The Admissibility of Expert Evidence in Canada

Graham D. Glancy, MB, ChB, and John M. W. Bradford, MB, ChB, DPM

Recent decisions in Canadian Law suggest that it is evolving in a manner heavily influenced by American law. A recent Supreme Court decision uses the framework of prevailing law and superimposes the more stringent criteria enunciated in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* We trace this development, reviewing the intervening cases that have contributed, and conclude with a summary of the law as it stands today.

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In 1994, the U.S. Supreme Court clarified the criteria for the admissibility of expert evidence in the well-known decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc*.[1] This decision was much more stringent than the previous standard set in *Frye v. U.S.*,[2] which merely demanded that the scientific principle must be sufficiently established to have gained general acceptance.

Grudzinskas and Appelbaum[3] note that the decision in *General Electric Co. v. Joiner*, 522 U.S. 136 (1997), asserts that *Daubert* did not alter the underlying principles of the general acceptance test of *Frye*. In *Joiner* it was made clear that trial courts have broad discretion to reject expert opinions if they are not supported by the data. This decision emphasized that questions of admissibility are reviewable under the abuse-of-discretion standard and are not subject to a more stringent standard of review than other decisions regarding evidentiary matters. In other words, the question is whether the trial judge used reasonable discretion to guide his decision.

A good starting point for a review of the state of affairs in Canada is the case of *R. v. Mohan.*[4] The facts of this case can be summarized as follows: Dr. Mohan was a practicing pediatrician who was charged with four counts of sexual assault on four of his female patients, 13 to 16 years of age at the time. Defense counsel indicated that he intended to call a psychiatrist who would testify that the perpetrator of the alleged offenses would be part of a limited and unusual group of individuals and that the accused did not fall within that narrow class, because he did not possess the characteristics of persons belonging to that group. The Crown Attorney objected, and the trial judge held a *voir dire* on the evidence. The psychiatrist called by the defense, Dr. Hill, identified pedophiles and sexual psychopaths as examples of members of unusual and limited classes of persons. He opined that if one perpetrator was involved in all four complaints described in hypothetical questions, this perpetrator would belong to the group of sexual psychopaths. He testified that Mohan did not have the characteristics of any of the relevant groups, including sexual psychopaths. The trial judge ruled that the evidence was not admissible, stating that it would be "merely character evidence of a type that is inadmissible as going beyond the evidence of general reputation, and does not fall within the proper sphere of expert evidence" (Ref. 4, p 11).

The Ontario Court of Appeal[5] ruled that the trial judge had made conclusions based on the sufficiency of the evidence of Hill, not its admissibility. The court believed that the trial judge had misapprehended the opinion of Hill. It stated that it was admissible to show that the accused was not a member of either of the unusual groups of aberrant personalities that could have committed the offenses alleged. The court noted that that opinion evidence showing that the accused did or did not possess the distinguishing characteristics of an abnormal group is admissible in a criminal case in which it appears that the specific crime would have been committed by a person with an abnormal propensity or disposition that

Dr. Glancy is Assistant Professor of Psychiatry, University of Toronto, Ontario, Canada. Dr. Bradford is Professor and Head, Division of Forensic Psychiatry, University of Ottawa, Ontario, Canada. Address correspondence to: Graham D. Glancy, MB, ChB, 302 The East Mall, Suite 400, Etobicoke, Ontario M9B 6C7, Canada. E-mail: graham.glancy@utoronto.ca

Table 1 Factors Governing the Admissibility of Expert Evidence in Four Cases

Frye	Mohan	Daubert	J. (L.-J.)
General acceptability	Relevance		Relevance
	Necessity		Necessity
	Absence of exculpatory rule		Absence of exclusionary rule
	Properly qualified expert		Properly qualified expert
		Whether the theory or technique can be and has been tested	Whether the theory or technique can be and has been tested
		Whether the theory or technique has been subjected to peer review and publication	Whether the theory or technique has been subjected to peer review and publication
		The known or potential rate of error or the existence of standards	The known or potential rate of error or the existence of standards
		Whether the theory or technique used has been generally accepted	Whether the theory or technique used has been generally accepted

is characteristic of a special or extraordinary class of persons.

