

# Effect of colleague and coworker abuse on family physicians in Canada

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## Abstract

**Objective** To assess the effects of physician-colleague and coworker abuse on family physicians in Canada.

**Design** A mixed-methods, bilingual study that included surveys and telephone interviews.

**Setting** Canada.

**Participants** Family physicians in active practice who were members of the College of Family Physicians of Canada in 2009.

**Methods** Surveys were mailed to a random sample of family physicians (N=3802), and 37 family physicians who had been abused in the past year participated in telephone interviews.

**Main findings** A total of 770 surveys (20%) were completed. A small number of respondents reported having been subjected to abuse by physician colleagues (9%) or coworkers (6%) in the previous month. Many of the respondents reported that the same physician colleagues or coworkers were repeat abusers. More than three-quarters (77%) of the physician-colleague abusers were men, whereas more than three-quarters (77%) of the other coworker abusers were women. Interviewed family physicians described feeling humiliated and unappreciated, and developed symptoms of anxiety or depression. As a result of the abuse, some family physicians terminated their employment or refused to work in certain environments. The most striking effect of this abuse was that respondents reported losing confidence in their professional abilities and skills.

**Conclusion** Although only a small number of family physicians experience abuse by physician colleagues and other coworkers, the effects can be considerable. Victims reported a loss of confidence in their clinical abilities and some subsequently were faced with mental health issues.

### EDITOR'S KEY POINTS

- Little is known about the frequency and effects of abuse on Canadian family physicians at the hands of their colleagues. This paper reports on the monthly incidence rate and the effects of abusive encounters when physician colleagues and other coworkers are the perpetrators.
- The response rate to the survey was low (20%) but not dissimilar to some other studies of family physician abuse. More female family physicians were victimized than male family physicians were. Physician-colleague perpetrators were more often men, while other coworker perpetrators were more often women.
- Abuse perpetrated by physician colleagues and other coworkers not only affects the confidence and mental health of the family physician victims, but it also affects patient care, as victims second-guess their decisions or are reluctant to refer patients to colleagues who have been abusive in the past.

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# Effets de la violence envers des médecins de famille canadiens de la part de collègues médecins ou d'autres collègues de travail

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## Résumé

**Objectif** Évaluer les effets de la violence subie par des médecins de famille canadiens de la part de collègues médecins et d'autres collègues de travail.

**Type d'étude** Étude bilingue utilisant diverses méthodes, incluant des enquêtes et des interview téléphoniques.

**Contexte** Canada.

**Participants** Médecins de famille en pratique active qui étaient membres du Collège des médecins de famille du Canada en 2009.

**Méthodes** On a posté des enquêtes à un échantillon aléatoire de médecins de famille (N=3802), et 37 de ceux qui avaient été victimes de violence durant l'année précédente ont participé à une interview téléphonique.

**Principales observations** Au total, 770 enquêtes ont été complétées. Un petit nombre de répondants ont déclaré avoir été victimes de sévices de la part de collègues médecins (9%) ou d'autres collègues de travail (6%) au cours du mois précédent. Plusieurs d'entre eux mentionnaient que c'étaient les mêmes collègues médecins ou collègues de travail qui répétaient les mêmes actes violents. Plus des trois quarts (77%) des collègues médecins responsables des comportements violents étaient des hommes, tandis que pour les autres collègues de travail, plus des trois quarts (77%) étaient des femmes. Les médecins de famille interviewés se sont sentis humiliés et dépréciés, et ils ont développé des symptômes d'anxiété et de dépression. À cause des abus, certains médecins de famille ont mis fin à leur emploi ou ont refusé de travailler dans certains milieux. L'effet le plus frappant de ce type de violence était que les répondants disaient avoir perdu confiance dans leur capacités et leurs habiletés professionnelles.

**Conclusion** Même si ce n'est qu'un petit nombre de médecins de famille qui sont victimes de violence de la part de collègues médecins ou d'autres collègues de travail, les effets peuvent être considérables. Les victimes ont déclaré avoir perdu confiance en leurs habiletés cliniques et certains ont par la suite éprouvé des problèmes de santé mentale.

