



Evidence

Études

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## Do physicians assess lifestyle health risks during general medical examinations?

### *A survey of general practitioners and obstetrician-gynecologists in Quebec*

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#### Abstract

**Background:** In Canada several guidelines have been published for the screening of lifestyle health risks during general medical examinations. The authors sought to examine the extent to which such screening practices have been integrated into medical practice, to measure physicians' perceived level of difficulty in assessing these risks and to document physicians' evaluation of their formal medical training in lifestyle risk assessment.

**Methods:** An anonymous mail survey was conducted in 1995 in Quebec with a stratified random sample of 1086 general practitioners (GPs) and with all 241 obstetrician-gynecologists (Ob-Gyns). The authors evaluated the proportion of physicians who reported routine assessment (with 90% or more of their patients) of substance use, family violence and sexual history during general medical examinations of adult and adolescent patients; the proportion of those who find inquiring about these issues difficult; and the proportion of those who evaluated their medical training in lifestyle risk assessment as adequate or excellent.

**Results:** The overall response rate was 72.6%. Among adult patients, 82.2% of the GPs reported routinely assessing tobacco use, 67.2% alcohol consumption, 34.2% illicit drug use and 3.2% family violence; the corresponding proportions for assessments among adolescent patients were 77.1%, 61.8%, 52.9% and 5.6%. Comparatively fewer Ob-Gyns reported routinely assessing these issues (56.1%, 28.6%, 20.4% and 1.3% respectively among adults and 62.7%, 35.2%, 26.8% and 2.8% respectively among adolescents). In the area of sexual history, condom use was routinely assessed by more Ob-Gyns than GPs (47.0% v. 28.2%); however, the proportion of Ob-Gyns and GPs was equally low for assessing number of partners (24.8% and 23.1%), sexual orientation (18.8% and 16.9%) and STD risk (26.2% and 21.2%). The vast majority of GPs and Ob-Gyns reported finding it difficult to assess family violence (86.5% and 93.0%) and sexual abuse (92.7% and 92.4% respectively). Over 80% of the physicians felt that they had had adequate or excellent medical training in assessing risk behaviours for heart disease and STD risk. The proportion who felt this way about their training in screening for illicit drug use, family violence and sexual abuse ranged between 12.7% and 31.6%.

**Interpretation:** Although morbidity and mortality associated with smoking, alcohol consumption, illicit drug use, unsafe sexual practices, family violence and sexual abuse have been well documented, routine screening for these risk factors during general medical examinations has yet to be integrated into medical practice.

Physicians play an essential role in promoting healthy lifestyles and preventing disease in their patient population through health-risk screening and risk-reduction counselling.<sup>1-3</sup> In the last 2 decades the screening by physicians of lifestyle variables, such as tobacco use, alcohol consumption, exercise and diet has improved.<sup>4-10</sup> However, many other lifestyle health risks remain undervalued by



primary care physicians. Unsafe sexual behaviour, drug use, family violence and sexual abuse are major sources of morbidity and death that affect a significant proportion of the population.<sup>11-17</sup> Although physicians have begun to integrate some screening for unsafe sexual behaviour and drug use into medical examinations, these areas are not evaluated as often as other risk behaviours.<sup>18-24</sup> Few surveys have evaluated physicians' screening practices for prevalent social problems such as family violence and child abuse.<sup>25,26</sup>

Lifestyle health risk assessment by primary care physicians is important in providing complete health care because pertinent screening questions can help to identify individuals who may need further services or treatment. In Canada several guidelines have been published for evaluating lifestyle health risks during the general medical examination,<sup>27-30</sup> but no recent Canadian study has examined the extent to which these guidelines have been integrated into medical practice. We surveyed general practitioners (GPs) and obstetrician-gynecologists (Ob-Gyns) in Quebec to examine the extent to which physicians assess lifestyle health risks during general medical examinations, to measure physicians' perceived level of difficulty in making these assessments and to document the physicians' evaluation of their formal medical training in lifestyle risk assessment.

