

# Lifestyle health risk assessment

## *Do recently trained family physicians do it better?*

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### abstract

**OBJECTIVE** To determine whether recently trained family physicians were more likely to routinely assess lifestyle health risks during general medical evaluations. To document physicians' perceptions of the difficulties of lifestyle risk assessment, of medical training in that area, and of how often they saw patients with lifestyle health risks.

**DESIGN** Anonymous mailed survey conducted in 1995.

**SETTING** Family practices in the province of Quebec.

**PARTICIPANTS** Stratified random sample of 805 active family physicians of 1111 surveyed; 25 were ineligible or could not be located, and 281 did not respond (74.1% response rate).

**MAIN OUTCOME MEASURES** Proportion of physicians graduating before and after 1989 who reported routinely (with 90% or more of their patients) assessing their adult and adolescent patients during general medical evaluations for substance use, sexual risk behaviours, and history of family violence and sexual abuse.

**RESULTS** Except for asking about drug use, recently trained family physicians did not report better assessment of lifestyle health risks during general medical examinations than family physicians who graduated more than 10 years ago did. In both groups, routine assessment averaged 82% for tobacco use, 68% for alcohol consumption, and 20% to 40% for sexual risk behaviours. Screening for family violence and sexual abuse was rare, but more frequently reported by older women physicians. Only 20% to 40% of recent graduates rated their medical training adequate for evaluating illicit drug use, family violence, and sexual abuse.

**CONCLUSION** Recently trained family physicians do not assess most lifestyle risk factors any better than their more experienced colleagues.

### résumé

**OBJECTIF** Déterminer si les médecins de famille récemment diplômés étaient davantage susceptibles d'évaluer systématiquement les risques pour la santé du mode de vie durant les examens médicaux généraux. Documenter la perception des médecins à l'égard des problèmes posés par l'évaluation des risques causés par le mode de vie et de la formation médicale à ce sujet, ainsi que la fréquence des cas qu'ils avaient vus présentant des risques pour la santé à cause du mode de vie.

**CONCEPTION** Un sondage anonyme envoyé par la poste en 1995.

**CONTEXTE** Des pratiques familiales dans la province de Québec.

**PARTICIPANTS** Un échantillon stratifié au hasard de 805 médecins de famille actifs sur un total de 1 111 contactés: 25 n'étaient pas admissibles ou ne pouvaient pas être localisés et 281 n'ont pas répondu (un taux de réponse de 74,1%).

**PRINCIPALES MESURES DES RÉSULTATS** La proportion des médecins ayant reçu leur diplôme avant et après 1989 qui ont rapporté avoir procédé, durant les examens médicaux généraux, à une évaluation systématique chez leurs patients adultes et adolescents (90% et plus d'entre eux) de leur consommation d'alcool et de drogues, de leurs comportements sexuels et des antécédents de violence familiale et d'abus sexuel.

**RÉSULTATS** Exception faite des questions sur l'usage de drogues, les médecins de famille récemment diplômés n'ont pas signalé avoir fait une meilleure évaluation des risques pour la santé posés par le mode de vie que les médecins de famille diplômés depuis plus de 10 ans. Dans les deux groupes, l'évaluation systématique se faisait en moyenne dans 82% des cas pour l'usage du tabac, 68% pour la consommation d'alcool et de 20% à 40% pour les comportements sexuels. Le dépistage de la violence familiale et des abus sexuels était rare, mais plus fréquemment rapporté par les femmes médecins plus âgées. Seulement de 20% à 40% des récents diplômés jugeaient leur formation médicale adéquate pour l'évaluation de l'usage des drogues illégales, de la violence familiale et des abus sexuels.

**CONCLUSION** Les médecins de famille dont la formation est récente n'évaluent pas mieux la plupart des risques pour la santé causés par le mode de vie que leurs collègues plus expérimentés.

