

Knowledge of medical-legal issues

Survey of Ontario family medicine residents

Scot P. Saltstone, LLB, MD, CCFP Robert Saltstone, PHD, CPSYCH Brian H. Rowe, MD, MSC, CCFP(EM)

ABSTRACT

OBJECTIVE To ascertain how much family medicine residents know about medical-legal issues and what their attitudes toward medical-legal training are.

DESIGN Survey using multiple-choice questions to assess knowledge of typical legal scenarios and attitudes to training. Responses to questions were assessed using a Likert scale.

SETTING University of Ottawa's Family Medicine Program, including the Northeastern Ontario Family Medicine Program and the Melrose and Elizabeth Bruyere Family Medicine Centres.

PARTICIPANTS Forty-five family medicine residents in the University of Ottawa's Family Medicine Program.

MAIN OUTCOME MEASURES Demographic information and answers to questions assessing respondents' knowledge of and attitudes toward medical-legal issues.

RESULTS Mean score for correct responses was 8.6 out of 16 possible correct responses. Residents' knowledge about certain issues was excellent, such as knowing that comments can be construed as sexual abuse and that they should report patients whose medical conditions make it dangerous for them to operate motor vehicles. On other issues, such as how to treat incompetent individuals and how to treat minors when parents refuse consent for treatment, residents' knowledge seemed poor. Although residents thought knowledge of medical-legal issues was important for providing good-quality care to patients and avoiding litigation, they felt inadequately trained in and uncomfortable about dealing with these issues.

CONCLUSION Residents are somewhat confused about medical-legal issues. They seem very interested in learning medical-legal principles. These findings should encourage educators to provide opportunity for residents to gain knowledge in these areas.

RÉSUMÉ

OBJECTIF Vérifier le niveau des connaissances des résidents de médecine familiale dans le domaine médico-légal et connaître leurs attitudes face à la formation dans ce domaine.

CONCEPTION Enquête utilisant un questionnaire à choix de réponses et présentant des scénarios juridiques typiques afin d'évaluer les connaissances et les attitudes face à cette formation. Pour évaluer les réponses aux questions, on a utilisé l'échelle de Likert.

CONTEXTE Le programme de médecine familiale de l'Université d'Ottawa, y compris le programme de médecine familiale du nord-est de l'Ontario et les centres de médecine familiale Melrose et Elizabeth Bruyère.

PARTICIPANTS Quarante-cinq résidents du programme de médecine familiale de l'Université d'Ottawa.

PRINCIPALES MESURES DES RÉSULTATS Renseignements démographiques et réponses aux questions mesurant le niveau des connaissances des répondants et leurs attitudes face aux aspects médico-légaux.

RÉSULTATS Le résultat moyen des réponses correctes fut de 8,6 sur une possibilité de 16. Les connaissances des résidents étaient excellentes dans certains domaines, à savoir, par exemple, que certains commentaires peuvent être interprétés comme harcèlement sexuel et qu'on devrait déclarer les patients dont la condition médicale rend dangereuse la conduite d'un véhicule automobile. Dans d'autres aspects, par contre, comme la prise en charge de patients incompetents et la façon de traiter les mineurs lorsque les parents refusent leur consentement au traitement, les connaissances des résidents ont semblé faibles. Malgré l'importance accordée par les résidents aux aspects médico-légaux qui font partie intégrante de la qualité des soins aux patients et qui leur permettent d'éviter les litiges, ils avaient l'impression que leur formation était déficiente et qu'ils étaient inconfortables dans ces domaines.

CONCLUSIONS Les résidents expriment un certain degré de confusion dans le domaine médico-légal. Ils semblent très intéressés à apprendre les principes médico-légaux. Ces résultats devraient encourager les éducateurs à offrir aux résidents l'opportunité d'accroître leur niveau de connaissances dans ce domaine.

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RESEARCH

Knowledge of medical-legal issues

Today's medical practitioners need knowledge of the law governing the practice of medicine.¹ The practice of law and the practice of medicine increasingly overlap. The trend in recent years toward codifying individual rights and freedoms² has filtered down to the relationship between physicians and patients. For example, in Ontario, the laws governing consent to treatment have recently been formalized.^{3,5} When one group (eg, patients) is given rights, another group (eg, physicians) is charged with obligations and responsibilities to respect and uphold those rights. Changes to legislation place an increased burden on health care providers to update their medical-legal knowledge continually.