## Methods

We surveyed GPs and Ob-Gyns in the province of Quebec who were French speaking, active in patient care and licensed after 1964. All Ob-Gyns who met the selection criteria were included. GPs were divided into 6 groups based on sex, type of practice (private or community health clinic) and date of licensure (1965-1988 and 1989-1992), and a random sample was taken from each group. The physicians' demographic data, stratification and sampling were provided by the Collège des médecins du Québec. Overall, 25 physicians were not eligible or could not be located, reducing the sample to 1327.

A self-administered questionnaire was mailed to physicians in 1995; the questionnaire was developed from questionnaires used in previous studies,<sup>18-22</sup> including a survey of recently trained family physicians.<sup>23</sup> Great care was used in the wording of questions and answers to avoid ambiguity, minimize measurement error and facilitate the interpretation of findings. Results of the pretest of the questionnaire conducted with a sample of 30 physicians indicated that the questions were clear and unequivocal and the length of the questionnaire was reasonable. The questionnaire, consisting of 100 closed questions, took about 15 minutes to complete.

In reporting on their risk assessment practices, physicians were asked to refer to the general medical examinations they performed with adolescent (13-18 years) and adult (19-55 years) patients during the past 6 months. To facilitate the interpretation of results, the screening practices of physicians with adults and those with adolescents were analysed separately. The questionnaire surveyed physicians' assessment of tobacco use, alcohol consumption, illicit drug use, sexual risk behaviour, family violence and history of sexual abuse. Physicians were asked the proportion of patients they assessed for each health risk: 25% or less, 50%, 75%, or 90% or more (the last category was considered routine screening). Physicians were also asked to indicate whether it was easy, rather difficult or very difficult to discuss these lifestyle health risks with

patients and to indicate whether they rated their medical training for the assessment of lifestyle health risks as excellent, adequate or insufficient. The survey was anonymous to minimize social desirability bias. [A copy of the questionnaire is available upon request from the first author.]

The survey was based on Dillman's total design method.<sup>31</sup> There were 4 mailings to achieve an acceptable response rate. Follow-up of nonrespondents was made possible by asking respondents to return a preaddressed stamped postcard on which their name and identification number appeared. Physicians who did not return the postcard were resolicited up to 3 times. Physicians who returned their questionnaire had a chance of winning \$250; a prize winner was drawn from the returned postcards once data collection was complete.

Weights that took into account the sample design and the probability of sampling were used to derive estimates for GPs. The  $\chi^2$  test was used to compare differences in the risk assessment practices and perceptions of GPs and Ob-Gyns.

## Results

Of the 1327 physicians contacted, 963 (72.6%) returned their completed questionnaire. There were some variations in the response rates across survey strata (Table 1); the overall response rate was higher among the GPs than among the Ob-Gyns, and in the GP group a greater proportion of the women than of the men responded (80.7% v. 66.5%).

The physicians' risk assessment of substance use and family violence is presented in Table 2. Most of the GPs stated that they routinely assess tobacco use and alcohol consumption during general medical examinations of adults; about one-third reported assessing illicit drug use. The GPs' assessment of tobacco use and alcohol consumption among adolescent patients was comparable to that among adults; however, slightly more GPs said that they ask adolescent patients about illicit drug use than those who said they ask adults. A significantly smaller proportion of Ob-Gyns than of GPs reported that they routinely assess their patients' substance use. Routine screening for family violence was reported by less than 7% of the physicians.

The physicians' assessment of sexual history is presented in Table 3. The item most often evaluated on a routine basis was contraceptive method. Although significantly more Ob-Gyns than GPs reported routinely assessing contraceptive method and condom use, still less than half of the Ob-Gyns reported discussing condom use with their patients. The proportion of physicians who stated that they routinely assess sexual orientation, number of sexual partners and risk of contracting STDs was comparable (range 16.9%-26.2%). Routine screening for sexual abuse was rarely reported.

The vast majority (86.5%-93.0%) of the physicians reported having difficulty asking patients about family violence and sexual abuse (Table 4). About two-thirds reported finding it difficult to ask patients about illicit drug use. The Ob-Gyns seemed to experience as much difficulty as the GPs in asking about sexual issues.

Over 80% of the physicians evaluated their medical



training in assessing risks associated with heart disease and STDs as adequate or excellent (Table 5). This proportion dropped to less than 33% for training in evaluating illicit drug use, family violence and sexual abuse.