## POINTS DE REPÈRE DU RÉDACTEUR

- On sait peu de choses de la fréquence et des effets de la violence infligée aux médecins de famille canadiens par des collègues. Cet article rapporte le taux d'incidence mensuel et les effets des comportements violents perpétrés par des collègues médecins ou par d'autres collègues de travail.
- Le taux de réponse à l'enquête était bas (20%), ce qui ne diffère pas tellement des taux observés dans d'autres études portant sur la violence faite aux médecins de famille. Chez les médecins de famille, plus de femmes que d'hommes ont été victimes de violence. Chez les collègues médecins, les auteurs étaient plus souvent des hommes, tandis que chez les autres collègues de travail, c'étaient plutôt des femmes.
- Qu'elle vienne de collègues médecins ou d'autres collègues de travail, la violence affecte la confiance et la santé mentale des médecins de famille qui en sont victimes, mais elle se répercute aussi sur les soins aux malades, car les victimes mettent en doute leurs décisions et hésitent à diriger leurs patients à des collègues qui ont usé de violence dans le passé.

Cet article a fait l'objet d'une révision par des pairs.  
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The Canadian Centre for Occupational Health and Safety defines *abuse* as “threatening behaviour, harassment, verbal abuse, physical attacks and grave physical or psychological harm.”<sup>1</sup> Researchers have consistently demonstrated that physicians are often subjected to verbal and physical abuse by patients and their family members. In 2009 we reported on the lifetime prevalence of abuse among family physicians: 75% reported at least 1 major abusive incident, and 39% reported at least 1 severe abusive incident.<sup>2-8</sup> Little is known, however, about the frequency and effects of abuse on Canadian family physicians at the hands of their physician colleagues and other health professionals (coworkers). Only a few studies have reported on physician-colleague, coworker, or supervisor abuse, and most of these studies focused on the experiences of medical students, medical residents, or nurses.<sup>9-12</sup> Two recent studies among Canadian nurses reported that abuse committed by coworkers (including physicians) and supervisors is highly prevalent.<sup>13,14</sup>

The effects of abuse in the workplace for health care workers, such as nurses and physicians, are substantial.<sup>3,15,16</sup> Physicians who face abuse are more likely to refuse to work in certain settings, such as emergency departments and after-hours clinics, than their non-abused colleagues.<sup>17-20</sup> The effects of abuse is important to consider, given the knowledge that medical students, residents, and nursing students who reported being abused by supervisors and coworkers were at greater risk of developing sleep disturbances, depression, suicidal thoughts, posttraumatic stress disorder, and addictions.<sup>17,21-23</sup> Overall, female health care workers, including female family physicians, are at higher risk of being victims of abuse, particularly abuse of a sexual nature.<sup>3,6,24</sup>

The original study from which this paper is derived was designed to examine the lifetime prevalence and monthly incidence rates of abusive encounters in the workplaces of family physicians in Canada and the effects of that abuse.<sup>3,25</sup> This article reports on the monthly incidence rate and the effects of abusive encounters when physician colleagues and coworkers are the perpetrators.

## METHODS

The overall study used a mixed-methods approach, employing a sequential transformative design (quantitative then qualitative).<sup>26</sup> The 7-page survey was a modification of a survey developed by a New Zealand research team.<sup>20</sup> Part 1 of the survey included demographic questions pertaining to physician sex, practice location, type of practice, and so on. Part 2 included questions about the career prevalence and frequency of 13 different

types of abusive encounters ranging from minor to severe.<sup>3</sup> Part 3 asked about the monthly incidence of abusive encounters by perpetrators.<sup>25</sup> The survey was pretested for face validity in both French and English. After the face-validity assessment, the survey was pilot-tested in both English and French. For the monthly incidence rates, participants were asked to recall the last abusive incident they encountered in the past month and check the boxes that best described their experiences. Detailed information was sought regarding the abuser and conditions surrounding the abusive encounters, including time of the abusive encounter, sex of the abuser, if the abuser had a history of mental health issues or addiction problems, and if the abuser had victimized the respondent on a previous occasion.