In the past, many laws were based on common law (judge-made law and case law). Codifying the law removes some of the flexibility in interpretation. In many areas of medicine, specific rules govern how decisions on health care issues are to be made. Child protection, public health, and mental health issues are just a few of the health-related areas where knowledge of legal rules is imperative. Patients also have a new awareness of their "rights." Even if patients are unaware of the scope of their rights, some legislation³ obliges health care providers to inform patients of these rights.

Despite the importance of medical-legal issues, little research has focused on how they affect the practice of medicine. The Canadian Medical Protective Association (CMPA) and the Canadian Medical Association (CMA) fielded a medicolegal questionnaire in 1987.⁶ Many respondents to the questionnaire thought that knowledge of basic medical-legal principles could help physicians recognize and avoid legal problems. As well, knowledge of law was thought to affect the attitudes of physicians in favour of law and the legal system.⁷

Linton⁸ suggested that the perceived "widening gap between law and medicine" can be bridged through dialogue and each profession's appreciation of the other. Some argue that if physicians had

more knowledge of the law they would have less anxiety and perhaps practise less "defensive medicine"⁹⁻¹² (ie, order fewer tests or procedures just to decrease the likelihood of lawsuits). The extension of this argument is that a decrease in the practice of defensive medicine could lead to a decrease in the cost of health care without decreasing quality of care.

Although physicians' medical-legal knowledge has rarely been assessed formally, medical-legal questions sometimes appear on medical school as well as medical licensure examinations. No studies have specifically measured physicians' medical-legal knowledge. One study incorporated 10 multiple-choice questions to measure Texas physicians' knowledge of Texas law regarding the treatment of terminally ill patients into a larger study of physicians' decision making for terminally ill patients.¹³ Average respondents answered approximately half the questions correctly.

In a recent study,⁹ Northern Ontario physicians were asked whether they understood what the law required of them to avoid being found liable for negligence. The authors reported that "our highly subjective assessment of the answers... was that roughly two thirds knew what was required while the remaining third either had misconceptions or omitted something from their statements of what was required." Unfortunately, due to their methodologic limitations, these studies contribute little to our understanding of physicians' medical-legal knowledge.

This study explores how much a sample of family medicine residents know about medical-legal issues. The study posed questions about how comfortable family medicine residents are in dealing with issues pertaining to law and medicine, how they assess the medical-legal education they have received, and their interest in learning more about medical-legal issues. Finally, residents were asked how important they felt medical-legal knowledge was, not only for avoiding litigation, but for providing good-quality care to patients.

METHODS

Questionnaires were mailed to 99 family medicine residents affiliated with the University of Ottawa's Family Medicine Program: 25 were enrolled in the Northeastern Ontario Family Medicine Program and 74 in either the Melrose (Ottawa Civic Hospital) or Elizabeth Bruyere (Ottawa General Hospital) Family Medicine Centres.

Dr Scot Saltstone practises family and emergency medicine in Powassan, Ont. He is also a lawyer who conducts medical-legal seminars. **Dr Robert Saltstone** is a psychologist and Manager of Research for the Ontario Ministry of the Solicitor General and Correctional Services in Subury, Ont. **Dr Rowe** is Research Director of the Northeastern Ontario Family Medicine Program in the Health Sciences Education Resource Centre at Laurentian University.

The 32-item questionnaire asked for demographic information and posed 17 multiple-choice questions designed to evaluate residents' knowledge of important applied legal concepts. The multiple-choice questions were drawn from seven different provincial¹⁴⁻¹⁹ and federal²⁰ statutes and from the common law.²¹ Each multiple-choice question had four alternative answers and a fifth choice that was, "I am unsure of the answer and would seek advice."

The multiple-choice questions were field-tested for accuracy, clarity, and relevance with 10 local primary care physicians. The questionnaire had face validity and content validity. One of the questions was eliminated during analysis because the law changed while the questionnaires were being completed.