### Interpretation

The results of this survey show that the use of some substances is not routinely assessed by GPs and Ob-Gyns during general medical examinations. Among the GPs tobacco use was most frequently assessed, followed by alcohol consumption. Only about one-third stated that they routinely assess illicit drug use among their adult patients; over half said that they do so among adolescent patients. Our finding that fewer Ob-Gyns than GPs reported routinely assessing tobacco, alcohol and drug use during general medical examinations is unsettling because many women of childbearing age have an Ob-Gyn as their primary care physician. A recent decision made in Quebec, whereby family physicians will provide most primary care, should increase the proportion of female patients that will be screened for these lifestyle health risks.

Despite significant morbidity and mortality related to STDs and the prevalence of sexual risk behaviours in the population,<sup>13-17</sup> less than one-quarter of the GPs in our study reported that they routinely assess their patients' sexual risk behaviours. Although condom use was assessed more routinely by the Ob-Gyns than by the GPs, sexual orientation, number of partners and STD risks taken with partners were routinely assessed by 25% or less of physicians. These results are comparable to those reported previously<sup>22</sup> and suggest that physicians are hesitant to discuss

these issues. Despite the finding that most of the physicians felt that their medical training was adequate or excellent in assessing sexual risk behaviours, up to half stated that they find it difficult to discuss these issues with patients.

Routine screening for family violence and sexual abuse during general medical examinations was rarely reported in our study, even though it has been shown that most patients are willing to discuss these problems.<sup>25</sup> Family violence and sexual abuse are prevalent problems in our society that have devastating short- and long-term effects on victims' physical and mental health.<sup>32,33</sup> In one study<sup>11</sup> 39% of women reported a lifetime episode of physical abuse by a partner. In another study<sup>12</sup> the prevalence of childhood sexual abuse was estimated to be 11% among girls and 4%

**Table 2: Proportion of physicians who reported routinely\* assessing substance use and family violence during general medical examinations of adult and adolescent patients**

Inquiry	No. (and %) of GPs†	No. (and %) of Ob-Gyns†	p value
<b>Adult patients</b>			
Tobacco use	615 (82.2)	83 (56.1)	< 0.001
Alcohol use	503 (67.2)	42 (28.6)	< 0.001
Illicit drug use	256 (34.2)	30 (20.4)	0.001
Family violence	24 (3.2)	2 (1.3)	NS
<b>Adolescent patients</b>			
Tobacco use	553 (77.1)	89 (62.7)	< 0.001
Alcohol use	443 (61.8)	50 (35.2)	< 0.001
Illicit drug use	397 (52.9)	38 (26.8)	< 0.001
Family violence	40 (5.6)	4 (2.8)	NS

Note: NS = not significant.  
 \*With ≥ 90% of patients.  
 †n varied from 713 to 750 for the GPs and from 142 to 149 for the Ob-Gyns.

**Table 1: Sample design and response rates in survey of general practitioners (GPs) and obstetrician-gynecologists (Ob-Gyns) in Quebec**

Survey strata	Total population	Sample	No. of physicians contacted	No. of questionnaires returned	Response rate, %
<b>GPs</b>					
<i>Licensed 1965-1988</i>					
Private practice					
Men	2467	192	186	130	69.9
Women	1069	182	181	140	77.3
Community health clinic					
Men	394	191	186	108	58.1
Women	225	169	166	117	70.5
<i>Licensed ≥ 1989</i>					
Men	213	130	129	95	73.6
Women	398	247	238	215	90.3
Subtotal	4766	1111	1086	805	74.1
<b>Ob-Gyns</b>					
<i>Licensed ≥ 1965</i>					
Men	169	169	169	110	65.1
Women	72	72	72	48	66.7
Subtotal	241	241	241	158	65.6
Total	5007	1352	1327	963	72.6



among boys. Guidelines, educational campaigns and screening tools have been developed in recent years to aid primary care physicians in detecting domestic violence.<sup>34,35</sup> It is hoped that these efforts will improve physicians' screening practices.

