lot/some help		
		95 confid inte	lence		95 confid inte	lence		95 confid inte	lence		95 confid inter	ence	
Source of support	%	from	to	%	from	to	%	from	to	%	from	to	
Any professional source	41.6	35.0	48.5				35.8	30.7	41.2				
General practitioner	24.1	18.1	31.2	63.8	48.9	76.4	17.0	13.1	21.7	66.5	53.6	77.3	
Social worker/Counsellor	22.4	16.8	29.2	71.9	54.7	84.4	18.6	14.4	23.7	63.2	48.3	76.0	
Psychiatrist	12.4 <sup>E</sup>	8.2	18.2	55.0 <sup>E</sup>	32.9	75.3	8.7 <sup>E</sup>	6.0	12.6	70.1	51.5	83.7	
Psychologist	11.5 <sup>E</sup>	8.2	16.0	52.9 <sup>E</sup>	35.6	69.4	8.9	6.4	12.2	52.1 <sup>E</sup>	35.1	68.7	
Nurse	F			F			3.2 <sup>E</sup>	1.8	5.6	58.9 <sup>E</sup>	30.6	82.3	
Any informal source	61.4	54.5	67.8				57.9	52.2	63.3				
Friend	47.6	40.8	54.5	87.4	80.1	92.2	44.0	38.6	49.7	85.9	78.9	90.8	
Family member	33.0	26.5	40.1	71.0	56.9	82.0	30.8	26.1	36.0	81.5	72.3	88.2	
Co-worker/Supervisor	6.0 <sup>E</sup>	4.0	9.0	69.9	51.5	83.5	5.0 <sup>E</sup>	3.4	7.4	62.3 <sup>E</sup>	40.3	80.2	
Teacher or school principal	6.4 <sup>E</sup>	3.8	10.6	88.1	66.1	96.6	$6.5^{E}$	4.2	10.1	69.8	46.7	85.9	
Internet	27.7	21.7	34.7				22.3	18.0	27.2				
Self-help group	4.2 <sup>E</sup>	2.3	7.6				4.4 <sup>E</sup>	2.6	7.3				
Telephone help line	2.7 <sup>E</sup>	1.4	4.9				3.1 <sup>E</sup>	1.8	5.4				
None	35.5	29.6	42.0				40.4	35.1	46.0				
Hospitalization	F						4.1 <sup>E</sup>	2.3	7.1				

<sup>..</sup> not available for a specific reference period

<sup>...</sup> not applicable

<sup>&</sup>lt;sup>E</sup> use with caution

F too unreliable to be published

#### Mental health support

Among 15- to 24-year-olds with lifetime depression, 42% consulted a professional and 61% consulted an informal source in the past 12 months (Table 4). Friends (48% of those with depression) and family members (33%) were the most common informal sources. More than half of those with lifetime depression considered the source to have provided "a lot" or "some" help. Others, however, did not perceive that they received help from specific sources (for example, 47% who sought help from a psychologist).

About a third (36%) of those who reported lifetime suicidal thoughts consulted a professional and 58% consulted an informal source in the past 12 months. The rate at which young Canadians

reported that the source was helpful exceeded 50% for all sources.

When the other socio-demographic and psychosocial variables were taken into account, females had significantly higher odds of consulting professional sources, and immigrants had significantly lower odds (Table 5). Compared with those who did not have lifetime depression, young Canadians who did had more than four times the odds of consulting a professional in the past 12 months; those with lifetime suicidal thoughts had more than three times the odds, compared with those who never had suicidal thoughts. Individuals with more negative social interactions were more likely to consult professional sources, and those with greater ability to deal with stressors were less likely.