The survey was mailed to a randomly selected sample of 3802 family physicians across Canada using the membership database of the College of Family Physicians of Canada.<sup>3</sup> Only family physicians in active practice were included in the sample. Survey participants who had been subjected to any form of workplace abuse in the previous 12 months were invited to contact the study centre to participate in a telephone interview. No exclusion criteria were applied. The study received ethical approval from the research ethics boards of the University of Saskatchewan, the University of Alberta, and Dalhousie University.

## Interviews

The research team developed an interview guide. The purpose of the interview was to add context and meaning to the survey data.<sup>26</sup> The interview guide consisted of a number of questions about the nature of the abuse, information about the perpetrator, when and where the abuse occurred, and, most important, the effects of the abuse on the victim and his or her family.

Once the participant contacted the study staff regarding his or her willingness to participate in an interview, a consent form was forwarded to the participant. Before the telephone interview commenced, the interviewer used a script to obtain oral consent. Permission was sought to audiotape the telephone interview. The interviewer signed a document to indicate that all the proper steps to obtain oral consent had been followed. No financial compensation was offered for completing either the survey or the telephone interviews. The survey data and the interview data were not linked. Participants were asked to provide a description of their practice environments to provide some context for the interview; however, demographic data were not collected during the interviews in order to protect the participant's identity.

## Analysis

The monthly incidence rate of abuse by physician

colleagues and coworkers, the type of abuse, and the characteristics of the abuser and victim were calculated using frequencies. The monthly abuse incident rates were grouped by perpetrator, including *physician colleagues* and *coworkers* (eg, nurses, other health professionals, office staff, hospital administrators). Abuse was defined and categorized as *minor*, *major*, or *severe* as parameters of individual responses (Table 1).

With the exception of 2 interviews, all of the interviews were audiotaped; notes were taken during the 2 interviews in which participants preferred not to be audiotaped. For the qualitative data analysis, all recordings were transcribed verbatim and then analyzed thematically, as were the field notes. The research team read the same 3 transcripts but independently determined patterns, and during a team meeting the related patterns were placed in subtheme categories and then moved into higher levels of abstractions or themes. Decisions were made by consensus. The themes that emerged from the interviewees' stories create a "comprehensive picture of the collective experience" of the sample of family physicians who were interviewed.<sup>27</sup> Two research assistants thematically coded the remaining transcripts. The qualitative data analysis program NVivo was used to organize the themes and categories.<sup>26,28</sup>

## RESULTS

### Monthly incidence rates

We received 770 completed surveys (20% response rate). Surveys from family physicians who had worked in their practices less than usual in the previous month

(2 or more weeks less) were removed from the analysis of the monthly incident rates. Additionally, surveys that had missing data on the monthly incident rate questions were also removed. The monthly incidence rate calculations presented here are based on survey data from 722 participants. Demographic information and the representativeness of our sample have been reported earlier.<sup>3</sup>

Of all the respondents 9% (n=65) reported having been abused in the past month by physician colleagues, and 6% (n=42) reported having been abused in the past month by other coworkers. When comparing physician-colleague and coworker abuse, the characteristics of the abusive incidents were similar, with the exception of the sex of the offenders and victims (Table 2). Physician-colleague perpetrators were more often men, while coworker perpetrators were more often women.

### Effects of colleague and coworker abuse

Thirty-seven physicians (4 French and 33 English) were interviewed for this study: 23 were women and 14 were men. With a focus on the effects of physician-colleague and coworker abuse, 2 main themes emerged from analysis of these interviews: abusive incidents involving specialist colleagues and the resultant loss of confidence in professional abilities by family physicians, and the negative effects of abuse on the mental health—mainly anxiety and depression—of the victim.

