Adolescent care

Part 1: Are family physicians caring for adolescents' mental health?

Andrée Gilbert, MD, MSC **Brigitte Maheux,** MD, MPH, PHD **Jean-Yves Frappier,** MD, FRCPC **Nancy Haley,** MD, FRCPC

ABSTRACT

OBJECTIVE To investigate how often family physicians see adolescents with mental health problems and how they manage these problems.

DESIGN Mailed survey completed anonymously.

SETTING Province of Quebec.

PARTICIPANTS All 358 French-speaking family physicians who practise primarily in local community health centres (CLSCs), including physicians working in CLSC youth clinics, and 749 French-speaking practitioners randomly selected from private practice.

MAIN OUTCOME MEASURES Frequency with which physicians saw adolescents with mental health problems, such as depression, suicidal thoughts, behavioural disorders, substance abuse, attempted suicide, or suicide, during the last year or since they started practice.

RESULTS Response rate was 70%. Most physicians reported having seen adolescents with mental health problems during the last year. About 10% of practitioners not working in youth clinics reported seeing adolescents with these disorders at least weekly. Anxiety was the most frequently seen problem. A greater proportion of physicians working in youth clinics reported often seeing adolescents for all the mental health problems examined in this study. Between 8% and 33% of general practitioners not working in youth clinics said they had not seen any adolescents with depression, behavioural disorders, or substance abuse. More than 80% of physicians had seen adolescents who had attempted suicide, and close to 30% had had adolescent patients who committed suicide.

CONCLUSION Family physicians play a role in adolescent mental health care. The prevalence of mental health problems seems higher among adolescents who attend youth clinics. Given the high prevalence of these problems during adolescence, we suggest on the basis of our results that screening for these disorders in primary care could be improved.

EDITOR'S KEY POINTS

- This study documents family physicians' perception of the number of adolescents they see each year and the frequency with which adolescents consulted them for various medical conditions, particularly mental health problems.
- A substantial proportion of family physicians not working in youth clinics reported seeing no adolescents with depression, behavioural disorders, or substance abuse during the last year (between 8% and 18% of physicians in community clinics and between 22% and 33% of private practitioners).
- Given the prevalence of mental health problems during adolescence, the authors suggest on the basis of the results of this study that screening for these disorders in primary care could be improved.

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Some 10% to 25% of adolescents experience severe mental distress during adolescence.[1-5] Adolescents' mental health problems lead to extensive morbidity in many spheres of their lives and can have tragic consequences, including suicide.[6-10] Research has confirmed that close to 90% of young people who commit suicide have suffered from mental health problems.[9-10] The frequency with which adolescents commit suicide is particularly alarming in Québec where there are 34.4 suicides per 100 000 15- to 19-year-old boys compared with 19.3 in Canada as a whole.[11]

General practitioners are increasingly seen to have an important role in detecting mental illness.[4,5,12-14] About 75% of adolescents consult general practitioners at least once a year for various problems.[15,16] It is estimated that more than 20% of adolescents who consult primary care practitioners suffer from mental health problems,[17-23] but most of these adolescents give physical health problems as the reason for consultation.[17,18,24] It is essential that physicians take the initiative and raise issues related to mental health. Several studies have found that physicians tend to underdiagnose and undertreat adolescents suffering from mental health problems.[5,12,13,17,25] It is thought that physicians identify less than one third of adolescents with mental health problems and that 50% to 80% of adolescents suffering from mental illnesses do not receive the care they need.[4,5,12,13,25]

To our knowledge, no studies on how many adolescents are seen by family physicians have been conducted in Canada, particularly in the field of mental health. The goal of this study was to document family physicians' perceptions of the number of adolescents they see in practice each year and the frequency with which adolescents consulted them about various medical conditions, particularly mental health problems.

METHODS

We surveyed Francophone family physicians in Quebec in 2000-2001. The sample was selected from physicians listed in the database of the Collège des médecins du Québec. The study population included French-speaking general practitioners in active medical practice in Québec who obtained licences to practise medicine after 1969. Two samples were taken from this population. One sample of 749 physicians was selected randomly from among 5682 physicians exclusively in private practice. Of these, 77 were excluded because they were not eligible, could not be reached, or did not see adolescents in their practice, leaving 672 physicians. The second sample included 358 physicians who spent at least 65% of their practice time in community clinics (CLSCs). These CLSCs are public community health centres that group together various health professionals, such as physicians, nurses, social workers, and psychologists; most CLSCs offer services specifically for adolescents through youth clinics. Of these 358 physicians, 14 were excluded because we were unable to reach them or they were not eligible, leaving 344 physicians in the sample.