Table 5
Adjusted odds ratios relating selected characteristics to consulting professional sources of support, household population aged 15 to 24, Canada excluding territories, 2012

	Mo	del 1	Model 2			
	Adjusted odds	95% confidence interval	Adjusted odds	95% confidence interval		
Characteristic	ratio	from to	ratio	from	to	
Age (continuous)	1.04	0.98 1.10	1.04	0.98	1.11	
Sex						
Male <sup>†</sup>	1.00		1.00			
Female	2.02*	1.47 2.79	1.98*	1.43	2.73	
Geography						
Rural	0.98	0.67 1.43	1.00	0.68	1.48	
Population centre <sup>†</sup>	1.00		1.00			
Immigrant status						
Non-immigrant <sup>†</sup>	1.00		1.00			
Immigrant	0.49*	0.27 0.90	0.53*	0.30	0.95	
Household income						
Not low income†	1.00		1.00			
Low income	0.88	0.62 1.25	0.85	0.59	1.23	
Student status						
Not student	0.86	0.59 1.25	0.95	0.65	1.39	
Student <sup>†</sup>	1.00		1.00			
Psychosocial factors (continuous)						
Negative social interactions	1.22*	1.14 1.30	1.22*	1.13	1.31	
Emotional support	0.98	0.94 1.03	0.99	0.95	1.03	
Ability to deal with stress	0.73*	0.65 0.82	0.71*	0.64	0.80	
Lifetime depression						
$No^{\dagger}$	1.00					
Yes	4.68*	3.23 6.78				
Lifetime suicidal thoughts						
No <sup>†</sup>			1.00			
Yes			3.85*	2.73	5.43	

<sup>...</sup> not applicable

Source: 2012 Canadian Community Health Survey-Mental Health.

The presence of depression or suicidal thoughts alone is insufficient to understand the use of professional sources. Psychosocial factors interacted significantly with depression and suicidal thoughts. As well, these associations differed for males and females.

Regardless of whether they had depression, females with less ability to deal with stress had higher odds of consulting professional sources (Figure 1; results were similar for suicidal thoughts). Those with greater ability to deal with stress tended to consult professional sources only if they had depression or suicidal thoughts. Similarly, females with more negative social interactions had elevated odds of consulting professional sources, regardless of depression status (data not shown).

For males with suicidal thoughts, negative social interactions were not associated with consulting professional sources (Figure 2). However, males who did not have suicidal thoughts had higher odds of consulting professional sources if they had more negative social interactions (even higher odds than those with suicidal thoughts).

#### **Discussion**

Mental illness often develops early in life and is a leading cause of disability in youth.<sup>28</sup> One in ten 15- to 24-year-olds reported having experienced symptoms of depression in their lifetime, and one in seven reported suicidal thoughts. A small percentage reported attempting suicide, but they represented more than 150,000 individuals.

A goal of this study was to provide detailed information about young people who experience depression. Depression was mostly likely to interfere with social life, followed by close relationships and school attendance. For 18% of those with depression, the worst episode lasted more than a year, and as a result of symptoms of depression, they missed, on average, almost a month of regular activities.

<sup>\*</sup> significantly different from reference category (p < 0.05)

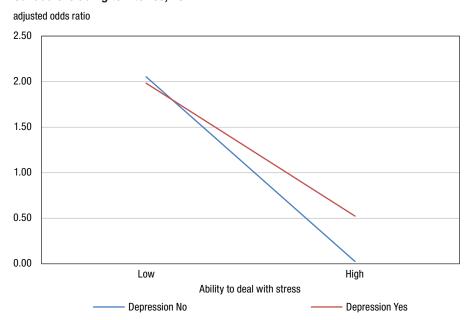
<sup>†</sup> reference category

As in earlier studies, 11,29 few socio-demographic correlates were found to be associated with depression among young Canadians, other than being female and smoking. For this age group, characteristics that cannot be examined in a population-based study may be related to depression (for instance, service availability, personal income versus household income).