The Supreme Court, in a ruling written by Justice John Sopinka, noted that the admissibility of expert evidence is governed by four factors: relevance, necessity in assisting the trier of fact, absence of any exclusionary rule, and the proper qualification of the expert (Table 1). The Court noted that the threshold requirement is a question of law to be decided by the trial judge. *Mohan* changed the previous standard that the expert's opinion must be merely helpful, to a higher standard that it must be necessary. The decision emphasized the fact that expert evidence should be excluded if the potential for prejudice substantially outweighs the probative value, an important concern later reaffirmed in *R. v. B.M.*[6] The Court went on to note that the influence of the testimony over the trier of fact may be out of proportion to its reliability. It stated that expert evidence should not be admitted where there is a danger that it will be misused or will distort the fact-finding process. It noted that the evidence must be necessary, in that it should be outside the experience and knowledge of a judge and jury.

The Court went on to say that evidence that advances a novel scientific theory or technique is subject to special scrutiny to determine whether it meets the best basic threshold of reliability. It also stated that the Crown cannot elicit evidence of the defendant's disposition and that if the perpetrator of the crime or the accused has distinctive behavioral characteristics and a comparison of one with the other will be of material assistance in determining innocence or guilt, then such a comparison goes to admissibility. The expert must express an opinion that is in common use in the scientific community as a reliable indicator that the defendant can be characterized as belonging in a distinctive group. Therefore, the scientific community must have developed a standard profile for the offender who commits this type of offense. If these requirements are satisfied, the evidence meets the criteria of relevance and necessity.

However, the Court concluded that nothing in the record of this particular case supported a finding that the profile of a pedophile or a sexual psychopath had been standardized to the extent that it could be said that it matched the supposed profile of the offender depicted in the allegations. The Court therefore believed that the doctor's evidence was not sufficiently reliable to be considered helpful.

The Court went on to note in the analysis that when scientific evidence is dressed up in scientific language that the jury will not easily understand and is submitted through a witness who has impressive antecedents, it is apt to be accepted by a jury as being virtually infallible. The Court reviewed a previous case[6] wherein a polygraph was excluded because it was described as evidence cloaked under the mystique of science.

The Court noted that the criterion of necessity is not too strict a standard. It stated that the subject matter must be such that ordinary people would be unlikely to form a correct judgment about it unless assisted by a person with special knowledge. It gave as an example the case of *R. v. Lavallee*,[7] regarding a woman with battered-woman syndrome.[8]

The Court emphasized that experts must not be permitted to usurp the functions of the trier of fact and noted that this had been the basis of excluding expert evidence on the ultimate issue in the past,

although this rule is no longer in general application. In Canada, contrary to the U.S. Federal Rules of Evidence, experts are permitted to opine on the ultimate issue at the discretion of the trial judge.

In discussing the absence of an exclusionary rule, the Court emphasized that the closer the expert evidence gets to the defendant's disposition, the higher a threshold it has to meet. It noted that in this kind of case the evidence must tend to show that the accused shares distinctive and unusual behavioral traits with a perpetrator. These traits must be sufficiently distinctive that they serve as a badge or mark to identify the perpetrator. The greater the number of people in general who have these tendencies, the less relevant the evidence is in regard to the identity of the perpetrator. When evidence states that this type of offense would only be committed by an abnormal group, then psychiatric evidence that the accused did or did not possess these characteristics is relevant, either to include or exclude him or her from the special class. However, the Court warned that normal human behavior is a matter that the judge or jury can assess without expert evidence. For example, it was noted in *R. v. Garfinkle*,[9] that a disposition for sadism is clearly abnormal, in contradistinction to dispositions for violence or dishonesty, which are clearly too common to be classified as abnormal.

R. v. Mohan[4] is therefore important in clearly stating and describing the four factors that courts must take into account when assessing the admissibility of expert evidence. These factors are to be found in Table 1. *Mohan* went some way in defining the legal analysis that the judge must use when deciding this question of law.

Questions Arising Regarding Expert Testimony on the Ultimate Issue

In a 1996 case, the Canadian Supreme Court ruled on a concern that is of great significance to forensic psychiatrists.[10] It has long been a matter of debate as to whether experts can give an opinion on the very issue before the court, the so-called ultimate issue. For example, in an insanity case, can the psychiatric expert say that this person was indeed insane at the material time and therefore qualifies for a defense of not guilty by reason of insanity (in Canada, not criminally responsible due to mental disorder)? It has been argued that it is the expert's job simply to say, for example, that the accused has a given mental disorder and that his or her thinking at this time included perhaps delusional beliefs. In this case, the court seems to condone the admissibility of expert testimony on the ultimate issue. It is up to the trial judge to take this opinion into consideration, but to make it clear that the determination of the ultimate issue is for the judge or jury. In a book chapter, Justice Sopinka opined that it is no longer generally ruled that experts cannot give an opinion on the ultimate issue and that testimony may be allowed, but it is finally in the hands of the trier of fact to make a decision.[11]