The questionnaire was self-administered and took approximately 20 minutes to complete. Seven questions were designed to assess residents' confidence and interest in medical-legal issues and their belief in the importance of acquiring medical-legal knowledge. Residents were asked to respond to these questions on a 7-point Likert scale.

Ethics

Each questionnaire was sent to residents with a covering letter explaining the details of the survey and its purpose. The survey was approved by the Sudbury General Hospital Ethics Review Committee and by the program and unit directors of the family medicine centres whose residents were surveyed. The survey was anonymous, confidential, and returned without identification to the Northeastern Ontario Family Medicine Program. Data are reported in an aggregate fashion, thus preserving anonymity and confidentiality. A letter of support from the Ontario College of Physicians and Surgeons was received and mentioned in the covering letter.

Statistics

Analyses were completed using the SPSS/PC+ (version 4.0.1) statistical package. Continuous data are reported as means (with standard deviations) and analyzed using unpaired two-tailed *t* tests. Categorical data are reported as percentages and analyzed using χ^2 statistics. Repeated testing of a single data set reduces the overall α level, so we used a standard $P < 0.01$ to identify statistically significant results.

RESULTS

We received 45 completed questionnaires for a response rate of 46%; 22 (49%) responses were from

the Northeastern Ontario Family Medicine Program; 23 (51%) from the Ottawa family medicine centres.

Demographics

Twenty-five (55.6%) of the respondents were men. Residents' mean age was 27. Residents had completed their medical school training at nine different universities; five in Ontario, one in Quebec, one in eastern Canada, and two in western Canada. Thirty-eight (84.4%) had graduated from Ontario medical schools; 21 (46.7%) were first-year residents, 22 (48.9%) second-year, and two (4.4%) third-year. Twenty-five (55.6%) had Bachelor of Science degrees, 13 (28.9%) had medical degrees only, five (11.1%) had masters degrees, and two (4.4%) had Bachelor of Arts degrees.

Knowledge

Twenty-two (48.9%) residents said they had taken a course in medical law at medical school; 32 (71.1%) said they had received some medical-legal education during residency. Mean score for correct medical-legal responses was 8.6 (range 5 to 12) out of 16. There was no significant difference between the mean scores of first- and second-year residents ($P = 0.69$).

Residents' knowledge was excellent in some areas: 45 (100%) knew that comments might be construed as sexual abuse, 42 (93.3%) that they could prescribe birth control pills to intellectually mature 14-year-old girls without parental consent, 39 (86.7%) that they should report patients whose medical conditions might make it dangerous to operate motor vehicles, 34 (75.6%) that police had to obtain warrants before doctors were obliged to release confidential patient information, and 44 (97.8%) that people suffering from mental illness could maintain sufficient mental capacity to give valid consent to treatment (Table 1).

However, residents had little knowledge about other areas of medical law. Only 12 (26.7%) gave correct responses on treatment of incompetent individuals, five (11.1%) on the lack of protection afforded physician-patient communications, 15 (33.3%) on treatment of minors when parents refuse to consent to treatment, and two (4.4%) on reportable diseases (they chose the correct response to a question about the duty to report HIV- and AIDS-infected patients). Residents' responses on the duty to report patients with certain common or recognizable illnesses demonstrated a poor understanding of the subject; only four (8.9%) gave correct responses.

RESEARCH

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Table 1. Summary of legal issues and responses

ISSUE	NO. OF ITEMS	% CORRECT*
Physician behaviour (sexual abuse, sexual comments)	3	71
Consent (incompetent patients, treatment refusal, function of age)	5	63
Patient confidentiality (release of information to courts and police, release of driver information)	5	55
Coroners' cases (sudden death)	1	38
Reportable diseases (HIV and AIDS, common illnesses)	2	7

*Mean % correct across all items related to the issue.

Comfort level

Twenty (44%) residents felt "not at all comfortable" or only "somewhat comfortable" dealing with issues pertaining to law and medicine. Ten (22%) said they felt "moderately comfortable"; none felt "completely comfortable." Thirty-one (69%) residents assessed the medical-legal education they had received in medical school and residency as "poor" or "unacceptable"; 11 (24%) thought the quality of medical-legal education they had received was less than "good." When asked to whom they would turn for advice if they were unsure how to deal with an issue, 21 (47%) said they would seek help from the CMPA, 12 (27%) said they would ask a practising physician, and the rest would contact a lawyer or consult a publication.

