

# Canadian Psychiatrists' Current Attitudes, Practices, and Knowledge Regarding Fitness to Drive in Individuals With Mental Illness: A Cross-Canada Survey

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**Objectives:** To assess current attitudes, practices, and knowledge of Canadian psychiatrists regarding fitness to drive in individuals with mental illness and to explore variations according to provincial legislation.

**Method:** We carried out a national cross-sectional survey, using a random sample of psychiatrists. We used a mail survey to collect data.

**Results:** In total, 248 psychiatrists participated; the response rate was 54.2% on traced subjects. The majority (64.1%) reported that they strongly agreed or agreed that addressing patients' fitness to drive is an important issue. However, only 18.0% of respondents were always aware of whether their patients were active drivers. One-fourth strongly agreed or agreed that they were confident in their ability to evaluate fitness to drive. In discretionary provinces, 29.3% of psychiatrists reported not knowing their provincial legislation, as did 14.6% of psychiatrists in mandatory provinces; of those responding, 54.0% from discretionary provinces and 2.8% from mandatory provinces gave incorrect answers.

**Discussion:** Psychiatrists' responses demonstrate a broad range of attitudes, practices, and knowledge. There appears to be a large gap between what is expected of psychiatrists and their readiness and self-perceived ability to make informed clinical decisions related to driving safety.

**Conclusion:** There is a clear need for education and guidelines to assist psychiatrists in decision making about driving fitness.

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Information on funding and support and author affiliations appears at the end of the article.

## Clinical Implications

- It is important for psychiatrists to consider their patients' fitness to drive.
- Education and guidelines are needed to assist psychiatrists in determining fitness to drive.

## Limitations

- The small sample size decreased the statistical power.
- The findings may have limited generalizability.
- There is a possible refusal bias.

**Key Words:** mental illness, driving, fitness to drive, psychiatrists

Mental illnesses are characterized by alterations in thinking, mood, and behaviour and are associated with significant distress and impaired functioning (1). There is particular concern about fitness to drive among individuals with mental illnesses related to cognitive and behavioural alterations and the additional side effects of psychotropic medications. Currently in Canada, there is no national standardized assessment process in place for individuals with mental illnesses who drive a motor vehicle. Rather, the responsibility to assess and refer for evaluation and (or) recommendation that driving cease usually falls with the patient's GP or psychiatrist (2).

### Psychiatrists' Practices as Related to Driving Capacity

We carried out an extensive review of the literature, using electronic databases (PsycINFO, MEDLINE, and Cinahl) and the following search terms: driving, fitness, and performance combined with the terms psychiatrist, survey, mental illness, and mental disorders. We found only 4 studies of psychiatrists' practices relevant to driving, all from Great Britain (3–6).

Of these, 2 described the practices of psychiatrists in regard to assessing driving competency (4,6). Both assessed psychiatrists' awareness of the DVLA guidelines while asking for their views on the issues and advice they gave patients. Specifically, Humphreys and Roy sent a questionnaire to all psychiatrists in 2 health districts in the United Kingdom, obtaining a 100% response rate ( $n = 31$ ) (4). Thompson and Nelson sent a questionnaire to all general adult psychiatrists working in 3 districts in Scotland and had a 54% response rate ( $n = 101$ ) (6). Overall, the results indicated that psychiatrists' knowledge of the legislation was relatively poor and that they infrequently advised patients about driving issues (4,6). The third survey focused on a few patients in an acute psychiatric hospital (5). A cross-sectional design was used, and patients were given a self-report questionnaire asking about their current driving practices and about advice they had received from

their physician (5). Of 42 patients who completed the questionnaire, 16 (38%) held a current driver's license, and a further 7 had held a license in the past. Of these 23, 6 (26%) received advice from their GP and 2 (9%) received advice from their psychiatrist regarding the likely effects of their illness on driving. Finally, in a prospective descriptive study, Elwood followed 10 psychiatrists over a 4-week period and asked them to record the diagnosis and the driving status of all patients encountered (3). They were also asked whether they gave advice concordant with the DVLA guidelines and if not, why not. Additionally, psychiatrists were asked to record whether they informed patients of any side effects of medications they considered relevant to driving performance. Information was recorded for 297 patients, 123 (41%) of whom were drivers. According to the psychiatrists' assessments, 19/123 (15%) failed to meet the DVLA criteria of fitness to drive. In 9/19 (47%) of these cases, the psychiatrist did not advise the patient in concordance with the DVLA guidelines. Side effects of psychotropic medications were considered to have potential adverse effects on the driving ability of 60/123 (43%) drivers; psychiatrists did not provide relevant advice to 14 (23%) of these individuals.