### Specialist colleague abuse and loss of confidence

A male family physician working in the emergency department was berated by a specialist when requesting

**Table 1. Types and seriousness of abuse**

SERIOUSNESS	TYPE OF ABUSE
Minor incidents	<b>Disrespectful behaviour:</b> rude or disrespectful actions <b>Bullying:</b> belittling, professional humiliation <b>Verbal anger:</b> loud, angry, insulting, but NOT threatening <b>Verbal threat:</b> loud, angry, insulting, and threatening <b>Humiliation:</b> personal insults, name calling, or gestures that you perceive as decreasing your self-esteem or as humiliating
Major incidents	<b>Physical aggression:</b> throwing objects, slamming doors, kicking, or gesturing, but NOT damaging persons or property <b>Destructive behaviour:</b> breaking or smashing objects and kicking or striking out toward and causing damage to possessions and property, but NOT to any persons <b>Sexual harassment:</b> speaking, looking, or gesturing in a manner that you perceive as an unwanted sexual advance
Severe incidents	<b>Assault:</b> hitting, punching, kicking, pulling, or pinching you WITHOUT injury <b>Assault causing injury:</b> hitting, punching, kicking, pulling, or pinching you causing injury <b>Attempted assault:</b> breaking, smashing, kicking, or striking out toward you, but NOT physically hitting or harming you <b>Sexual assault:</b> physically touching or assaulting you in a manner that you perceive as unwanted and of a sexual nature <b>Stalking:</b> monitoring, following, or stalking you

**Table 2. Patterns of abuse by perpetrators**

PATTERNS OF ABUSE	PHYSICIAN-COLLEAGUE ABUSER, % (N = 65)	COWORKER ABUSER, % (N = 42)
Female victim	62	60
Male perpetrator	77	33
Female perpetrator	33	77
Repeat perpetrator	57	49
Abuse over the telephone	37	12
Abuse face-to-face	51	81
Minor abuse* • disrespectful behaviour, bullying, verbal anger, verbal threats, humiliation	97	100
Major abuse* • physical aggression, destructive behaviour, sexual harassment	5	12
Severe abuse* • assault, assault causing injury, attempted assault, sexual assault, stalking	2	5

\*These are not mutually exclusive.

a consultation. The specialist made the family doctor feel inadequate, “like you are wasting their time.” (IM3\*) This negative relationship eroded the family physician’s confidence in his skills. He said:

The impact is that it makes you feel reluctant to call [specialists] as individuals when you have someone that you think should be seen. So that’s not ideal care for your patients, right? The other [issue] is that you begin to second guess your own clinical skills and [start] wondering whether or not you are stupid. And so it kind of blows your confidence out a bit .... This has happened several times. (IM3)

A female participant described having a dispute with a specialist who berated her in the presence of other staff members and patients. The specialist in question told the family physician in front of patients and nurses that she was “incompetent and unsafe” and that he was “going to make sure that everybody knows that.” (IF21) The effect of this encounter on the young family physician was noteworthy. She said, “I told my colleagues I wasn’t going to do this anymore because I’m a relatively new doctor; I initially quit [doing obstetric work].” This family physician did return to doing obstetric work in her community but added, “I think, almost on a daily

basis, about quitting.” Furthermore, she noted, “I’m afraid of making mistakes all the time and [I’m] second-guessing myself a lot.”

### Negative effects on mental health

The negative effects of workplace mistreatment by physician colleagues and coworkers were found to be substantial for some interviewees. As an example, a female physician described her experiences with harassment by the Chief of Medicine in her hospital. When asked to work a specific weekend, she explained her inability to do so owing to a previous commitment and was met with an angry response and an attempt to have her privileges revoked. The participant noted:

[The Chief of Medicine] wrote a nasty letter trying to make me feel guilty. He then went to the Credentials Committee and sort of said “...well this is unacceptable, a doctor who can’t work!” I mean I work 48 weeks a year on the ward, so it’s not that I wasn’t working. It was just that I couldn’t acquiesce to his request at that time and he just kind of went nuts with it. (IF1)

Of the emotional effect of this event she said:

I mean, I would go into work and I’d have to, you know, wait before going into work. I’d be sobbing, in tears, like just emotionally really upset about going into work ... so that was very traumatic. (IF1)

Eventually the participant decided to leave the hospital.