It is disconcerting that large proportions of physicians

**Table 3: Proportion of physicians who reported routinely assessing sexual history**

Inquiry	No. (and %) of GPs*	No. (and %) of Ob-Gyns*	p value
<b>Adult patients</b>			
Contraceptive method	366 (48.9)	119 (79.9)	< 0.001
Condom use	211 (28.2)	70 (47.0)	< 0.001
No. of sexual partners	173 (23.1)	37 (24.8)	NS
Sex of partner	126 (16.9)	28 (18.8)	NS
STD risk with partners	159 (21.2)	39 (26.2)	NS
Sexual abuse	17 (2.3)	2 (1.3)	NS
<b>Adolescent patients</b>			
Sexual activity	401 (56.0)	87 (60.8)	NS
Contraceptive method	518 (72.3)	125 (87.4)	< 0.001
Attitudes concerning condom use	252 (35.3)	71 (49.7)	0.001
Sexual abuse	39 (5.4)	8 (5.6)	NS

\*n varied from 712 to 750 for the GPs and from 142 to 149 for the Ob-Gyns.

**Table 4: Proportion of physicians who reported finding it rather or very difficult to discuss lifestyle health risks with patients**

Inquiry	No. (and %) of GPs*	No. (and %) of Ob-Gyns*	p value
<b>Family violence and substance use</b>			
Family violence	689 (86.5)	147 (93.0)	0.02
Illicit drug use	507 (63.6)	106 (67.1)	NS
Alcohol use	322 (40.4)	65 (41.1)	NS
Tobacco use	50 (6.3)	9 (5.7)	NS
<b>Sexual history</b>			
History of sexual abuse	739 (92.7)	146 (92.4)	NS
Sex of partners	392 (49.1)	76 (48.4)	NS
No. of sexual partners	301 (37.8)	54 (34.2)	NS
STD risks with partners	235 (29.4)	37 (23.4)	NS
Condom use	127 (15.9)	8 (5.1)	< 0.001
Contraceptive method	18 (2.3)	0 (0.0)	0.05

\*n varied from 789 to 798 for the GPs and from 157 to 158 for the Ob-Gyns.

**Table 5: Proportion of physicians who evaluated their medical training in lifestyle risk assessment as adequate or excellent**

Area of risk assessment	No. (and %) of GPs*	No. (and %) of Ob-Gyns*	p value
Risk behaviours for heart disease	776 (97.4)	149 (94.3)	0.04
Risk behaviours for STDs	646 (81.1)	152 (96.2)	< 0.001
Alcohol use	396 (49.7)	68 (43.0)	NS
Illicit drug use	174 (21.8)	50 (31.6)	0.007
Family violence	147 (18.4)	21 (13.3)	NS
Sexual abuse	101 (12.7)	35 (22.2)	0.002

\*n varied from 796 to 797 for the GPs and was 158 for the Ob-Gyns.

reported that they find it difficult to assess family violence and sexual abuse, illicit drug use and sexual risk behaviours. The assessment of these lifestyle conditions requires good communication skills so that both patient and physician are comfortable raising these emotionally charged and sensitive subjects; these skills should be developed during medical training. The dissatisfaction with training in assessing illicit drug use, family violence and sexual abuse reported by the majority of physicians in our study suggests that physicians are aware of the important role they have in assessing these lifestyle risk factors.

Although we surveyed GPs and Ob-Gyns in Quebec, there is no reason to believe that the practices would be different elsewhere in Canada, since medical education and training are comparable between provinces and the basic principles underlying various health care delivery systems in Canada are similar. The estimates of the physicians' screening practices reported in our study are likely to be valid. We were careful to develop risk assessment measures that reflect clinical practices and to obtain high response rates. If an error occurred in the measurement of screening practices, it would tend to overestimate the assessment of lifestyle risk behaviours owing to the social desirability factor; however, we sought to control for this effect by making the questionnaire anonymous.

Although morbidity and mortality associated with tobacco, alcohol and illicit drug use, unsafe sexual practices, family violence and sexual abuse have been well documented, routine screening for these risk factors during general medical examinations has yet to be integrated into medical practice. With physicians reporting low screening practices and important deficiencies in training in this area, our findings underscore the need for increased medical education in lifestyle risk assessment.

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