### The Canadian Picture

The CMA handbook on fitness to drive (7) contains a chapter on mental illnesses. It discusses the effects on driving of emotional disorders, antisocial personality disorder, psychoses, progressive dementia, and behavioural and learning disabilities and includes a paragraph on the effects of psychopharmacological therapy on driving. The second section provides recommendations for physicians on how to assess and report potentially unsafe drivers. Importantly, as noted in the guide,

the recommendations remain mainly empirical [relying on experience or observation alone] and represent that the driving standards are based on the consensus opinion of an expert panel. . . . They are intended to impose no more than common sense restrictions on drivers with medical disabilities (7, p 4).

Provincial and territorial regulations governing the reporting of medically unfit drivers also exist to assist physicians with decisions about driving. In all but 3 provinces (Alberta, Nova Scotia, and Quebec), physicians are mandated to report unfit drivers (7). Exceptionally, in British Columbia, physicians are only mandated to report unfit drivers who do not agree to stop driving. It is also the only province or territory without legislation to protect physicians who report medically unfit drivers. Currently, there is no scientific evidence about what constitutes an adequate assessment of fitness to drive among individuals with mental illness (8). A recent survey of Canadian family physicians' attitudes and practices regarding fitness to

#### Abbreviations used in this article

CI	confidence interval
CMA	Canadian Medical Association
CMD	Canadian Medical Directory
DMV	Department of Motor Vehicles
DVLA	Driver and Vehicle Licensing Authority
GP	general practitioner
SD	standard deviation
SNRI	selective noradrenaline reuptake inhibitor
SSRI	selective serotonin reuptake inhibitor

drive in elderly clients revealed a sense of missing competencies (9). It is likely that psychiatrists have similar concerns.

### What About Current Practices in Canada?

To our knowledge, no large-scale study has ever explored psychiatrists' attitudes to, and management of, fitness to drive and related issues for patients with mental illness. Thus our objective in this study was to assess Canadian psychiatrists' attitudes, practices, and knowledge in regard to fitness to drive among individuals with major mental illnesses and to explore, on variables specified a priori, variations in these attitudes, practices, and knowledge according to provincial legislation, psychiatrists' demographic characteristics, patient population characteristics, and practice environments.

## Method

### Research Design

We conducted a national, cross-sectional mail survey of a random sample of Canadian psychiatrists, using a structured questionnaire. We sent a second mailing to nonrespondents and used follow-up telephone contacts to identify the status of the psychiatrist (for example, retired, incorrect address, or not working with adult clients) and to encourage participation. Ethics approval was provided by the Institutional Review Board, Faculty of Medicine, McGill University.

### Study Population and Sample Size

The sampling frame was defined as psychiatrists registered in the 2004 *CMD* (10). To verify that the *CMD* was representative of practising clinicians, we compared the list of psychiatrists registered in the *CMD* for the province of Quebec with the lists of psychiatrists from the Quebec College of Physicians; 79% of the psychiatrists registered with the Quebec College were registered in the *CMD*. Because the 2 directories were issued within a 9-month interval, we speculated that a portion of those missing might have moved to another province, were new graduates, or retired.

The primary outcome of interest was Canadian psychiatrists' responses about fitness to drive among individuals with mental illness. In Humphrey and Roy's survey, 75% of psychiatrists indicated that they gave advice about driving with a mental illness (4). According to this estimate, a sample size of 288 psychiatrists would permit inference of the study findings to Canadian psychiatrists with a 95%CI. Our second objective was to compare psychiatrists' practices according to discretionary and mandatory reporting requirements. We therefore also calculated a sample size for 2 proportions. Power calculations indicated that, with 113 questionnaires per group, we could detect variations in responses of 18%, according to mandatory or discretionary reporting, using an alpha of 0.05 and power of 0.80. Assuming a 65% to 70% response rate based on the recent Canadian study on family physicians (9),

we mailed 742 surveys (383 in the 7 provinces with mandatory legislation and 359 in the provinces with discretionary legislation). Disproportional sampling was used: we calculated the number of psychiatrists sampled from each province proportionally to the percentage available in each (see Table 1).

For the initial sampling frame, we assigned sequential identification numbers to psychiatrists from the *CMD* and used a random numbers table to select potential respondents. The inclusion criteria were as follows: working a minimum of 2 days weekly in clinical practice, seeing clients who are potential or actual drivers, and treating individuals with either mood disorders, psychotic disorders, and (or) personality disorders.

### Measurement of Variables

No rigorously developed measurement tool exists to assess psychiatrists' current practices (4,6). However, the recently completed Canadian study of family physicians' practices related to driving assessment of the elderly used a questionnaire that was rigorously developed and pilot tested (9). We created a slightly modified version and selected variables according to a framework that classified potential factors affecting clinical practices into predisposing, enabling, and reinforcing factors (11). When creating new questions, we followed Dillman's guidelines on writing questions (12).