In two cases, the court attempted to clarify the meaning of the ruling that an expert must be able to provide information that is likely to be outside the experience and knowledge of the trier of fact. As pointed out in *R. v. Mohan*, if experts are admitted too easily, every trial could result in a contest of experts, with the trier of fact acting as a referee. In the first case,[12] the court of appeal noted that it is very difficult to be exact about what is within or without the normal experience of triers of fact. In the end, the court decided that each case must be decided on its own merits in the best judgment of the court. In another case, *R. v. McIntosh*,[13] a psychologist's opinion on the question of eye witness identification was excluded. In the ruling, the court of appeal noted that some judges are too eager to abdicate their fact-finding responsibilities to experts without fully analyzing the area of expertise and whether the expert testimony is necessary to help the trier of fact.

In an earlier case,[7] however, the Supreme Court stated that in regard to battered-woman syndrome, juries may not have sufficient knowledge or experience in human behavior in particular circumstances to be able to understand some of the apparently paradoxical behavior before the court. Justice Bertha Wilson noted that the psychological effect of battering on spouses was beyond the knowledge of the average juror and that it was thus both helpful and necessary for an expert to give evidence to explain certain actions.[7]

On the subject of whether expert evidence can be predicated on hearsay, the previous law in Canada appeared to be that the facts relied on by an expert must be proven in court for the totality of the opinion to be admissible.[14] Justice John Dickson in *R. v. Abbey*,[14] stated that a psychiatric opinion and its basis are not admissible as the proof of the truth of its content, and this is still held today. However, in the *Lavallee*[7] ruling, the Court noted that not every fact

relied on by the expert must be proven, as this is too high a burden. In interpreting this case Justice Sopinka[11] stated that it is generally now held that the number of facts elicited by hearsay and not proven in court goes to the weight that should be given to the expert evidence, but not necessarily to the admissibility of the evidence.

In an important case,[6] an interesting comment was made regarding expert evidence. In *R. v. B.M.*, the evidence in question was that of results of polygraph examinations. The Supreme Court rejected the expert evidence, stating as one of the reasons the ". . .human fallibility in assessing the proper weight to be given to evidence cloaked under the mystique of science" (Ref 6, p 34).

R. v. J. (J.-L.)

In this case, the Court analyzed the admissibility of expert evidence as it applies to what it termed a novel science, penile plethysmography. Justice William Binnie wrote an important judgment on behalf of the Supreme Court that demonstrated how the law had evolved since the *Mohan* case.

The facts of the case, *R. v. J.* (*J.-L.*),[15] were that the accused had custody of two male children between three and five years of age, although they lived in a complicated family situation, such that he visited them on a daily basis, took about half his meals there, and was often present during weekends. On the basis of behavior observed by a woman charged with their care after an allegation of sexual assault, the accused was charged with touching for a sexual purpose, unlawful anal intercourse, and sexual assault. The defense attempted to tender evidence of a psychiatrist who stated that the type of offenses alleged would have been committed by a serious sexual deviant. He stated that he had tested the respondent for certain distinctive characteristics and that these characteristics could be excluded.

The tests included a psychiatric history, the MMPI-2, electromyography (EMG), and penile plethysmography. A *voir dire* was called, and it was established that the MMPI-2 is not specifically designed for detection of sexual disorders. Justice Binnie noted that in phallometric testing the respondent was never confronted with "specific images designed to replicate the offenses alleged against him" (Ref. 15, p 5).

In reviewing the testimony of the expert, Dr. Edouard Beltrami, it should be noted that the testing was in French, and so there may be a certain clumsiness in the translation. The doctor concluded that the subject exhibited "judgment problems in a tumultuous emotional life" and that he did not "seem to have the irrational ideas associated with sexual offenses" (Ref. 15, p 5). He also noted some emotional instability with women but no other particular pathologic behavior. He noted that the respondent had a clearly normal sexual preference.

In his analysis, Judge Binnie noted that the "dramatic growth in frequency with which they [experts] have been called upon has led to ongoing debate about suitable controls in their participation; precautions to exclude junk science and the need to preserve and protect the role of the trier of fact. . ." (Ref. 15, p 7). He reviewed the decisions in *R. v. Mohan*[4] and *R. v. Béland*,[16] which warned about the dangers of the apparent infallibility of expert evidence. He concluded that a trial judge should take the role of gatekeeper very seriously, not allowing too easy an entry to expert evidence.

