

Serving as a medical expert witness: Avoiding common errors and potential pitfalls

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ABSTRACT

The medical expert witness plays a crucial role in providing objective, informed opinions that can influence the outcome of court trials and disciplinary proceedings. It is critical for physicians and surgeons with specialised knowledge in the Singapore setting to provide relevant opinions to ensure fair and consistent outcomes when medical disputes occur in Singapore. This commentary draws from the author's experience to highlight common errors and potential pitfalls, which doctors may face in their capacity as an expert witness.

Keywords: avoid pitfalls, common errors, court attendance, expert witness, writing expert reports

INTRODUCTION

With rising education levels and affluence in Singapore, there has been an increase in the public's expectation for high standards of medical care, and greater transparency and accountability by both the medical profession as well as healthcare institutions. This has contributed towards a more litigious culture and consequently, the need for medical experts to provide independent opinions (referred to as the expert's report) in legal proceedings. Medical doctors in Singapore do not receive formal training in their undergraduate and postgraduate curriculum to serve as medical expert witnesses. Additionally, while clinical experience helps, it is often insufficient to equip oneself to serve as a medical expert witness in court and disciplinary tribunal (DT) proceedings.¹ Attending courses such as the medical expert witness training conducted by the Academy of Medicine, Singapore (in collaboration with the Singapore Medical Association, Singapore Academy of Law, and Law Society of Singapore), provide a guided learning experience through simulations in writing expert witness reports, oral testimony, and cross examination.

An effective medical expert witness is expected to understand the proper procedures in court or DT hearings, and also be able to communicate well. The contents of this commentary has been distilled

from the author's experience as both an expert witness, as well as chairman/member of DT proceedings. This commentary aims to serve as a primer to acting as a medical expert witness, and aims to help readers avoid common errors and pitfalls when acting as a medical expert witness.

The basic requirements

The necessary qualifications

In section 47 of the Evidence Act 1893,² and order 12 of the Rules of Court 2021,³ an expert is defined as a "person with scientific, technical or other specialised knowledge based on training, study or experience." Their role is to provide an independent and unbiased opinion about a particular factual issue relating to the case based on their specialised knowledge. In legal terms, the bar is not difficult to cross. Expert evidence is typically provided in a standardised, formal written medical expert report called an Affidavit of Evidence in Chief (AEC), as well as subsequent oral testimony in court or DT hearings. These are vital components in arriving at an equitable and fair decision in medical disputes.^{4,5}

A medical expert witness must therefore have the appropriate medical qualifications, relevant specialty training, and sufficient clinical experience. It may be helpful for the expert to include his or her relevant professional appointments and committee roles in professional medical organisations and with the Ministry of Health in their curriculum vitae submitted to counsel, the court, or tribunal.

In medico-legal cases where clinical care is often the subject of dispute, a well-published researcher who does not have significant clinical responsibilities arguably has less (but not no) credibility. Therefore, an expert's years of clinical practice in his or her specialty, with a strong track record of patient care will be invaluable when providing opinions which involve hands-on clinical care. This was illustrated in the Coroner's Inquiry into the death of Frankin Heng Ang Tee, where the State Coroner preferred the evidence of the expert who was an anaesthetist, given

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that the likely cause of death was asphyxia from airway obstruction rather than multiple iatrogenic punctures of the intestine during liposuction.²

In practice, expert witnesses will usually demonstrate their expertise by providing their expert opinion on specific medical issues in dispute. Ultimately, it will be the presiding judge and DT members who will determine if the evidence provided by the expert witness was useful in the proceedings. Alternatively, the expert witness may be criticised by the presiding judge if he or she was poorly prepared, illogical, or unconvincing in his or her testimony.⁶

Strong communication skills

A medical expert witness is often asked to explain complex medical concepts to judges, tribunal members, and lawyers who have little to no medical knowledge or training. Possessing strong and effective communication skills will help an expert to present their opinions clearly and persuasively. A cautionary note is appropriate when preparing an expert opinion, experts will have the benefit of hindsight. A complex case with hindsight bias may appear straightforward and easy to explain. Expert witnesses should therefore beware to avoid over-simplifying their opinions and instead, ensure that it is rendered within the proper context.

Understanding the legal process

Familiarity with the legal process, including the role of expert evidence and cross-examination, is likely to be helpful. For a more in-depth summary of the legal process, one can consider taking courses or attending seminars on what being an expert witness entails.

Staying current in one's field

Continuing education is crucial for an expert to maintain his credibility. Additionally, relying on the latest knowledge and practices helps one to ensure that their medical expert opinion remains accurate and grounded.