### Piloting of the Questionnaire for Validation

A group of professionals with content and methodological expertise reviewed the questionnaire for face validity; it was pretested on a convenience sample of 8 psychiatrists. Revisions were made according to their feedback. The final English version was translated into French, and a rigorous forward and backward translation technique was used (13). Feedback indicated that the questionnaire took 10 to 15 minutes to complete.

### Questionnaire Content

The 56-item questionnaire has 6 sections: attitudes toward driving assessment and reporting; frequency of practices or activities pertaining to driving assessment and reporting; specific components that psychiatrists include in their driving assessment; knowledge about driving policies and programs in the province and perceived gaps in the health care system; demographic characteristics of psychiatrists, patient populations, and practice environments; and finally, comments. Response choices were as follows: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree, no opinion, not applicable, or where appropriate, always, often, sometimes, rarely, never, and not applicable (see Table 2 for examples).

**Table 1 Characteristics of the sample by legislation and as a whole (n = 248)**

Variables	Mandatory reporting n = 125		Discretionary reporting n = 123		Total n = 248	
	Mean	SD	Mean	SD	Mean	SD
Age (years)	51.1	11.4	47.0	9.9	49.0	10.8
Years in practices	17.4	11.2	15.2	10.2	16.3	10.7
Patients seen daily	9.7	4.5	10.6	5.2	10.2	4.9
	n	%	n	%	n	%
Sex						
Men	81	64.8	77	62.6	158	63.7
Provinces (questionnaires sent)						
British Columbia (107)	29	23.2	—	—	29	11.7
Manitoba (45)	18	14.4	—	—	18	7.3
New Brunswick (15)	6	4.8	—	—	6	2.4
Newfoundland (16)	2	1.6	—	—	2	0.8
Northwest Territories (2)	1	0.8	—	—	1	0.4
Ontario (169)	59	47.2	—	—	59	23.8
Prince Edward Island (5)	2	1.6	—	—	2	0.8
Saskatchewan (24)	8	6.4	—	—	8	3.2
Alberta (91)	—	—	38	30.9	38	15.3
Quebec (228)	—	—	65	52.8	65	26.2
Nova Scotia (40)	—	—	20	16.3	20	8.1
Size of community (n = 246) <sup>a</sup>						
< 10 000	2	1.6	4	3.3	6	2.4
10 000–50 000	13	10.5	12	9.8	25	10.2
50 001–100 000	7	5.6	12	9.8	19	7.7
100 001–500 000	37	28.9	33	27.0	70	28.5
> 500 000	65	52.4	61	50.0	126	51.2
Number of primary work settings (n = 234) <sup>abc</sup>						
1	87	75.7	102	85.7	189	80.8
2	28	24.3	14	11.8	42	17.9
3	0	—	3	2.5	3	1.3
Primary work setting(s) <sup>b</sup>						
Teaching hospital	54	47.0	71	59.7	125	53.4
Nonteaching hospital	22	19.1	28	23.5	50	21.4
Private practice <sup>c</sup>	50	43.5	31	26.1	81	34.6
Mixed setting	16	13.9	9	7.6	25	10.7
Others	1	0.9	0	0	1	0.4
Number of service(s) (n = 241) <sup>abc</sup>						
1	52	43.7	49	40.2	101	41.9
2	34	28.6	48	39.3	82	34.0
3 or more	33	27.7	25	20.5	58	24.1

Table 1 continued						
Variables	Mandatory reporting <i>n</i> = 125		Discretionary reporting <i>n</i> = 123		Total <i>n</i> = 248	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Service(s) <sup>b</sup>						
Inpatient	57	47.9	67	54.9	124	51.5
Outpatient	94	79.0	100	82.0	194	80.5
Day hospital	14	11.8	15	12.3	29	12.0
Rehabilitation	5	4.2	13	10.7	18	7.5
Private practice <sup>c</sup>	56	47.1	35	28.7	91	37.8
Primary clientele(s) ( <i>n</i> = 227) <sup>ab</sup>						
Psychogeriatric	37	33.0	36	31.3	73	32.2
Psychotic disorders	63	56.3	79	68.7	142	62.6
Affective disorders	87	77.7	98	85.2	185	81.5
Substance abuse disorders	46	41.1	47	40.9	93	41.0
Personality disorders	66	58.9	77	67.0	143	63.0
Anxiety disorders	77	68.8	82	71.3	159	70.0
<sup>a</sup> Numbers vary slightly due to missing data <sup>b</sup> When asked to indicate primary work setting(s), service(s) and main clientele(s) some indicated 2 or more <sup>c</sup> Significant difference between mandatory and discretionary legislation ( <i>P</i> < 0.05) — = no data						

### Procedures

Questionnaires were mailed, and elements that have been shown to improve response rates were used (12). These included personalized signed correspondence, a stamped return envelope, and multiple contacts with recipients. Each questionnaire included a unique code that helped to identify respondents. Psychiatrists were asked to sign and return an eligibility checklist. This allowed coding of each as eligible, noneligible, or a potential refusal if the cover sheet was not returned. Nonrespondents received a reminder 3 weeks after the first mailing. Subsequently, nonrespondents were contacted by telephone to identify their eligibility and willingness to participate. Procedures to trace nonrespondents included verifying the psychiatrist's work status within the organization and searching for contact information in telephone and Internet directories.