In reviewing the *Mohan* criteria, Justice Binnie allowed that the defense expert's evidence satisfied the threshold requirement, in that the subject matter of the inquiry is beyond the ken of an ordinary person. He noted that *Mohan* kept the door open to novel science but rejected the general acceptance theory of *Frye*. However, he went further and appeared to accept the reliable-foundation test laid down in the aforementioned *Daubert v. Merrell Dow Pharmaceuticals*, *Inc*. He noted that while *Daubert* must be read in the light of the specific text of the U.S. Federal Rules of Evidence "which differs from our own [Canadian] procedures" (Ref. 15, p 9), it is reasonable to rely on the criteria used in *Daubert*, and he listed several factors that could be helpful in evaluating the soundness of novel science.

The judge noted that although penile plethysmography may not yet be generally accepted as a forensic tool, "it may become so" (Ref. 15, p 9). He went on to say that it was generally used by the scientific community to assess the progress of therapy of known and admitted sexual deviants and that it was not applicable to the respondent. Although he cited an article from the *Bulletin of the American Academy of Psychiatry and the Law*,[17] it is somewhat unclear from whence the judge drew this information. He stated that Edouard Beltrami was a pioneer in Canada in trying to use this therapeutic tool as a forensic tool. He therefore concluded that Dr. Beltrami's use

of penile plethysmography for diagnostic purposes was novel science. He stated, and this is probably true, that the MMPI-2 is too nonspecific for the purpose of diagnosing sexual deviance. He went on to note that Dr. Beltrami's evidence was potentially very powerful and therefore, because his opinion broaches on the ultimate issue, there is another reason for special scrutiny.

Justice Binnie went on to review the evidence of whether the disposition to commit a specific offense can be included and reviewed the cases of *R. v. McMillan*,[18] and *R. v. Mohan*,[4] in which the law evolved into the consideration of a distinctive group. In *R. v. Garfinkle*,[8] pedophiles were considered to be such a distinctive group. In many cases, however, it may not be possible to tell whether the offenses were specifically committed by pedophiles, as they could have been committed by other people perhaps affected by impulsiveness, stress, alcohol, or drugs. The judge mentioned another case, *R. v. Malboeuf*,[19] in which a murder involving necrophiliac lust was considered sufficiently distinctive that the Crown was allowed to elicit expert evidence that the accused demonstrated distinctive characteristics that would place him in the category of persons who commit this type of crime. The law has evolved that the requirement is of a standard profile that can be identified and described with workable precision.

In this particular case, Justice Binnie thought that Dr. Beltrami's definition of a distinctive group with a propensity to commit this type of crime was vague, as Dr. Beltrami could not give a standard profile. It is noted that Dr. Beltrami emphasized "[translation] . . .[T]here is no point in making me say it a thousand times, there is no standard profile, but nonetheless I compared certain characteristics that are found frequently, not absolutely. . ." (Ref. 15, p 15). Dr. Beltrami went on to say that some sexual abuse may be committed by people who have organic disorders, psychosis, mentally deficient people (sic), alcoholics, and drug addicts. He also stated that somebody committing anal intercourse on a three-year-old boy would most probably have homosexual pedophilia and possibly even sadism, but he appeared to say this in a vague and roundabout manner.

In assessing the specificity of tests, it was agreed that the MMPI-2 and related tests were not specifically designed to complement penile plethysmography in diagnosing paraphilias. The judge noted that no test protocols were introduced and there was no confirmation that whatever standard procedures that exist had been followed. In fact, he noted that Dr. Beltrami had ". . . more or less disavowed any supervisory function and could not answer specific questions about how the tests on the respondent were conducted" (Ref. 15, p 14).

Dr. Beltrami gave evidence about the error rate in plethysmographic results. He stated that the tests had a sensitivity of 47.5 percent and a reliability of 97.4 percent. His evidence suggested that 52.5 percent of sexual deviants would test negative. The court concluded that such a result would render the test so prone to error as to make it useless for the purposes of identification or exclusion. It appears that Dr. Beltrami was talking about some general studies, although he alluded to the fact that the sensitivity in unusual sexual preferences could be up to 87 percent; but his evidence was somewhat vague. Dr. Beltrami said that "tailor made scenarios" (Ref. 15, p 14) are sometimes built to fit the alleged acts exactly, but no such scenario was used in this case. The court concluded that the tests therefore may not be relevant for this exact case, although Dr. Beltrami apparently did not explain that the tests must be standardized and that it would be improper procedure to custom build a scenario for a particular case. The Supreme Court noted that the trial judge did not regard the testimony as reliable for the purpose of excluding the accused as a perpetrator of the crime, and the Court concurred with this finding. The Court also pointed out that Dr. Beltrami refused to share with the trial judge the data on which he relied, suggesting that the details would be too complicated and there would be "battles over little details." This failure to turn over the data led the Court to conclude that the opinion was not based on scientific support.