The work of the expert

Understanding medical negligence

As stated earlier, medical expert witnesses are only required in cases where the factual disputes involve specialised medical knowledge to resolve. The majority of such cases are those involving medical negligence. Medical negligence occurs when a healthcare professional fails to provide the standard of care expected in their field, resulting in harm to the patient. In many cases, this will involve being asked to evaluate whether the care provided met the accepted standards, and to identify any deviations that may

have led to the patient's poor outcome. These can be divided into 3 broad, but distinct categories:

- (1) **Misdiagnosis:** This involves incorrect or delayed diagnosis of a medical condition. An expert witness may be asked to assess whether the healthcare provider failed to recognise symptoms, order appropriate tests, or interpret test results accurately.
- (2) **Mismanagement:** This refers to the improper handling of a patient's treatment or care. Relevant facts include whether the healthcare provider followed the correct protocols, administered the right medications, and provided appropriate follow-up care.
- (3) **Departure from guidelines:** Related to the above, experts are typically asked to examine whether the healthcare provider had deviated from accepted practice standards or clinical guidelines in their management of the patient's condition. Readers should note however that clinical guidelines are meant to assist clinicians and should not be considered as setting determinative medicolegal standards. A useful expert opinion is one which differentiates between "errors of judgment" and "errors of clinical reasoning".

Dealing with diagnostic errors

Diagnostic errors often stem from faulty data collection or lack of synthesis of data. The expert witness is often asked to assess whether the healthcare provider collected sufficient data, interpreted it correctly, and made appropriate clinical decisions based on the information available.

The following considerations may help frame the common areas commonly examined in negligence cases.

Errors of judgment

Errors of judgment occur when a healthcare provider makes a decision that, in hindsight, may not have been the best choice, but was reasonable given the circumstances and information available at the time. These errors are often subjective and can be influenced by factors such as experience, intuition, and situational context. For example, a doctor might choose a particular treatment plan based on their professional judgment, even if another equally qualified doctor might have chosen a different approach. These errors are usually one-off events and are not repeated errors. Nevertheless, even a single error of judgment can have catastrophic consequences. In the case cited in Coroner's Inquiry 10/2010, the aesthetic physician was found guilty of professional misconduct by the DT. In the subsequent appeal process, the Court of

Three Judges stated that it “...was among the most egregious cases of medical cases we have come across” and struck the doctor from the medical register.⁷

Errors of clinical reasoning

Errors of clinical reasoning, on the other hand, involve flaws in the cognitive processes used to arrive at a diagnosis or treatment plan.⁸ These errors are more objective and can be traced to specific mistakes in data collection, interpretation, or synthesis. Clinical reasoning errors include:

- **Faulty data collection:** Failing to gather all relevant information, such as missing key symptoms or not ordering necessary tests.
- **Lack of data synthesis:** Inability to integrate and interpret the collected data correctly, leading to incorrect conclusions.
- **Misapplication of knowledge:** Applying medical knowledge incorrectly or failing to consider differential diagnoses.

Key differences between the different errors

In summary, the differences between the 2 kinds of errors are as follows:

- (1) **Subjectivity versus (vs) objectivity:** Errors of judgment are usually subjective and based on individual decision-making, while errors of clinical reasoning are objective and based on cognitive processes.
- (2) **Decision vs process:** Errors of judgment pertain to the final decision made by the healthcare provider, whereas errors of clinical reasoning pertain to the process leading up to that decision.
- (3) **Reasonableness vs flaws:** Errors of judgment can be reasonable given the circumstances, even if they were not the best choice in hindsight. However, this does not mean that they are excusable, especially if the error is particularly egregious. On the other hand, errors of clinical reasoning are inherently flawed and indicate a failure in the cognitive process.

Understanding the difference between these types of errors is essential in medical negligence cases. While errors of judgment may not necessarily constitute negligence if they were reasonable at the time, errors of clinical reasoning can be more clearly identified as deviations from accepted standards of care. For a more in-depth review of medical negligence, readers are referred to textbooks which cite cases in Singapore.^{9,10}

It is important to be mindful of hindsight bias and complexity of clinical care when reviewing the case records and how the case had evolved to result in a poor clinical outcome. In the context of medical care in Singapore, it is not common for a single event to result in a bad outcome.

The legal process

Medical negligence and professional misconduct

In medical disputes, the claimant usually makes a statement of claim (SOC) with medical negligence as a common or the main allegation. When the Singapore Medical Council (SMC) prosecutes a doctor in Singapore, the respondent doctor will be referred to the DT and the charge is usually for professional misconduct. The comments on medical negligence also apply to professional misconduct in DT proceedings. The medical expert witness is often asked if there was a breach of care and injury from medical negligence by the accused doctor. The medical expert witness provides the independent and unbiased opinion in the charges of professional misconduct in DT proceedings. It is important to clarify that it will be the DT members or presiding judge who will determine guilt and not the medical expert witness.