### Data Analyses

We used descriptive statistics to describe the sample. Response frequencies are presented as the percentages of total returned questionnaires. To explore variations according to provincial legislation, chi-square tests (or *t* tests on means, as appropriate) were used to compare responses to specific questions determined a priori to be important potential variables. The *P* value was set at 0.01, and a Bonferroni correction was used for multiple comparisons (14). For conciseness, the

possible response choices are at times grouped as follows: agree or strongly agree, neither agree nor disagree or no opinion, strongly disagree or disagree, and not applicable, as well as always or often, sometimes, rarely or never, and not applicable.

We performed univariate analyses to determine the possible effect of certain demographic characteristics of the psychiatrists, patient population, and practice environment on specific respondents' attitudes, practices, and knowledge. Qualitative methods were used to analyze open-ended responses in the comment section (15). Specifically, 2 authors independently coded all comments according to themes, and agreement was then verified.

## Results

### Response Rate to Questionnaire

We sent a total of 742 questionnaires. We could not trace 43 psychiatrists. The eligibility of 258 psychiatrists was unknown, as they did not return questionnaire or phone calls. Of the 441 contacted, 58 refused to participate, citing mainly time constraints; 4 reported that the questionnaires had been returned, although they were never received; and 379 returned the questionnaires. Of respondents, 131 were not eligible, and 248 were eligible and completed the questionnaire. The total response rate for traced subjects was 54.2% (379/699). There

was no significant difference in response rates between psychiatrists living in provinces with mandatory or discretionary reporting legislation ( $P = 0.4$ ). Data are presented from the 248 questionnaires with complete data.

### Demographics

Table 1 describes the characteristics of the total sample that returned the questionnaires and compares the characteristics for respondents from provinces with mandatory or discretionary reporting.

### Current Attitudes, Practices and Knowledge

**Attitudes.** Although 64.1% of respondents reported that they strongly agreed or agreed that addressing a patient's fitness to drive was important, only 25.7% strongly agreed or agreed that they were confident in their ability to do so. Most (84.9%) strongly agreed or agreed that a clinical screening instrument to identify at-risk drivers would be useful, and 82.8% strongly agreed or agreed that they would benefit from further education. Although 61.7% strongly agreed or agreed with the statement that psychiatrists should be legally required to report potentially unsafe drivers to the DMV, two-thirds (66.0%) strongly agreed or agreed that psychiatrists face a conflict of interest when reporting. A similar percentage (67.3%) strongly agreed or agreed that reporting a patient negatively affects the physician-patient relationship. Only 12.2% strongly agreed or agreed that the provincial DMV evaluates potentially unsafe drivers in a timely fashion.

Figure 1 indicates respondents' perceptions of the risk of a motor vehicle crash caused by various mental illnesses. As shown by the last set of bars on the extreme right of Figure 1, almost one-half (47.5%) of the respondents strongly agreed or agreed that those with mental illness are at higher risk of having a motor vehicle crash, compared with the general population. Bipolar disorders were perceived as the most likely to affect driving safety, with 69.5% strongly agreeing or agreeing that such patients are at higher risk.

When participants were asked about the risk of a motor vehicle crash related to medications (Figure 2), 61.5% strongly agreed or agreed that individuals using psychotropic medications are at a higher risk than the general population. Benzodiazepines were considered by far the most likely to affect fitness to drive, whereas SSRIs and SNRIs were considered the least likely. A high percentage of respondents were neutral (neither agreed nor disagreed or had no opinion) in regard to the effects of major psychotropic medications on driving, with the exception of benzodiazepines.

**Practices.** About three-quarters (77.6%) of respondents said they were always or often aware of whether their patients were active drivers, but less than one-half (44.5%) always or often asked their patients whether they experienced driving

difficulties. Most (74.4%) indicated they always or often informed patients about possible side effects of medications on driving, while fewer (52.6%) indicated that they always or often informed patients that their illness could affect their driving. Almost one-half (46.1%) were unaware of the CMA handbook *Determining Medical Fitness to Drive—A Guide for Physicians* (7).

**Knowledge and Resource Use.** Of respondents, 22% reported having no idea of whether it was mandatory to report potentially unsafe drivers in their province. Almost three-quarters (70.7%) reported knowing the steps to take in reporting a driver they felt to be unsafe. However, 62.0% indicated that the provincial DMV's procedures for evaluating potentially unsafe drivers were unclear. Further, 49.4% did not know whether centres or specialists that carry out road tests were available in their community, and 72% perceived that tools to assess the driving capacity of individuals with mental illness were lacking.