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**U**nhealthy lifestyles cause substantial morbidity and mortality in the North American population. Almost a third of the population uses tobacco, and an estimated 10% misuse alcohol.<sup>1-3</sup> These unhealthy behaviours are the two most important causes of preventable disease in Canada. Many people also have risky sexual behaviours and misuse substances; both activities can lead to serious social and medical problems.<sup>4,5</sup>

Family violence is prevalent in our society; 39% of women report at least one episode of physical abuse by a partner,<sup>6</sup> yet this problem often goes undetected in medical settings. The same is true for child abuse, with prevalence rates of severe childhood sexual abuse estimated at 11% among girls and 4% among boys.<sup>7</sup> Both domestic violence and child abuse have detrimental short-term and long-term effects on victims' physical and mental health.<sup>8,9</sup>

The prevalence of unhealthy behaviours in the population and the serious effect they have has prompted several health organizations and provincial and federal governments to urge primary care physicians to do more screening and preventive counseling.<sup>10-15</sup> The College of Family Physicians of Canada and the Canadian Medical Association have emphasized the important role of family physicians in early detection of patients with lifestyle health risks.<sup>10,12</sup> In recent years, several guidelines and tools have been published to encourage physicians to focus more on risk assessment during general medical examinations.<sup>16-21</sup>

Surveys of physicians' screening practices have shown some improvement in assessment of certain health behaviours, such as tobacco and alcohol consumption, exercise, and diet.<sup>22-26</sup> Many other lifestyle risks, such as those related to sexual health, drug use, and family violence or sexual abuse, however, tend not to be routinely evaluated by primary care physicians,

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despite recommendations.<sup>27-33</sup> Since the early 1980s, medical issues, such as AIDS, drug addiction, family violence, and sexual abuse, have been increasingly discussed in the literature and seen in clinical practice. No studies have noted whether recently trained family physicians screen more readily for these lifestyle risks than their older colleagues do.

In this study, we looked at family physicians' practices regarding assessment of lifestyle risk factors during general medical examinations and compared recently trained physicians with their older colleagues. We also assessed physicians' perceptions of lifestyle risk assessment and how they rated their training in this area. Given the specific screening recommendations for lifestyle health risks promoted in recent years, we expected that recently trained physicians would do more lifestyle risk assessment than their older colleagues.

## METHODS

### Study population

Our data came from a 1995 anonymous mail survey of physicians in the province of Quebec. Physicians' demographic and professional data were provided by the Collège des Médecins du Québec. To be included in the study, family physicians had to be actively practising, graduated after 1963, and French-speaking. Some physicians had not had residency training in family medicine because the residency program became obligatory only in 1989. A stratified, random sample of 1111 family physicians was surveyed, with sex, year of graduation, and type of practice serving as stratifying variables. Twenty-five physicians were not eligible or could not be located, reducing the sample to 1086.

### Data collection

Data were collected using a self-administered mailed questionnaire with mainly closed-ended questions. The questionnaire was developed from questions used in previous studies,<sup>25-29</sup> including a previous survey of recently trained family physicians.<sup>30</sup> The questionnaire was pretested on 30 physicians; results of the pretest indicated high reliability and face validity for the outcome measures.

In answering the questionnaire, physicians had to refer to their general medical examinations of adult (19 to 55 years old) and adolescent (13 to 18 years old) patients during the last 6 months of practice. (General medical examinations include a complete history, review of systems, and full physical examination.)

Lifestyle health risks examined included tobacco use, alcohol consumption, illicit drug use, certain risky sexual behaviours, family violence, and sexual abuse. Physicians were asked what proportion of adult and adolescent patients they assessed for each risk factor: 25% or less, 50%, 75%, 90% or more (90% constitutes routine screening in this study) and whether it was easy, rather difficult, or very difficult for them to ask patients about these risks. Physicians were also asked to indicate how frequently they saw patients with lifestyle risks and whether they thought their medical training for screening for such risks had been excellent, adequate, or deficient.

The survey was anonymous to minimize social desirability bias. We followed up nonrespondents three times, as suggested in Dillman's total design method.<sup>34</sup>

### Data analysis

Pearson  $\chi^2$  tests were used to compare practices and perceptions of family physicians who graduated before 1989 with those who graduated after 1989. Analyses were done on weighted data to take into account sample design. When physicians' sex influenced risk assessment practices, as was the case for sexual risk factors, family violence and sexual abuse, results are presented separately for male and female physicians to eliminate the confounding effect of this variable. Considering the problem of multiple comparisons, we set the level of statistical significance for each individual test at .01.