Interest in medical-legal education

Forty (89%) residents were "interested" or "very interested" in obtaining more information on issues pertaining to law and medicine. Four (9%) were only "somewhat interested" in more information. Twenty-seven (60%) chose an interactive seminar as their preferred method of receiving medical-legal information; 11 (24%) said they would prefer a combination of lecture, written material, and interactive seminar; five (11%) preferred lectures on medical-legal issues; and two (4%) wanted only written material. Responding to the statement, "The knowledge of medical-legal principles is important for providing good-quality care to my patients," 32 (71%) indicated that such knowledge was "moderately" to "very" important. Forty (89%) said that knowledge of medical-legal principles "likely" or "very likely" would help them recognize and avoid legal problems.

DISCUSSION

For many reasons, knowledge of medical-legal principles has become necessary for practising physicians. Governments continue to set down specific rules in legislation to govern relationships between physicians and patients.³⁻⁵ Health care consumers have a new awareness of their rights and of health care providers' obligation to respect those rights. Knowledge of the law governing the practice of medicine might decrease physicians' concern about being sued and therefore decrease the practice of defensive medicine, which might help lower health care costs.⁹⁻¹² Knowledge of law might help physicians avoid lawsuits.⁶

Because of their long-term relationships with patients and the breadth of their practice, primary care physicians frequently find themselves in situations where legal issues are a concern. We chose to survey family medicine residents on their knowledge of medical-legal issues and their attitudes toward medical-legal training. As far as we are aware, no similar studies of residents have been published, and we found scant data specifically addressing physician knowledge of medical-legal issues in the literature.

Results of this survey suggest that those surveyed had excellent knowledge of some specific issues, such as the danger of comments being misconstrued, but on other issues, such as treatment of incompetent individuals, knowledge was poor even though many stated they had received training in this area in medical school or residency. First- and second-year residents had similar numbers of correct responses; this suggests that second-year residents are no more knowledgeable about medical-legal issues despite an additional year of residency training.

It was encouraging to find that most residents recognized they lacked knowledge about medical-legal issues and wanted to learn more about the area. We hope this preliminary study will foster interest among those surveyed to learn more about medical-legal issues and also will encourage educators to provide opportunities for learning.

Limitations

Certain limitations to this study might affect the ability to generalize the results. First, the overall response rate was 46%, with residents from the Northeastern Ontario Family Medicine Program overrepresented and residents from the Ottawa centres underrepresented. However, this response rate is higher than in other surveys of residents,^{22,23} and results do not differ significantly between the two groups.

Another potentially limiting issue is whether responders differ from non-responders in other measurable ways. Because age and sex were similar in both groups, we could find no other obvious trends to examine. However, the "volunteer effect" might have operated in this study such that residents who responded were in some way more motivated and possibly more knowledgeable about medical-legal issues. Hence, the results reported here might overestimate residents' knowledge of the law.

The questionnaire itself has limitations. Often only one question was asked about a specific law or legal principle. Depending on the principle tested, we cannot conclude that a resident unable to answer one question correctly about a particular area of medical law had insufficient overall knowledge of the area, and vice versa. To measure residents' knowledge reliably, many more questions on a specific subject would be required, necessitating use of a much longer and more time-consuming survey instrument (oral and written feedback from residents suggested the questionnaire was already long enough). We suspect the length of the survey was the main reason only 45% of residents completed and returned questionnaires. However, according to comments from the physicians who field-tested the questions, the survey did ask the essential questions raised by particular statutes or common-law principles.

Conclusion

Knowledge of medical-legal issues is imperative for primary care physicians. Although family medicine residents receive some education on the laws governing the practice of medicine, they performed only moderately well on multiple-choice questions designed to evaluate their knowledge about important, applied legal concepts. Residents were very interested in learning more about medical-legal issues. This finding should encourage educators to provide opportunities for residents to increase their knowledge in this area. ♦

Correspondence to: Dr B.H. Rowe, 935 Ramsey Lake Rd, Sudbury, ON P3E 2C6; telephone (705) 688-0200; fax (705) 671-1688

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