Preparing medical expert reports

Medical expert reports (in the form of AEIC) are the cornerstone of medical negligence cases. These reports provide detailed analysis and opinions on the medical aspects involved (Table 1). As a medical expert witness, one should be well-versed in:

- Reviewing charges (for criminal and DT proceedings) or SOC.
- Understanding the Letter of Instruction also known as LOI from appointed lawyers.
- Focusing on areas such as misdiagnosis, mismanagement, and departures from accepted practice standards in clinical management.

Table 1. Affidavit of Evidence in Chief checklist.

Upon receipt of a Letter of Instructions (LOI) and a first read of the relevant case notes, the following are practical considerations:	
☐	(1) Is there a conflict of interest?
☐	(2) Does the doctor have the relevant knowledge and expertise to serve as a medical expert witness in this particular case?
☐	(3) Can the timeline provided be met?
☐	(4) After the first read of the case notes, what type of errors (if any) were evident – misdiagnosis, mismanagement, miscommunication?
☐	(5) Did the respondent doctor's practice follow established guidelines and provide an acceptable level of care?
☐	(6) Provide references that predate the event in question and use them to support the opinion(s) sought.
☐	(7) Care must be taken to review the charges filed/Statement of Claim and the LOI again before answering the specific questions posed.
☐	(8) Communications to clarify the questions posed in the LOI may be necessary.
☐	(9) Beware of hindsight bias and the complexity of clinical care.
☐	(10) The primary function of the expert witness is to serve the court.

The requirements for a good expert witness report have been elaborated previously,² and is worthwhile highlighting and clarifying what it should contain and provide here:

- Details of the expert's qualifications and clinical experience.
- Provides and elaborates on medical literature or published guidelines which the expert has relied on; focusing as far as possible on Singapore data and the literature that was published before the event in question.
- Provides a statement setting out the issues which the experts have been asked to consider (Letter of Instruction) and the basis upon which the evidence was given (case notes, results of investigations, complaint letter, etc.)
- Where there is a range of opinion on the matters dealt with in the report, a summary of the range of opinions and the reasons for which the specific conclusions were reached.
- A summary of the conclusions reached.
- A statement of belief of correctness of the expert opinion.
- A statement that the expert understands that in giving the report, his or her duty is to the court, and that they have complied with the legal requirements of an expert's evidence set out in Order 12 Rule 5 of the Rules of Court.⁴

Testimony and giving evidence in court or DT

A well-written and well-researched AEIC which withstands logical analysis and is reasonable, may obviate the need to attend court. Based on anecdotal experience, more than half of the cases in which the author has acted as expert witness did not go to trial. The case had either been withdrawn (civil proceedings) or parties had opted for early negotiated settlement (alternative dispute resolution via mediation and arbitration) without the need the court proceedings to run its course.

When attending a High Court trial as a medical expert witness, the submitted AEIC would have been scrutinised extensively by the lawyers of the parties concerned before the trial. If there are controversies or disputes about the submitted opinion (which may be diametrically opposite to another expert witness), adequate references will be needed to support the opinion. When there is significant difference in opinions expressed by opposing expert witnesses, the evidence will be tested by oral testimony in court or DT proceedings. This was illustrated in *Goh Guan Sin v Yeo Tseng Tsai and National University Hospital* ("Goh Guan Sin") in which there was dispute among the defendant's factual witnesses' and numerous medical expert witnesses' interpretation of radiological

findings, specifically, on whether the haematoma seen was intra-axonal or extra-axonal and the amount of hematoma that was extra-axonal. The presiding judge reviewed the medical evidence and made the ruling to dismiss the claim by the plaintiff, with one of the reasons being that he preferred the evidence given by the defendant's expert witness over the plaintiff's expert (see in particular, *Goh Guan Sin* from [172] to [224]).¹¹

As dispute cases often take many months and sometimes years for the formal proceedings to begin, it is expected that the counsel will, prior to court or DT proceedings, engage their witnesses (including experts) to review their AEICs, familiarise the witnesses on the format of proceedings and where appropriate, discuss the expected line of questioning by the opposing counsel. However, the author notes that while the counsel may discuss possible questions that may be posed with the expert witness, they are not allowed to coach the expert on what answer he or she should give in court.

An expert should also be prepared to be asked questions outside the scope of the submitted AEIC. The presiding judge may need the expert's active participation in other areas as it is the judge who needs the independent expert witnesses' opinion to inform their ruling on the outcome of the case. In court, rather than refusing to go beyond their remit (i.e. the questions the expert was asked to address in their report), where appropriate, a reasonable and co-operative approach in answering such questions may assist the court, provided the expert remains independent, and cognisant of their role to assist the court.

However, this does not mean an expert has to entertain unreasonable questions from the counsel, and an expert can take comfort in the fact that the counsel who engaged them (and often times the presiding judge) will intervene during cross examination if the opposing counsel acts in an unreasonable or difficult manner.