## RESULTS

Of 1086 family physicians who received questionnaires, 805 returned them for an overall response rate of 74.1%. Response rates varied somewhat across survey data. For physicians who graduated before 1989, response rates were 64% (238/372) for men and 74% (257/347) for women. Corresponding response rates for physicians who graduated after 1989 were 74% (95/129) for men and 90% (215/238) for women. Study of respondents' demographic and professional characteristics showed, as expected, that female physicians were generally younger than male physicians and were more likely to have salaried practices in local community health centres.

### Practices

**Substance use.** The proportion of physicians who reported routinely assessing tobacco and alcohol use during patients' general medical examinations was similar in both groups; it averaged 82% for tobacco

and 68% for alcohol consumption (**Table 1**). For illicit drug use, however, there were significant differences between the two groups. Recent graduates were more likely to report assessing patients' illicit drug use than older graduates, and screening for illicit drug use was more common among adolescent patients than among adult patients; 64% of recently trained physicians reported routinely assessing adolescents' illicit drug use, compared with 52% of older physicians. Differences persisted even after controlling for physicians' sex and type of practice.

Table 1. **Percentage of family physicians who reported routinely\* assessing substance use during general medical evaluations of adult and adolescent patients, by year of graduation**

SUBSTANCES SCREENED	MD BEFORE 1989 (N = 448) %	MD AFTER 1989 (N = 298) %	P VALUE
<b>ADULT PATIENTS</b>			
Tobacco	82	82	.94
Alcohol	67	68	.77
Illicit drugs	33	43	.005
<b>ADOLESCENT PATIENTS</b>			
Tobacco	77	80	.31
Alcohol	61	67	.10
Illicit drugs	52	64	.002

\*With  $\geq 90\%$  of patients.

**Sexual history.** As shown in **Table 2**, women physicians routinely screened for sexual risk factors more frequently than men, but year of graduation made no difference in assessment practices. Overall, family physicians tended to discuss sexual health issues more readily with adolescents than with adults. The proportion of physicians who reported routinely assessing sexual risk behaviours associated with sexually transmitted diseases in adult patients was low, averaging about 30% for women physicians and 20% for men.

**Family violence and sexual abuse.** Only a few physicians reported routinely screening for family violence and sexual abuse. **Table 3** presents results for family physicians who screened more than half their patients. Rates of screening were low, varying between 2% and 18%. For men physicians, screening practices varied little according to year of graduation. For women, however, those who graduated before 1989 evaluated these risk factors more regularly in both adult and adolescent

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Table 2. **Percentage of family physicians who reported routinely\* assessing some items of adult and adolescent patients' sexual history during general medical evaluations, by sex and year of graduation**

SEXUAL HISTORY ITEMS SCREENED	MEN			WOMEN		
	MD BEFORE 1989 (N = 221) %	MD AFTER 1989 (N = 91) %	P VALUE	MD BEFORE 1989 (N = 236) %	MD AFTER 1989 (N = 206) %	P VALUE
<b>ADULT PATIENTS</b>						
Contraceptive method	41	30	.07	71	63	.08
Condom use	22	22	.99	40	40	.96
Number of sexual partners	18	23	.33	37	35	.71
Sex of partners	16	19	.63	25	17	.05
STD risk of partners	17	16	.94	32	29	.49
<b>ADOLESCENT PATIENTS</b>						
Sexual activity	49	59	.10	75	74	.79
Contraceptive method	67	64	.62	83	85	.66
Attitudes toward condom use	31	29	.73	48	42	.21

\*With  $\geq 90\%$  of patients.

Table 3. **Percentage of family physicians who reported assessing quite regularly\* patients' history of abuse and violence during general medical evaluations of adult and adolescent patients, by sex and year of graduation**

ITEMS SCREENED	MEN			WOMEN		
	MD BEFORE 1989 (N = 221) %	MD AFTER 1989 (N = 91) %	P VALUE	MD BEFORE 1989 (N = 236) %	MD AFTER 1989 (N = 206) %	P VALUE
<b>ADULT PATIENTS</b>						
Family or conjugal violence	7	4	.44	14	4	<.001
Sexual abuse	5	3	.54	11	2	<.001
<b>ADOLESCENT PATIENTS</b>						
Family or conjugal violence	13	9	.33	18	11	.02
Sexual abuse	10	8	.47	14	9	.10

\*With more than half their patients.

patients than those who graduated after 1989. Those working in salaried practices within community clinics did not screen more readily than those in private practice.