**Methods Used in Fitness-to-Drive Assessment.** When asked about elements included in screening fitness to drive, most psychiatrists reported that they assess the patient's psychiatric and medical history, medication and substance use, compliance with treatment, current cognitive symptoms, cognitive status, and level of insight. However, 16.8% indicated that they never make a referral to the DMV for a road test, and 27.9% never make a referral for a road test to a driving centre or specialist. Only one-half (49.8%) always or often take a driving history, and 18.3% never assess fitness to drive.

When asked about the frequency of assessing fitness to drive, respondents reported assessing an average of 5.5 (SD 8.7) patients over the last year, although 36.7% ( $n = 84$ ) had not assessed any patients. On average, they reported a single patient (mean 1.4, SD 3.2) to the provincial authority over the previous year, although 60.1% ( $n = 149$ ) indicated they had not reported any patients.

**Mandatory, Compared With Discretionary, Reporting.** Table 2 presents comparisons of psychiatrists' responses from provinces with mandatory or discretionary reporting. We use only variables that were hypothesized a priori to be potentially associated with legislation. Psychiatrists who practise in areas with mandatory legislation were more likely to strongly agree or agree that they would report a patient they considered unsafe and who agreed to stop driving ( $P < 0.000$ ). Although 29.3% of respondents in discretionary, and 14.6% in mandatory, provinces reported not knowing their provincial legislation, we found a significant difference among those who did indicate a response: 54% from discretionary and 2.8% from mandatory provinces answered incorrectly about their legislation ( $P < 0.0001$ ). Also, respondents in mandatory provinces

<b>Table 2 Comparison of attitudes, practices, and knowledge and (or) resource use according to legislation (mandatory or discretionary)</b>			
	Mandatory <i>n</i> (%)	Discretionary <i>n</i> (%)	<i>P</i> <sup>a</sup>
<b>Attitudes questions</b>			
	Strongly agree or agree		
Addressing my patients' fitness to drive is an important issue in my practice.	88 (71.0)	69 (57.0)	0.051
Psychiatrists should inquire about the driving ability of their patients.	103 (83.1)	105 (86.8)	0.570
In general, individuals with psychiatric conditions are at a higher risk of having a motor vehicle accident than the general population.	61 (49.6)	54 (45.4)	0.734
In general, individuals using psychotropic medications are at a higher risk of having a motor vehicle accident than the general population.	75 (61.5)	72 (61.5)	0.834
Psychiatrists should be legally required to report unsafe drivers to the provincial DMV unsafe drivers.	85 (69.1)	66 (54.1)	0.045
Reporting a patient who I consider to be an unsafe driver negatively affects on the physician–patient relationship.	92 (74.8)	73 (59.8)	0.040
<b>Practices Questions</b>			
	Always or often		
I am aware of whether my patients are active drivers.	98 (79.7)	92 (75.4)	0.596
I ask my patients about whether they have had any driving difficulties.	59 (48.4)	50 (41.0)	0.507
When I prescribe medications, I inform my patients about possible effects on driving.	72 (60.5)	57 (47.1)	0.772
I use the CMA handbook <i>Determining Medical Fitness to Drive – A Guide for Physicians</i> when assessing my patients' fitness to drive.	19 (26.4)	7 (11.7)	0.030
I report a patient to the provincial DMV:			
• when I am uncertain of his or her ability to drive safely.	36 (32.1)	28 (27.5)	0.755
• who I consider to be unsafe and who refuses to stop driving.	95 (87.2)	71 (74.0)	0.029
• who I consider to be unsafe and who agrees to stop driving <sup>b</sup>	36 (40.9)	24 (19.2)	0.000 <sup>a</sup>
For patients that I report, the DMV informs me of their decisions about the patient's driving status.	24 (25.8)	10 (12.0)	0.012 <sup>a</sup>
Referral for a road test to the provincial DMV	10 (10.9)	16 (18.6)	0.337
Referral for a road test to a driving centre/specialist other than the provincial DMV	9 (11.0)	15 (18.8)	0.231
<b>Knowledge and (or) resource use questions</b>			
	Incorrect		
In my province, it is mandatory for physicians to report medically unsafe drivers to the licensing authority (don't know replies removed)	3 (2.8%)	47 (54.0%)	0.000 <sup>a</sup>
	Yes		
I know the steps to take in reporting patients who I feel are unsafe to drive.	102 (82.9)	72 (58.5)	0.000 <sup>a</sup>
The provincial DMV procedures for evaluating potentially unsafe drivers are clear to me.	28 (22.8)	14 (11.5)	0.053
Centres or specialists that carry out road tests, other than the provincial DMV, are available in my community.	44 (36.1)	45 (36.6)	0.629
I have encountered difficulty finding a centre or specialist to assess my patient's ability to drive.	37 (30.3)	44 (36.1)	0.528
	Mean (SD)	Mean (SD)	
Number of patients assessed for fitness to drive over the last year	5.6 (9.3)	5.3 (8.1)	0.534
Number of patients reported to the provincial DMV over the last year	1.7 (3.9)	1.1 (2.4)	0.056
Numbers vary slightly owing to missing data.			
<i>t</i> tests were performed on means and chi-square tests on percentages (only one category is presented for the chi-square test)			
<sup>a</sup> Significant differences <i>P</i> < 0.01			
<sup>b</sup> For this question, British Columbia was considered to be in the discretionary group.			