In the author's experience, judges in Singapore usually accord respect to the medical expert witness, and will usually allow them to express and explain their opinion beyond a yes or no answer demanded by counsel. Some practical considerations during testimony include the following:

- Do not rush to answer the question posed.
- Do not anticipate or preempt the next question.
- Experts are allowed to clarify the question including asking counsel to refer to the specific section in the bundle of documents used in the proceedings.
- In answering, experts are allowed to refer to parts of their AEIC and the agreed "bundle of documents" used. However, they cannot refer to any personal notes or other external material

(i.e. anything that has not been exhibited in the proceedings).

- When answering, the expert should give their answer to the judge or DT chairperson, not to the lawyer who asked the question.
- Lawyers are trained to question witnesses (especially the expert witness) and their many years of court experience will often ensure their court craft is superior. Experts should therefore not be distracted by personal attacks on their qualifications and professional integrity. Opposing lawyers may use and discredit peripheral issues, elicit damaging assumptions or concessions, and magnify inconsistencies and minor mistakes.³
- An expert's participation in medical disputes will be important as Singapore contextual knowledge may at times be valuable in interpreting standards of practice in Singapore.¹

Things to note

Conflicts of interest

Fundamental to providing an unbiased and independent opinion as a medical expert witness is to ensure that there is no conflict of interest (COI). Put simply, COI arises when the legal duty to provide an unbiased and objective opinion, clashes with one's private interests. The COI may be actual, potential, or perceived. In the small and tight-knit Singapore medical community, merely knowing a doctor who is a potential defendant does not preclude one's involvement in a medicolegal case. It will be important to declare acquaintance level relationship. A potential COI may still be raised by opposing parties to discredit the opinion as non-independent, biased, and not credible.

Prepare for challenges

Being a medical expert witness can be challenging. One may face tough cross-examinations and scrutiny from opposing counsel. Prepare for these challenges by thoroughly reviewing case materials, practicing one's testimony, and staying calm under pressure.

Helping a friend or work colleague as an expert

An expert may be asked to assist a friend or work colleague to serve as a witness in a medico-legal case. Where the expert has a prior relationship with the doctor involved, particular care is needed to preserve independence and to distinguish clearly between factual, expert, and character evidence. Once the decision has been made to serve as a medical expert witness, a formatted AEIC should be submitted and preparations made to give testimony in court or DT. The opposing counsel may bring up the relationship as a conflict of interest and opinions rendered (written or verbal) as non-independent.

Assisting a friend or colleague with a written statement to attest to his or her good doctor skills—this will be considered as submission by a character witness. Such statements will usually not be taken as evidence in the court or tribunal proceedings, i.e. it will not be used to determine judgment of guilt. Character witness statements are however, considered during the sentencing stage as a mitigating factor.

Ethical considerations and medical judgment

The evidence from the medical expert witness does contribute to justice and uphold the ethical standards of medical practice in Singapore, especially when one is asked to weigh in on negligent or incorrect treatment. For DT, the charge of professional misconduct may not always relate to provision of medical care and can focus on ethical considerations in instances such as sexual misconduct, dishonesty, wrongful declaration, etc. In a case of overcharging, several SMC prosecution expert witnesses have provided oral testimony of over-charging. The case involved the Disciplinary Committee (the DT as it was previously called) and was referred for appeal with the Court of Three judges.¹² In their judgment, the Court "emphasise[d] that the ethical rule that a doctor must charge a fair and reasonable fee for his or her services" and "what constitutes a fair and reasonable fee for services rendered in any given situation would depend not only on the relevant facts but also on the views of experts in the particular field of practice concerned". Accordingly, the Court upheld the decision of the Disciplinary Committee.¹² In general, the court will be loath to interfere in the findings of the medical expert witness(es) as long as the evidence is logical and withstands scrutiny. In *Dr Khoo James v Gunapathy d/o Muniandy* [2002] SGCA 25 ("Khoo James"); the Court of Three Judges upheld the *Bolam-Bolitho* test and the principle that a judge should not be trying to "substitute his opinion for that of the doctor in the consultation room or operating chamber" and stated that "judges and lawyers should not play at being doctors".¹³

CONCLUSION

Becoming a medical expert witness requires a combination of medical expertise, legal knowledge, and strong communication skills. These considerations may help clinicians approach the role of expert witness more carefully and confidently. Such contributions will ensure an equitable and fair outcome to all affected parties. The duties of a medical expert witness are first and foremost to the court or tribunal, themselves (so that they do not lose credibility), and the party who engaged them, in that order. It is hoped that this commentary will offer a practical starting point for clinicians who may be asked to serve in this role.

Ethics statement

Not applicable, as no study participants were recruited.

Declaration

The author declares he has no affiliations with any commercial organisation with a direct financial interest in the subject or materials discussed in the manuscript.

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