### Physicians' perceptions

**Difficulty assessing lifestyle health risks.** The perceived difficulty of assessing lifestyle health risks varied considerably depending on risk factor examined (**Table 4**). On the basis of our data, lifestyle risk factors could be classified into three groups: those difficult for only a few physicians (contraceptive method, tobacco use, and condom use); those difficult for between 20% and 65% of physicians (information on sex partners, alcohol consumption, and use of illicit drugs); and those difficult for virtually all physicians (family violence and sexual abuse).

Examination of physicians' perceptions according to year of graduation showed no difference for the first group of factors. Inquiring about number and sex of sexual partners was more difficult for older physicians, but inquiring about family or conjugal violence appeared to be more difficult for more recently trained physicians.

### Medical training in lifestyle risk assessment.

Recent graduates were more likely to rate their medical training in lifestyle risk assessment as adequate or excellent (**Table 5**). They were almost unanimous in rating their medical training in assessment of sexual risk behaviours for STDs as adequate or excellent. For other risk factors, however, their perceptions were less positive. Only 58% thought training for screening for alcohol abuse was adequate or excellent; 40% or fewer thought so for illicit drug use and family violence; and only 21% thought so for sexual abuse.

**Clientele with lifestyle health risks.** Physicians reported they were frequently consulted by patients with lifestyle health risks (**Table 6**). More than half reported daily or almost daily seeing patients chronically using anxiolytics; rates of consultations varied according to physicians' sex, with more reported by men than by women physicians, but not by year of graduation (data not shown). One out of four physicians saw daily or nearly daily patients with risky behaviours for STDs and unplanned pregnancies. One in 25 reported daily or nearly daily consultations with patients experiencing family violence or sexual abuse.

**Table 4. Percentage of family physicians who reported finding it rather difficult or very difficult to inquire about lifestyle health risks with patients, by year of graduation**

LIFESTYLE HEALTH RISKS	MD BEFORE 1989 (N = 492) %	MD AFTER 1989 (N = 310) %	P VALUE
Contraceptive method	2	2	.53
Tobacco use	6	5	.67
Condom use	13	10	.17
STD risks of partners	27	20	.02
Number of sexual partners	33	22	.001
Sex of partners	47	38	.01
Alcohol consumption	41	41	.87
Illicit drug use	65	56	.02
Family or conjugal violence	87	93	.003
History of sexual abuse	92	96	.06

**Table 5. Percentage of family physicians who evaluated their medical training in risk assessment as adequate or excellent, by year of graduation**

LIFESTYLE RISKS	MD BEFORE 1989 (N = 488) %	MD AFTER 1989 (N = 309) %	P VALUE
Sexual risk behaviours	80	96	<.001
Alcohol misuse	49	58	.02
Illicit drug use	20	40	<.001
Family or conjugal violence	17	35	<.001
Sexual abuse	12	21	.001

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Table 6. **Percentage of family physicians consulted daily or weekly by patients with certain lifestyle health risks: N = 796.**

HEALTH RISKS	FREQUENCY OF CONSULTATIONS	
	DAILY OR NEARLY DAILY %	WEEKLY %
Smoking	88	97
Chronic use of anxiolytics	55	83
Risky behaviours for STDs and unplanned pregnancies	25	65
Alcohol or drug misuse	17	52
Family violence or sexual abuse	4	16

## DISCUSSION

This study gives new information on physicians' assessment during general medical examinations of sexual behaviour risks, substance use, and family violence. Even among recently trained physicians, assessment of most of these lifestyle risks is low and not significantly better than among their older colleagues.

### Substance use

Except for more evaluation of illicit drug use by younger graduates, rates of routine assessment of tobacco and alcohol use are similar for younger and older physicians and are still below recommendations.<sup>2,3,10,12</sup> Younger physicians' improved screening for illicit drug use might be due to better training in this health issue since the mid-1980s or to having grown up in a time and culture with a greater familiarity with illicit drugs.