Figure 1 Psychiatrists' perceptions of risk of motor vehicle accidents by mental illness

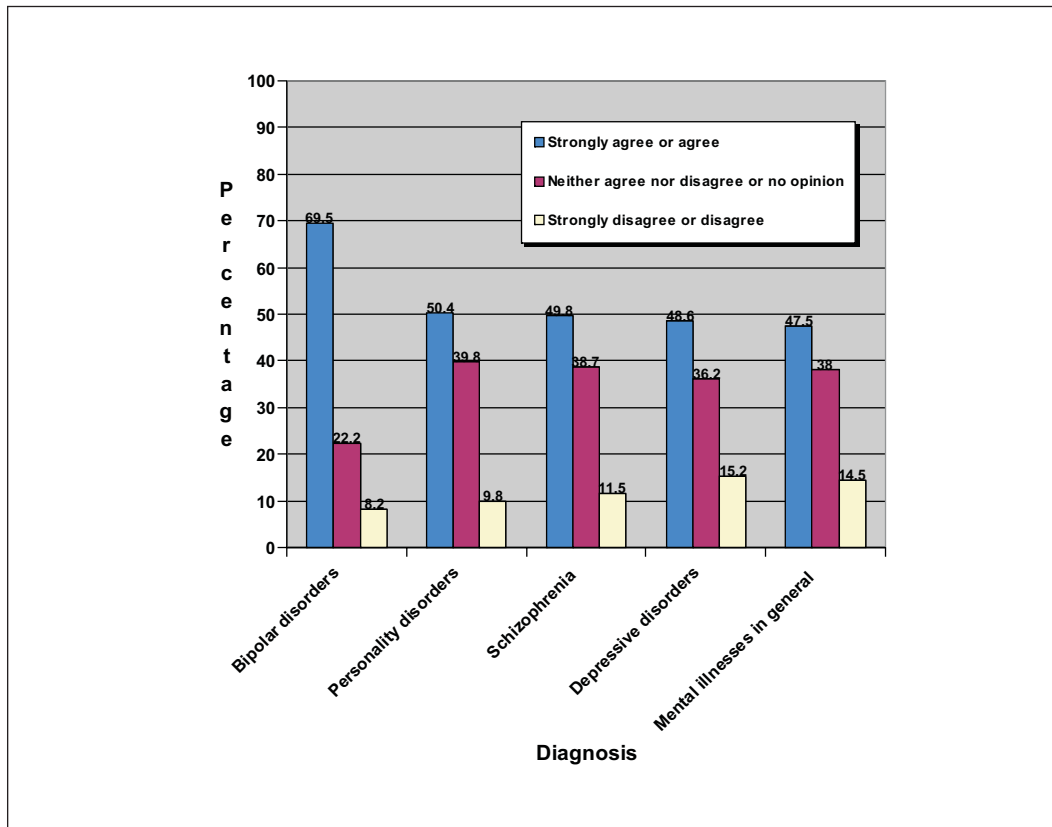
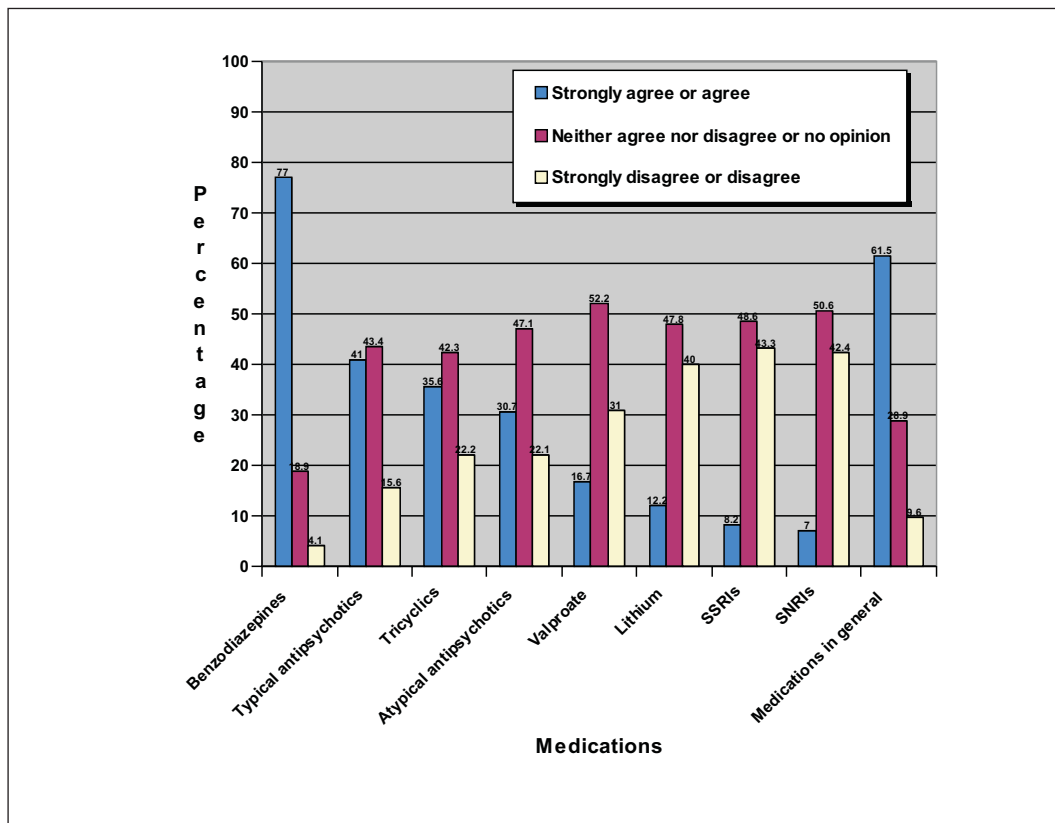