Data were collected through a mailed questionnaire; respondents remained anonymous. To ensure a high rate of response, 3 follow-up letters were sent to nonrespondents. The survey was composed mainly of questions to be answered on a 4- or 5-point scale. All questions were pretested on a sample of family physicians who indicated the questionnaire was understandable, pertinent, and easy to fill out. Adolescents were defined as people 12 to 17 years old. To estimate the number of adolescents seen, we asked physicians how many adolescents they had seen in an average week during the last year, how frequently adolescents visited for various physical and mental conditions during the last year, and how many adolescents they had seen for less common problems, such as suicide attempts, anorexia nervosa, or sexual abuse, since they started practice.

For the analysis, respondents were divided into 3 groups according to type of practice: private practice (n=414), CLSC but not youth clinic practice (n=173), and CLSC youth clinic practice (n=110). Pearson's chi-square test was used to determine whether the frequency of adolescents' visits varied according to physicians' type of practice.

RESULTS

Of the 1016 eligible family physicians, 707 returned completed questionnaires, for a response rate of 69.6%. Clinic physicians were more often women and were almost 4 years younger on average than private practitioners (**Table 1**). A greater proportion of CLSC physicians practised in remote areas with populations of less than 5000. Regression analyses showed that physicians' sociodemographic characteristics were not significantly related to the frequency of adolescents' consultations for mental health problems.

Adolescent medical consultations

Most family physicians saw at least 2 adolescents a week (**Table 2**). Almost one third of private practitioners reported seeing 10 adolescents or more a week; this

Dr Gilbert *is on staff in the Public Health Department of the Montreal Regional Health Board in Quebec.* **Dr Mayheux** *teaches in the Department of Social and Preventive Medicine at the University of Montreal.* **Dr Frappier** *teaches in the Department of Pediatrics at the University of Montreal and practises at the Hôpital Sainte-Justine.* **Dr Haley** *is on staff in the Public Health Department of the Montreal Regional Health Board, teaches in the Department of Pediatrics at the University of Montreal, and practises at the Hôpital Sainte-Justine.*

Table 1. Sociodemographic characteristics of respondents: *N = 699. Average age of physicians in private practice was 44.0 years, in CLSC general practice was 40.5 years, and in CLSC youth clinics was 40.4 years (P <.001).*

CHARACTERISTICS	PRIVATE PRACTICE (N = 414) %	CLSC GENERAL PRACTICE (N = 176) %	CLSC YOUTH CLINIC (N = 109) %	*P* VALUE
Female	39.9	58.0	82.6	<.001
Age (y)				
• 25-34	7.5	23.4	18.3	
• 35-44	49.0	44.4	55.8	<.001
• 45-54	35.3	27.5	26.0	
• ≥55	8.3	4.7	0	<.001
Population of community where practice located				
• <5000	10.7	23.4	10.2	
• 5000-25 000	25.5	30.9	25.0	<.001
• >25 000	63.7	45.7	64.8	
Practice location				
• Large urban centre	38.8	33.0	32.7	
• Small town or city	51.8	49.4	53.6	.06
• Remote area	9.4	17.6	13.6	

Table 2. Average number of adolescents seen by physicians per week during the past year by type of practice: *N = 697*, P <.001.

NO. OF ADOLESCENTS SEEN PER WEEK	PRIVATE PRACTICE (N = 414) %	CLSC GENERAL PRACTICE (N = 173) %	CLSC YOUTH CLINIC (N = 110) %
1 or none	16.4	14.5	0.9
2-9	52.7	63.0	19.1
10 or more	30.9	22.5	80.0

proportion increased to 80% among physicians working in CLSC youth clinics. We excluded from subsequent analyses 104 respondents who reported seeing 1 or no adolescents a week during the last 12 months.

Table 3 shows the frequency with which practitioners reported seeing adolescents for 5 medical conditions. Contraception or conditions related to sexuality were the most frequently reported reason for adolescents' visits. More than 90% of family physicians reported having seen at least 1 adolescent with a possible mental health condition during the last year. A higher proportion of youth clinic physicians reported often seeing adolescents for contraception or other reasons related to sexuality, adolescents with possible psychosomatic complaints (headaches, abdominal pain, fatigue), and adolescents with mental health problems.

Consultations for mental health problems

Most practitioners reported seeing at least 1 adolescent with anxiety; problems with parents, friends, or school; depression or suicidal thoughts; behavioural problems or personality disorders; or alcohol or drug abuse (**Table 4**). A greater proportion of youth clinic physicians saw adolescents with all types of mental health problems examined in this study.