Another female physician had difficulty with a particularly uncooperative colleague. The physician thought that she “bent over backward” to accommodate this difficult colleague. Not only did she find this colleague abusive, but so did the nursing staff. Finally, after yet again another incident, the physician broke down. She said:

[W]e had a staff meeting and this was the third time he [had] called me unprofessional because I merely said in the meeting “I would like to ask that the various doctors come together as a team and make up the roster together because it’s obviously, not working if only some of us contact the rest ... to make up the roster.” Well, he again tore a strip off me, and this time there were clerical staff, a nursing manager, other nurses, and, of course, colleagues .... I took my papers, gave them to the nursing manager, and I left the meeting. (IF17)

When asked about the effects of this, the participant simply said, “I no longer enjoy my work.” She also found she was emotional; it had affected her mental health and she consulted a psychiatrist. “I do find that

\*Participant codes indicate that the interaction was an interview (I), whether the participant was male or female (M or F), and the interview number.



sometimes I just go into crying spells and, last week, I actually needed to take an Ativan to be able to see my patients.” (IF17)

A male physician had a difficult relationship with a specialist in a small health region. The region had a limited number of specialists. The acrimonious relationship was hard on this family physician and it severely affected his relaxation time and mental health:

I would leave for my vacation practically depressed—not a depression but discouraged. I had to recuperate during 2 weeks of my vacation .... [O]n several occasions, after I recuperated [during the vacation] I would return ... and was capable of working again. (IM9)

One male physician believed that he was sexually harassed by female nurse coworkers in an emergency department. He said, “[T]hree nurses were discussing what type of examination they would like to do on me .... I felt very uncomfortable.” (IM1)

Most of the physicians interviewed described difficulty with the process of reporting abusive incidents and were unaware of or unclear about the resources and policies provided by their institutions and professional governing bodies. One female physician stated that reporting abuse was not a useful exercise. When the interviewer asked her if she had reported the incident, she answered no. The interviewer then asked “Why not?” Her response was “Because there [laughing] ... Because there was nobody to report to and nothing would ever be done about it anyway.” (IF20)

## DISCUSSION

The response rate to the survey was not as high as we had hoped. Although not dissimilar to rates reported in some studies of family physician abuse,<sup>29,30</sup> it was markedly lower than those found in other studies, which reported response rates up to 63%.<sup>31,32</sup> The monthly incident rate of physician-colleague and coworker abuse in the workplaces of Canadian family physicians is low, but the effects can be substantial. More female family physicians were victimized than male family physicians were, and more men were reported to be perpetrators. This parallels the findings of a study among Canadian medical students, which found that female medical students (42%) were more likely to experience sexual harassment than male students (11%).<sup>33</sup> The sex pattern observed for physician-colleague abuse also existed for victims of coworker abuse (ie, victims were more likely to be women); however, coworker perpetrators were more likely to be women. In other research, students and practising physicians report a range of perpetrators

among medical staff; however, abusive experiences appear to correspond to the medical hierarchy, with senior doctors (including surgeons, specialists, and chiefs of staff or medicine) reportedly being among the most frequent offenders.<sup>12,34</sup>

Physician-colleague and coworker abuse can begin during medical school or residency. Intimidation, harassment, and abuse are not reported as isolated events but as ongoing cycles that are deeply rooted in the medical system, and which affect practitioners during both their medical training and their careers.<sup>35-37</sup> As in our study, other research among medical students suggests that those who reported one or more abusive episodes were also more likely to report higher levels of stress, to experience mental health difficulties such as depression and suicidal thoughts, and to abuse alcohol.<sup>21,38</sup>

Physician-colleague and coworker abuse in the workplace of family physicians appears to be carried out primarily in face-to-face situations, is largely verbal in nature, and persists over time. Our study has demonstrated that “minor” abuse, while at first glance might not seem overwhelmingly important and is often considered “part of the job,” can have a negative effect on the mental health of its victims. A longitudinal study conducted with medical students in the United States reported considerable levels of harassment (40%) and belittlement (84%), and 13% of participants reported abuse.<sup>21</sup> The reported abuse was correlated with issues such as lower levels of confidence in clinical skills, overall cynicism, and lower satisfaction with their professional and personal lives. Students going into family medicine reported higher levels of abuse than physicians going into other medical specialties.<sup>10,21,39</sup>