Figure 2 Psychiatrists' perception of risk of motor vehicle accidents by medications



were significantly more likely to indicate that they knew the steps to take in reporting a patient ( $P < 0.0001$ ).

*Practice Determinants.* We also performed analyses to explore whether there was a difference in the average number of patients psychiatrists assessed and reported over the last year, based on community size (fewer than 500 000 or more than 500 000 individuals), as well as on the number of psychiatrists working in a teaching hospital, having an inpatient clientele, and having a psychogeriatric clientele. During the previous year, respondents working in a teaching hospital had assessed fitness to drive in an average of 6.7 (SD 10.4) patients, compared with 4.4 (SD 6.2) patients assessed by those not working in a teaching hospital ( $P = 0.002$ ), and had reported an average of 2.0 (SD 4.3) patients, compared with 0.8 (SD 1.5) patients reported by those not working in a teaching hospital ( $P < 0.0001$ ). Psychiatrists with a psychogeriatric clientele had assessed, on average, 9.9 (SD 11.0) patients during the past year, compared with 3.7 (SD 6.4) patients assessed by psychiatrists not following this clientele ( $P < 0.0001$ ), and had reported an average of 3.2 (SD 5.2) patients, compared with 0.6 (SD 1.2) reported by psychiatrists not following psychogeriatric patients ( $P < 0.0001$ ). No significant difference was found for those having, compared with not having, an inpatient clientele.

*Comments From Participants.* Almost one-third (30.6%) of the respondents added comments. About one-fifth indicated that driving is an important clinical issue. Some added that completing the survey had increased their awareness of the issue. One-fifth wanted specific guidelines from provincial authorities and perceived a responsibility to report and inform but not to carry out fitness-to-drive assessments, the latter being a DMV responsibility. Of the comments, 20% mentioned the need for a screening tool and more education. One in 10 comments pointed out problems arising from the lack of available and affordable formal driving assessments. Finally, a few respondents mentioned the difficulty of assessing driving in this heterogeneous population.

## Discussion

This study suggests that Canadian psychiatrists perceive fitness to drive to be an important issue, but only one-quarter see themselves as the professionals most qualified to identify patients with mental illness who are unsafe to drive. About two-thirds think they face a conflict of interest if they report a patient they think is unfit to drive, and about the same percentage feel that reporting has a negative effect on the patient–physician relationship. These findings are similar to those from other physician groups (16,17) and may explain to some extent the low frequency of assessing and reporting by psychiatrists.

One-half of those surveyed work in provinces in which they are delegated by law to report potentially unfit drivers, and psychiatrists for the most part think they should be legally required to report patients who are potentially unsafe. Nevertheless, a surprisingly high number were unaware of, or incorrectly interpreted, their province's legislation. Further, many were unfamiliar with the CMA guidelines (7) intended to assist physicians with fitness-to-drive decisions.

Most reported that they would benefit from further education on the topic of driving. Similarly, a survey of Saskatchewan physicians' attitudes and knowledge regarding assessment of medical fitness to drive indicated a lack of sufficient education and resources to aid physicians in their role (17). A substantial proportion of participants want a screening instrument to help identify drivers who should be referred for a more comprehensive driving assessment.