### Risky sexual behaviours

Although high-risk sexual behaviours are prevalent and cause substantial morbidity and mortality due to STDs and unplanned pregnancies, only a few physicians routinely took complete sexual histories during general medical evaluations. Overall, female physicians tended to discuss sexual issues more readily; perhaps women are generally more concerned about the consequences of STDs or failed contraception because they have an important effect on women's health.

Surprisingly, little improvement in evaluating sexual risk behaviours was noted among younger physicians who received their training during the HIV era. This is even more unexpected because recently trained family physicians are more likely to work for salaries in clinics in environments that promote and encourage preventive health services. Rates of sexual risk screening found in this survey are similar to those reported in earlier studies<sup>27-30,32</sup> and show that physicians continue to have serious difficulties taking sexual histories.

### Family violence

Several guidelines and educational campaigns on family violence have been developed in recent years to increase physicians' detection of violence.<sup>16-18</sup> Despite this, screening for family violence and sexual abuse continues to be rare. In this survey, only a few physicians regularly evaluated these social risk factors, even though most patients apparently favour inquiries on these subjects.<sup>35</sup> Clearly, increased educational efforts are needed to improve physicians' screening practices in these important areas.

### Medical training for lifestyle risk assessment

Despite the fact that physicians continue to report low rates of screening for most lifestyle health risks, recently graduated physicians think better of their medical training in this area than their older colleagues do. Either medical training in these areas has truly improved during the last decade or younger physicians are hesitant to criticize their recent medical education. The small proportion of physicians reporting adequate training in risk factors, such as substance abuse, sexual abuse, and family violence, is especially disconcerting. Only a few recently trained physicians felt adequately trained to assess illicit drug use, family violence, or history of sexual abuse.

For sexual risk behaviour assessment, physicians rated their training as excellent, but they did little screening in their practices. This discrepancy might be due to the fact that, despite perceived excellent training, younger physicians have not yet acquired enough clinical experience to put them at ease evaluating emotionally charged and sensitive areas.

### Generalizing from the study

Our results reflect the screening practices of family physicians in Quebec. There is, however, no reason to believe that findings would be different elsewhere in Canada, since medical education, training, and

licensing is comparable from province to province, and basic principles underlying health care delivery systems in Canada are similar.

Much care was taken to develop risk assessment measures that reflect clinical practice and to obtain a high response rate. Therefore, estimates of physicians' screening practices reported in the study are likely to be valid. Measurement errors in reporting physicians' practices would tend to overestimate assessment of lifestyle risks due to the social desirability factor. We sought to control for this factor by making the questionnaire anonymous.

### Conclusion

Despite being trained during an era when the medical and social problems related to substance misuse, STDs, and domestic violence have become increasingly apparent, recently trained doctors do little assessment of most of these lifestyle risk factors. These results should be of concern to all those involved in training and continuing education of family physicians. ❀

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### Key points

- This study examined whether new graduates of family medicine programs did a better job of inquiring about lifestyle health risks during general medical examinations than earlier graduates.
- Newer graduates asked about only drug use more frequently.
- Overall, routine assessment averaged 82% for tobacco use, 68% for alcohol consumption, and 20% to 40% for sexual risk factors. Screening for family violence or sexual abuse was rare.
- Only 20% to 40% of new graduates thought their training was adequate for inquiring about drug use, family violence, and sexual abuse.

### Points de repère

- Cette étude examinait si les nouveaux diplômés de programmes de médecine familiale s'enquerraient mieux des risques posés par le mode de vie durant les examens médicaux généraux que les diplômés de plus longue date.
- Seules les questions sur l'usage de drogues étaient plus fréquentes par les médecins diplômés plus récemment.
- Dans l'ensemble, l'évaluation systématique s'élevait en moyenne à 82% pour l'usage du tabac, 68% pour la consommation d'alcool et de 20% à 40% pour les facteurs de risque d'ordre sexuel. Le dépistage de la violence familiale ou de l'abus sexuel était rare.
- Seulement de 20% à 40% des récents diplômés jugeaient que leur formation était appropriée concernant l'évaluation de l'usage de drogues, de la violence familiale et de l'abus sexuel.

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