Fortunately, reports of abuse perpetrated by physician colleagues and coworkers appear to be uncommon; however, one could reasonably speculate that these abusive incidents are underreported. The belittlement of residents is commonly accepted as a salutary rite of passage and some supervisors believe they are justified in perpetuating this behaviour, having experienced it as students themselves.<sup>34,36,40-43</sup> Abusive behaviour might be conceptualized as part of a natural socialization process that contributes to the development of good doctors.<sup>39,41,44</sup> According to a recent study by Musselman and colleagues, many medical residents described their experiences as “good intimidation.”<sup>35</sup>

Not only does abuse have a considerable effect on the victim, but it can also have a negative effect on patient care. One study suggested that when residents were abused, they made more mistakes than residents who did not experience abuse.<sup>45</sup> Hence, abuse in the workplace of family physicians perpetrated by physician colleagues or coworkers is not just a quality-of-life issue, as it also has implications for patient care, a concern echoed by one of the physicians interviewed in our study.

## Limitations

Our response rate was low. We can speculate that the length of the survey was likely a deterrent, given the historically low rate at which physicians participate in survey completion even with short surveys. We would also speculate that non-respondents were less likely to have experienced noteworthy abusive events and, therefore, might not have taken the time to engage in the study. Minor abusive events might not have been impetus enough to take the time to participate. It is also possible that participants have underreported abusive incidents because they might not have interpreted the incidents as abusive.

As with all surveys, this study was based on self-report, and the abusive encounters were not corroborated with administrative data. However, we have no reason to doubt the responses of family physicians who took the time to complete this lengthy survey and who provided additional responses through the interviews. Nonetheless, with no corroborative data to validate the reported experiences, some participant stories could have been subjected to enhancement owing to their strong emotional reactions to abusive events.

## Future directions

The research this paper is based on is descriptive in nature and has identified the extent of abuse in the workplaces of Canadian family physicians. We believe that these findings only begin to illuminate the issue of workplace abuse experienced by family physicians. It will be important to examine the medical culture, starting with undergraduate medical education through the postgraduate training period, to further delineate the causes of this abuse and to provide us with some direction for its elimination. Further studies should be directed toward interventions to minimize abusive incidents and their negative ramifications in the workplace in order to create healthier work environments.

## Conclusion

Workplace abuse perpetrated by physician colleagues and other coworkers is not common among family physicians in Canada. Such abuse is gendered, as physician abuse more often involves a male perpetrator, but other coworker abusers are more often women. Most abused family physicians are women, and the perpetrator is often a repeat abuser.

Coworker abuse in family medicine can undermine a victim's confidence in his or her professional abilities and can affect patient management. In the long term, it can lead to career changes. This type of abuse can have serious effects on the health and well-being of victims, potentially causing more family physicians to limit their involvement in certain practice situations, such as in emergency or walk-in clinics. Given the current

challenges in human resources among family physicians, we cannot afford to lose family physicians or general practitioners because of interpersonal abuse. 🌿

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### Contributors

All authors contributed to the concept and design of the study; data gathering, analysis, and interpretation; and preparing the manuscript for submission.