With regard to the impact of mental illness and psychotropic medications on driving fitness, about one-half believed that individuals with a mental illnesses have a higher risk of motor vehicle crash than does the general driving population. Psychiatrists' answers as to whether taking certain medications could increase the risk of a motor vehicle crash showed a trend that corresponded to the scientific evidence, in that medications with the clearest evidence of a potentially negative effect were also those indicated by psychiatrists. However, psychiatrists' practice activities did not reflect these beliefs, in that many did not know whether their patients were active drivers or had recent driving difficulties. Indeed, many neglected to inform their patients that their condition or medications could influence driving. Interestingly, psychiatrists were more likely to advise patients about the possible impact of medications on driving than about the impact of their psychiatric condition. Possibly, providing information when prescribing a medication is a professional responsibility to which physicians are accustomed and for which there is clear scientific evidence.

Most psychiatrists did not feel that the various provincial DMVs evaluate potentially unsafe drivers in a timely fashion. Indeed, several written comments related to difficulties encountered with the DMVs, such as the lack of available and affordable driving assessments and the lack of clear, evidence-based guidelines for assessment. If psychiatrists lack confidence in the existing procedures, it is likely to affect their reporting behaviours negatively.

Psychiatrists working in provinces with mandatory legislation reported being significantly more knowledgeable regarding the steps to take in reporting a patient; they also were more inclined to report a patient. This suggests that legislation may have positive effects. With regard to determinants of practice, psychiatrists treating a psychogeriatric population and those

working in a teaching hospital were more likely to assess and report patients.

This study has several limitations. The response rate of 54.2% is a limiting factor; however, it is comparable to the response rate in similar surveys (16–22). In terms of respondent bias, many psychiatrists refused to participate, citing time constraints or indicating that they generally refused to participate in any survey. These major refusal reasons appear to be general and not specifically associated with driving-related issues. In terms of response validity, the answers suggest that psychiatrists were honest: there was a wide range of answers to questions with a potential for social-desirability bias. Indeed, the use of a mail survey without personal identifiers generally results in less social-desirability bias when compared with telephone or face-to-face interviewing (23).

Our findings have implications for public safety. Psychiatrists are the front-line professionals providing care to patients with the most serious mental illnesses. However, many psychiatrists do not think that they are best qualified to determine fitness to drive. Although some psychiatrists indicated willingness to intervene, others acknowledged that they rarely inquire about driving.

## Conclusion

This study indicates that, for the most part, there is a large gap between what is expected of psychiatrists and their readiness and self-perceived ability to make informed clinical decisions related to the driving safety of their clients. There is a clear and pressing need for action that includes education, guidelines to assist psychiatrists in daily decision making, empirically derived screening tools, and enhanced communication between psychiatrists and driving authorities.

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**Résumé : Attitudes, pratiques et connaissances actuelles des psychiatres canadiens à l'égard de l'aptitude à la conduite automobile des personnes souffrant de maladie mentale : un sondage pancanadien**

**Objectifs :** Évaluer les attitudes, pratiques et connaissances actuelles des psychiatres canadiens à l'égard de l'aptitude à la conduite automobile des personnes souffrant de maladie mentale et explorer les variations selon les lois provinciales.

**Méthode :** Nous avons mené un sondage transversal national à l'aide d'un échantillon de psychiatres aléatoire. Nous avons utilisé un sondage postal pour recueillir les données.

**Résultats :** En tout, 248 psychiatres ont participé; le taux de réponse a été de 54,2 % chez les sujets relevés. La majorité (64,1 %) a déclaré être parfaitement d'accord ou d'accord qu'aborder l'aptitude à la conduite automobile des patients est une question importante. Cependant, seulement 18,0 % des répondants savaient toujours si leurs patients étaient des conducteurs actifs. Un quart était parfaitement d'accord ou d'accord qu'ils étaient confiants dans leur capacité d'évaluer l'aptitude à la conduite automobile. Dans les provinces où la loi est discrétionnaire, 29,3 % des psychiatres ont déclaré ne pas connaître la loi provinciale, tout comme 14,6 % des psychiatres des provinces où la loi est obligatoire; parmi ceux qui ont répondu, 54,0 % provenant des provinces discrétionnaires et 2,8 % des provinces obligatoires ont donné des réponses inexactes.

**Discussion :** Les réponses des psychiatres démontrent une vaste gamme d'attitudes, de pratiques et de connaissances. Il semble y avoir un écart important entre ce qu'on attend des psychiatres et leur facilité et capacité autoperçue de prendre des décisions cliniques éclairées relativement à la sécurité de la conduite automobile.

**Conclusion :** Il existe un net besoin de formation et de guides pour aider les psychiatres à prendre des décisions quant à l'aptitude à la conduite automobile.