The Court therefore concluded that the trial judge addressed the proper legal requirements established in *Mohan*. It reiterated that the trial judge is able to discharge the gatekeeper function and that to do so is only proper. It ruled that the trial judge's decision to exclude Dr. Beltrami's testimony was supported by the evidence, and the conviction was restored.

Although the principles in *Daubert* were enunciated (Table 1) in the case, they were not specifically referred to in the conclusions. It does appear, however, that Canadian law now recognizes those principles for acceptance of novel science.

Conclusions

It is perhaps appropriate that much of Canadian law on the admissibility of expert evidence centers around sex offender research, since Canadian research has been so central in this area. In *R. v. J.* (*J.-L.*),[15], it is of note that no interveners and no groups, such as the Canadian Academy of Psychiatry and the Law, or others were informed of the case so that an intervention could occur. The evidence about phallometric testing was therefore left in the hands of one psychiatrist in one particular case, and frankly this evidence was not well presented to the court. Although a full review of phallometric testing of sexual offenders is beyond the scope of this article, the principal problem is a lack of standardization. It is clear that there is a long history of the use of this technique in clinical evaluations and many research studies. The approach has been one of looking at phallometric testing in terms of psychometric validity and reliability. There is even a question as to whether phallometric testing should be regarded as a psychological test. Furthermore, there is considerable variation in how erectile responses are measured and calculated; the types of stimulus sets that are used in phallometric examinations; and how the responses are reported, whether in deviance indices, percentages of all erections, *z*-scores, or raw scores.

Although individual laboratories report high levels of sensitivity and specificity, it again depends on the method of determining these measures of validity, the purpose of the research, and the clinical subjects who were evaluated. Against this background, it is difficult to establish to which general studies Dr. Beltrami was referring. Further, in looking at the validity of phallometric testing, it appears that the validity data for distinguishing extrafamilial child molesters from nonoffenders is the most satisfactory, but for other clinical subjects such as rapists, incest perpetrators, and exhibitionists in general, the data are not as reliable, which could mean that expert evidence on pedophiles based on phallometric testing may be acceptable but not on other clinical subjects.

Phallometric testing is routinely used, at least in Canada, as part of expert testimony in sentencing hearings (including dangerous offender hearings, Canada's equivalent of sexually violent predator hearings) but not at trial level, such as was the case in *R v. J.* (*J.-L.*).[15] The psychiatric evidence in *R v. J.* (*J.-L.*),[15] since it was addressing the most reliable use of phallometric testing (i.e., distinguishing nonoffenders from pedophiles), arguably met the *Daubert* criteria in this context. In our opinion, the lack of standardization across different testing sites means that if this expert testimony were accepted in any individual case, the danger would be that invalid testing in another case could mislead the court. The logical conclusion would be that until standardization occurs, any introduction at a trial level would have to be extremely cautious. Each time the phallometric testing laboratory should be required to report on its rates of sensitivity and specificity, and these validity data would have to meet the *Daubert* criteria. In contrast, visual reaction time, which is a standardized procedure known as the Abel Assessment for Sexual Interest, has been accepted by the courts. As a result of this, the Supreme Court ended up throwing the baby out with the bath water. It is our opinion that the Court may have been much better served calling for evidence from interveners who may have been able to present more coherent evidence about the procedure. For instance, within the small community of people who conduct research and assess sexual offenders, penile plethysmography is a very useful clinical tool and is routinely used and generally accepted for diagnostic purposes. A plethora of evidence is available on its sensitivity and specificity.

It should also be noted that phallometrics is a generally accepted science, has a very clear role to play in the prediction of dangerousness of sex offenders; and has, to our knowledge, generally been accepted by the courts for these purposes. We anticipate further judicial interest in this area.

In conclusion, Canadian law has evolved in the area of expert evidence toward a much more stringent and analytic approach. It behooves us as practitioners to be aware of these developments so as to direct our practice toward satisfying current criteria.

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