### Competing interests

None declared

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### References

1. Canadian Centre for Occupational Health and Safety. *Violence in the workplace*. Ottawa, ON: Canadian Centre for Occupational Health and Safety; 2007. Available from: [www.ccohs.ca/oshanswers/psychosocial/violence.html](http://www.ccohs.ca/oshanswers/psychosocial/violence.html). Accessed 2009 Mar 9.
2. Miedema B, Easley J, Fortin P, Hamilton R, Tatemichi S. Disrespect, harassment, and abuse. All in a day's work for family physicians. *Can Fam Physician* 2009;55:279-85.
3. Miedema B, Hamilton R, Lambert-Lanning A, Tatemichi SR, Lemire F, Manca D, et al. Prevalence of abusive encounters in the workplace of family physicians: a minor, major, or severe problem? *Can Fam Physician* 2010;56:e101-8. Available from: [www.cfp.ca/content/56/3/e101.full.pdf+html](http://www.cfp.ca/content/56/3/e101.full.pdf+html). Accessed 2011 Oct 12.
4. Elston MA, Gabe J, Denney D, Lee R, O'Beirne M. Violence against doctors: a medical(ised) problem? The case of National Health Service general practitioners. *Social Health Illn* 2002;24(5):575-98.
5. Magin P, Adams J, Ireland M, Joy E, Heaney S, Darab S. The response of general practitioners to the threat of violence in their practices: results from a qualitative study. *Fam Pract* 2006;23(3):273-8. Epub 2006 Feb 3.
6. Magin PJ, Adams J, Ireland M, Heaney S, Darab S. After hours care—a qualitative study of GPs' perceptions of risk of violence and effect on service provision. *Aust Fam Physician* 2005;34(1-2):91-2.
7. Manca D. What doctors won't say: they're living in fear. *Globe and Mail* 2005 Feb 15.
8. Walsh A. Our white coats are not armour. Protecting physicians in the doctor-patient relationship. *Can Fam Physician* 2005;51:1604-5 (Eng), 1609-11 (Fr).
9. Gold J, Ross P, Seeley J. *Harassment and intimidation in Canadian faculties of medicine: what Canadian graduates are telling us*. Paper presented at: 70th Annual Meeting of the Royal College of Physicians and Surgeons of Canada; September 2001; Ottawa, ON.
10. Nagata-Kobayashi S, Maeno T, Yoshizu M, Shimbo T. Universal problems during residency: abuse and harassment. *Med Educ* 2009;43(7):628-36.
11. Jankowiak B, Kowalczyk K, Krajewska-Kulak E, Sierakowska M, Lewko J, Klimaszczyńska K. Exposure the doctors to aggression in the workplace. *Adv Med Sci* 2007;52(Suppl 1):89-92.
12. Wilkinson TJ, Gill DJ, Fitzjohn J, Palmer CL, Mulder RT. The impact on students of adverse experiences during medical school. *Med Teach* 2006;28(2):129-35.
13. Lemelin L, Bonin JP, Duquette A. Workplace violence reported by Canadian nurses. *Can J Nurs Res* 2009;41(3):152-67.
14. Shields M, Wilkins K. Factors related to on-the-job abuse of nurses by patients. *Health Rep* 2009;20(2):7-19.
15. Henderson AD. Nurses and workplace violence: nurses' experiences of verbal and physical abuse at work. *Nurs Leadersh (Tor Ont)* 2003;16(4):82-98.
16. Duncan SM, Hyndman K, Estabrooks CA, Hesketh K, Humphrey CK, Wong JS, et al. Nurses' experience of violence in Alberta and British Columbia hospitals. *Can J Nurs Res* 2001;32(4):57-78.
17. Fernandes CM, Bouthillier F, Raboud JM, Bullock L, Moore CF, Christenson JM, et al. Violence in the emergency department: a survey of health care workers. *CMAJ* 1999;161(10):1245-8.
18. Magin PJ, Adams J, Sibbritt DW, Joy E, Ireland MC. Experiences of occupational violence in Australian urban general practice: a cross-sectional study of GPs. *Med J Aust* 2005;183(7):352-6.