Anxiety and problems with parents, friends, or school were the conditions most often seen in general practice. Adolescents with depression, suicidal thoughts, behavioural problems, or substance abuse were seen less often. Many physicians not working in youth clinics reported seeing no adolescents with these mental health problems during the last year (between 8% and 18% of CLSC general practice physicians and between 22% and 33% of private practitioners). When we restricted our analyses to physicians who saw 10 adolescents or more a week, we noted that the proportion of private practitioners who reported seeing no adolescents for behavioural problems (11.8%), depression or suicidal thoughts (15.6%), and alcohol or drug abuse (22.2%) during the last year remained high (data not shown).

Table 5 shows data on the number of adolescents with serious mental health conditions physicians had seen since starting to practise (nearly 80% of physicians had been practising for more than 10 years). Average number of adolescents seen was calculated for a period of 2 years to take into account the small number of adolescents presenting with these conditions. Since starting practice, 20% of CLSC physicians and 33% of private practitioners reported having had at least 1 adolescent patient who committed suicide, and 4 out of 5 physicians

had seen at least 1 adolescent for a suicide attempt. Youth clinic physicians reported seeing more adolescents with anorexia nervosa and sexual abuse than their colleagues did.

DISCUSSION

This study confirms that family physicians are consulted by adolescents. Almost one third of private practitioners said they saw at least 10 adolescents a week. It is unsurprising that a greater proportion of youth clinic physicians saw more adolescents each week. Family physicians seem to have an active role in providing mental health care to adolescents since most of them see young people with mental health conditions. In this study, about 10% of general practitioners not working in youth clinics reported often seeing adolescents with mental health problems.

More youth clinic physicians reported seeing adolescents with mental health problems, notably depression or suicidal thoughts, substance abuse, anorexia nervosa, and sexual abuse. These results suggest that the prevalence of mental health problems is higher among adolescents visiting youth clinics. This could be because adolescents feel more at ease in youth-oriented clinics and consult more readily for symptoms related to mental health. Youth clinic physicians also have an important role in adolescent sexual health care, and it is generally recognized that adolescents presenting with unplanned pregnancies, sexually transmitted diseases, and sexual violence often have underlying mental health problems.[7,26-29] Another explanation might be that CLSC physicians conduct more routine screening for these problems and that these physicians, who have acquired adolescent mental health expertise, get referrals from colleagues or from other health professionals working in CLSCs, especially school nurses, social workers, and psychologists. Youth clinics seem to act as intermediary resources between primary care and specialized services in the field of adolescent mental health.

Table 3. Proportion of family physicians who had seen adolescents for various health problems during the past year by frequency of consultation and type of practice. *N = 591.**

HEALTH PROBLEMS	PRIVATE PRACTICE (N = 340) %	CLSC GENERAL PRACTICE (N = 148) %	CLSC YOUTH CLINIC (N = 108) %	*P* VALUE
Contraception, conditions related to sexuality				
• At least every week	58.5	68.2	97.2	
• Sometimes, each month	40.4	31.1	2.8	<.001
• Never	1.2	0.7	0	
Infections other than sexually transmitted infections				
• At least every week	45.4	51.0	58.9	
• Sometimes, each month	50.1	45.6	41.1	.05
• Never	4.4	3.4	0.0	
Trauma				
• At least every week	34.4	36.7	26.0	
• Sometimes, each month	57.1	57.1	68.3	.25
• Never	8.5	6.1	5.8	
Headaches, abdominal pain, fatigue				
• At least every week	25.7	22.4	57.0	
• Sometimes, each month	70.8	74.8	43.0	<.001
• Never	3.5	2.7	0.0	
Mental health problems				
• At least every week	10.8	6.8	36.1	
• Sometimes, each month	80.1	89.9	62.2	<.001
• Never	9.1	3.4	1.9	

*Family physicians who reported seeing 2 or more adolescents per week during the last year.

Table 4. Proportion of family physicians who saw adolescents for mental health problems during the last year by frequency of consultation and type of practice: *N* = 596.*

MENTAL HEALTH PROBLEMS	PRIVATE PRACTICE (N = 340) %	CLSC GENERAL PRACTICE (N = 148) %	CLSC YOUTH CLINIC (N = 108) %	*P* VALUE
Anxiety				<.001
• At least every week	9.3	2.7	25.2	
• Sometimes, each month	80.2	95.9	72.0	
• Never	10.5	1.4	2.8	
Problems with parents, friends, or school				
<.001				
• At least every week	4.9	2.0	15.9	
• Sometimes, each month	80.6	92.5	79.4	
• Never	14.5	5.4	4.7	
Depression, suicidal thoughts				<.001
• At least every week	3.5	1.4	15.0	
• Sometimes, each month	74.5	90.5	81.3	
• Never	22.0	8.2	3.7	
Behavioural problems or personality disorders				<.001
• At least every week	4.7	0.7	9.3	
• Sometimes, each month	71.8	83.0	85.0	
• Never	23.5	16.3	5.6	
Alcohol or drug abuse				<.001
• At least every week	4.1	2.7	17.0	
• Sometimes, each month	63.3	79.6	76.4	
• Never	32.7	17.7	6.6	

*Family physicians who reported seeing 2 or more adolescents per week during the last year.