The present analysis extends previous findings<sup>19</sup> about young Canadians' perceptions of the amount of help they received from professional sources of mental health support. The results confirm an increased likelihood of professional consultation among 15- to 24-year-olds with depression and/or suicidal thoughts, although fewer than half of them sought professional help. They were more likely to turn to friends or family, and when they did, generally felt that they received a lot or some help. Barriers to the use of professional sources may include a lack of perceived need for help, preference for self-management, geographic proximity of services, and beliefs about effectiveness.30

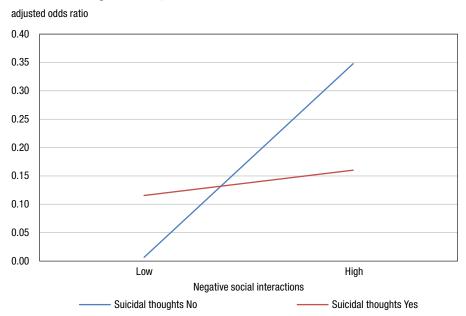
The socio-demographic and psychosocial correlates of service use by young Canadians with depression and suicidal thoughts in this analysis were similar to earlier findings.<sup>30,31</sup> However, interaction results suggest that psychosocial factors are more likely to prompt help-seeking than are depression or suicidal thoughts. That is, females with low perceived ability to deal with stress and high negative social interactions were more likely to consult professional sources, regardless of whether they had experienced depression. Males with suicidal thoughts were equally likely to consult professional sources independent of negative social interactions; however, those who did not have suicidal thoughts were more likely to consult professional sources if they had high negative social interactions. It is possible that men and women seek professional support when they identify impaired functioning (poor coping), rather than when they have symptoms of depression or suicidal thoughts.

Figure 1
Adjusted odds of consulting professional sources, interaction between ability to deal with stress and depression, female household population aged 15 to 24, Canada excluding territories, 2012



Note: Model adjusted for age, population centre, immigrant status, low income, student status, depression, ability to deal with stress. Source: 2012 Canadian Community Health Survey—Mental Health.

Figure 2
Adjusted odds of consulting professional sources, interaction between negative social interactions and suicidal thoughts, male household population aged 15 to 24, Canada excluding territories, 2012



Note: Model adjusted for age, population centre, immigrant status, low income, student status, depression, ability to deal with stress. Source: 2012 Canadian Community Health Survey—Mental Health.

# What is already known on this subject?

- An estimated 7% of 15- to 24-yearold Canadians had depression in the past 12 months.
- Suicide is the second leading cause of death at these ages.
- Severe depression is associated with suicidal behaviour.
- Less favourable socioeconomic conditions and psychosocial functioning are associated with mental health.
- Fewer than half of young Canadians with a mental health condition sought professional support in the past 12 months.

## What does this study add?

- In 2012, 14% of Canadians aged 15 to 24 reported having had suicidal thoughts at some point in their life.
- In the previous 12 months, 42% of those with depression and 36% of those with suicidal thoughts consulted a professional source of mental health support; 61% and 58%, respectively, consulted an informal source.
- Associations between depression and suicidal thoughts and psychosocial factors such as negative social interactions and perceived ability to deal with stress differed for males and females.

#### **Limitations**

This analysis has a couple of limitations. Like other research, 32,33 this study examined lifetime depression and suicidal ideation within a young cohort, among whom such experiences might be expected to be relatively recent, if not in the past 12 months. Even so, because associations with professional consultations pertain only to the previous year, it is possible that service use is underestimated. The analysis is also limited by the data collected by the CCHS-MH, which did not include several predictors of service use, such as severity of illness.34 Those with the most severe symptoms of depression may be the most likely to seek professional help.35

#### **Conclusions**

Information about depression and suicidal ideation during the transitional years of emerging adulthood is important, given that access to mental health services may change as youth transfer from the child to the adult health care system. The findings suggest that many young Canadians have depression and/or suicidal thoughts. Psychosocial risk and protective factors are related to depression and suicidal thoughts—namely, experiencing negative social interactions and perceived ability to deal with stress. These factors were also associated with professional consultations. Knowledge of these risk and protective factors may facilitate early intervention. In particular, the association between psychosocial factors and seeking professional support emphasizes the importance of identification of overall psychological functioning rather than specific symptoms of depression or suicidal thoughts.

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