19. King LA, McInerney PA. Hospital workplace experiences of registered nurses that have contributed to their resignation in the Durban metropolitan area. *Curationis* 2006;29(4):70-81.
20. Gale C, Arroll B, Coverdale J. Aggressive acts by patients against general practitioners in New Zealand: one-year prevalence. *N Z Med J* 2006;119(1237):U2050.
21. Frank E, Carrera JS, Stratton T, Bickel J, Nora LM. Experiences of belittlement and harassment and their correlates among medical students in the United States: longitudinal survey. *BMJ* 2006;333(7570):682. Epub 2006 Sep 6.
22. Mikkelsen EG, Einarsen S. Relationships between exposure to bullying at work and psychological and psychosomatic health complaints: the role of state negative affectivity and generalized self-efficacy. *Scand J Psychol* 2002;43(5):397-405.
23. Niedhammer I, David S, Degioanni S, Drummond A, Philip P, Acquarone D, et al. Workplace bullying and sleep disturbances: findings from a large scale cross-sectional survey in the French working population. *Sleep* 2009;32(9):1211-9.
24. Kowalenko T, Walters BL, Khare RK, Compton S; Michigan College of Emergency Physicians Workplace Violence Task Force. Workplace violence: a survey of emergency physicians in the state of Michigan. *Ann Emerg Med* 2005;46(2):142-7.
25. Miedema B, Hamilton R, Tatemichi SR, Lambert-Lanning A, Lemire F, Manca D, et al. Monthly incidence rates of abusive encounters for Canadian family physicians by patients and their families. *Int J Fam Med* 2010 Oct 19. DOI:10.1155/2010/387202.
26. Creswell JW. *Research design: qualitative, quantitative, and mixed methods approaches*. 2nd ed. Thousand Oaks, CA: Sage Publications Inc; 2003.
27. Aronson J. A pragmatic view of thematic analysis. [serial on the Internet]. *Qual Rep* 1994;2(1). Available from: [www.nova.edu/ssss/QR/BackIssues/QR2-1/aronson.html](http://www.nova.edu/ssss/QR/BackIssues/QR2-1/aronson.html). Accessed 2011 Oct 12.
28. Creswell JW. *Qualitative inquiry and research design: choosing among five traditions*. Thousand Oaks, CA: Sage Publications Inc; 1997.
29. Lanza ML, Zeiss RA, Rierdan J. Non-physical violence: a risk factor for physical violence in health care settings. *AAOHN J* 2006;54(9):397-402.
30. Winstanley S, Whittington R. Aggression towards health care staff in a UK general hospital: variation among professions and departments. *J Clin Nurs* 2004;13(1):3-10.
31. Magin P, Adams J, Joy E, Ireland M, Heaney S, Darab S. General practitioners' assessment of risk of violence in their practice: results from a qualitative study. *J Eval Clin Pract* 2008;14(3):385-90. Epub 2008 Mar 24.
32. Hobbs FD. Violence in general practice: a survey of general practitioners' views. *BMJ* 1991;302(6772):329-32.
33. Moscarello R, Margittai KJ, Rossi M. Differences in abuse reported by female and male Canadian medical students. *CMAJ* 1994;150(3):357-63.
34. Daugherty SR, Baldwin DC Jr, Rowley BD. Learning, satisfaction, and mistreatment during medical internship: a national survey of working conditions. *JAMA* 1998;279(15):1194-9.
35. Musselman LJ, MacRae HM, Reznick RK, Lingard LA. 'You learn better under the gun': intimidation and harassment in surgical education. *Med Educ* 2005;39(9):926-34.
36. Jacobs CD, Bergen MR, Korn D. Impact of a program to diminish gender insensitivity and sexual harassment at a medical school. *Acad Med* 2000;75(5):464-9.
37. Baldwin DC Jr, Daugherty SR, Rowley BD. Residents' and medical students' reports of sexual harassment and discrimination. *Acad Med* 1996;71(10 Suppl):S25-7.
38. Richman JA, Flaherty JA, Rospenda KM, Christensen ML. Mental health consequences and correlates of reported medical student abuse. *JAMA* 1992;267(5):692-4.
39. Kassebaum DG, Cutler ER. On the culture of student abuse in medical school. *Acad Med* 1998;73(11):1149-58.
40. Baldwin DC Jr, Daugherty SR. Do residents also feel "abused"? Perceived mistreatment during internship. *Acad Med* 1997;72(10 Suppl 1):S51-3.
41. Myers MF. Abuse of residents: it's time to take action. *CMAJ* 1996;154(11):1705-8.
42. Quine L. Workplace bullying in junior doctors: questionnaire survey. *BMJ* 2002;324(7342):878-9.
43. White GE. Sexual harassment during medical training: the perceptions of medical students at a university medical school in Australia. *Med Educ* 2000;34(12):980-6.
44. Becker K. Bullying in medicine. Both sides need help when bullying happens. *BMJ* 2002;324(7340):786.
45. Baldwin DC Jr, Daugherty SR. Interprofessional conflict and medical errors: results of a national multi-specialty survey of hospital residents in the US. *J Interprof Care* 2008;22(6):573-86.

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