Considering that more than 80% of family physicians in Quebec are private practitioners, most adolescents are consulting these physicians. This means that primary care screening for adolescents' mental disorders depends primarily on private practice physicians. A substantial proportion of physicians not working in youth clinics (even those who see quite a few adolescents weekly) said they had not seen any adolescents for such problems as depression, behavioural disorders, or substance abuse during the past year. This might be because few adolescents visiting general practice clinics had mental health problems. We do not know the prevalence of mental health problems among respondents' adolescent patients, but American and British studies have shown a high prevalence of mental health problems among adolescent patients in general primary care.[5,12,13,17,25] This suggests that detection of adolescents' mental health problems could be improved in Quebec. In fact, research done in other countries has concluded that most adolescents with mental problems are not diagnosed in primary care.[5,12,13,17,25] This is worrying because depression, conduct disorders, and substance abuse are the 3 conditions most often identified retrospectively among adolescents who have committed suicide.[9,10]

Strengths

One of the strengths of this study is the fact that the sample was selected from among all Francophone general practitioners in Quebec and the response rate was high. To minimize the effect of social desirability in responses, respondents remained anonymous. This anonymity made it impossible to verify whether respondents differed from nonrespondents. Comparisons of early and late respondents did not indicate significant differences for any of the variables, especially those related to frequency of adolescents' mental health consultations. As

a result, we believe respondents did not differ significantly from the overall population under study.

Limitations

The main limitation was that data were reported by respondents and were not measured objectively. Objective and precise measurement of number of adolescents seen, frequency of consultation for mental health problems, and prevalence of these problems would require a research design that would have been difficult to apply to all general practitioners in Quebec. We believe, however, that the measures used make it possible to estimate how often general practitioners see adolescents with mental health problems. To reduce recall errors, questions generally referred to recent practice.

Conclusion

This study shows that family physicians have a role in adolescent mental health care. The prevalence of mental health problems seems to be higher among adolescents consulting in youth clinics. Given the high prevalence of mental health problems during adolescence, we suggest based on the results of our study that screening for these disorders in primary care could be improved. Family physicians should be encouraged to actively screen for mental health problems in their adolescent patients.

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Contributors

Dr Maheux *was involved in all aspects of the study.* **Drs Gilbert** *and* **Haley** *participated in data analysis and interpretation of results and in writing the manuscript.* **Dr Frappier** *contributed to study concept and design, data collection and analysis, and interpretation of results. All the authors reviewed and approved the final version of the manuscript.*

Table 5. Proportion of physicians who, since starting practice, had seen adolescents with conditions associated with mental health problems by type of practice: *N = 569.**

CONDITIONS ASSOCIATED WITH MENTAL HEALTH PROBLEMS	PRIVATE PRACTICE (N = 328) %	CLSC GENERAL PRACTICE (N = 142) %	CLSC YOUTH CLINIC (N = 99) %	*P* VALUE
Committed suicide				
• None	66.6	81.9	76.9	.004
• Less than 1	29.3	14.6	22.1	
• At least 1	4.2	3.5	1.0	
Attempted suicide				
• None	16.8	21.8	15.2	.006
• Less than 1	51.8	52.8	37.4	
• At least 1	31.4	25.4	47.5	
Anorexia nervosa				
• None	13.4	16.9	2.0	<.001
• Less than 1	69.2	61.3	49.5	
• At least 1	17.4	21.8	48.5	
Sexual abuse				
• None	26.6	21.8	6.8	<.001
• Less than 1	60.8	56.3	46.6	
• At least 1	12.6	21.8	46.6	
Physical assault				
• None	28.2	31.9	22.3	.29
• Less than 1	52.7	47.5	50.5	
• At least 1	19.1	20.6	27.2	
School phobia				
• None	29.6	29.1	23.0	.21
• Less than 1	54.9	51.1	51.1	
• At least 1	15.9	19.9	26.0	

*Family physicians who reported seeing 2 or more adolescents per week during the last year.

Competing interests

None declared

Correspondence to: **Dr Andrée Gilbert,** *Montreal Public Health Department, Montreal Regional Health Board, 1301 Sherbrooke St E, Montreal, QC H2L 1M3; telephone 514 528-2400, extension 3013; e-mail* **agilbert@santepub-mtl.qc.ca**

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