

Editorial

Forensic Medicine: The Task of Healthcare Providers in Medicolegal Matters

Robert Perna*

TIRR Memorial Hermann, USA

*Corresponding author

Robert Perna, TIRR Memorial Hermann, USA

Submitted: 24 February 2014

Accepted: 28 February 2014

Published: 04 March 2014

Copyright

© 2014 Perna

OPEN ACCESS

EDITORIAL

Forensic medicine is the science that deals with the application of medical knowledge to legal questions. The use of medical knowledge and testimony in legal contexts has evolved and become a viable career option. Forensic medicine is a diverse and longstanding realm of medicine that deals with a broad scope of medicolegal issues such as cause of injury, medical and psychological autopsy, and symptom validity. Too often, forensic expert testimony goes further than the science supporting it. Though some aspects of forensics have strong empirical support (symptom validity testing with certain populations and some types of genetic testing), many forensic techniques have not been subjected to the rigors of scientific research. Juries may be left with an inaccurate impression of the scientific validity of the presented evidence.

Forensic science is a delicate combination of high stakes decisions and only probabilistic evidence which necessitates at least some level of subjectivity. Additionally, in medicolegal contexts questions are asked in a very different and definitive manner than in medical or clinical settings. There are strong forces at work in forensic medicine and these can combine possible financial incentives and the push for experts to provide responses and conclusions with certainty. Moreover, many of the questions subject to expert testimony are subject to diverse clinical opinions. For example, forensic experts may arrive at very different decisions on issues such as a persons' decision making capacity, if there are mitigating issues, or if someone suffered a mild TBI (which by definition has negative neuroimaging).

The scientific method requires that ideas or hypotheses be systematically studied, with the results peer reviewed and that findings can be replicated or conversely invalidated. This leads to refinement of the working theory or to its dismissal if results do not support it. This process is thus an on-going and collaborative one, with the accumulation of validated and scientifically accepted information over time. In contrast, the legal method involves an attempt to resolve conflict through an adversarial approach in which each side is allowed to present its position and supporting information. Direct examination and cross-examination are the methods by which information is tested in some legal contexts.

This process results in a specific decision that is essentially absolute and final, though may be affected by many biasing variables (perception of expert witnesses, jury selection, etc.).

Forensic science involves the use of scientific principles to answer questions posed by the legal system. There are many complexities to this intersection of science and law. Not the least of which is the difficulty judges and juries may have in determining the merit and accuracy of the scientific methods used by experts who present evidence to them. Although juries need to be protected from misleading information and junk science, it is also their job to evaluate controversial evidence. Fortunately, the medical forensics arena of practice has produced a new level of scrutiny regarding the quality of experts and evidence. Not only are experts exposed to the adversarial process, but also many jurisdictions now hold a higher level of scrutiny of testimony and evidence than previously accepted. The changing evidentiary standards, such as that which resulted from *Daubert v. Merrill Dow Pharmaceuticals, Inc.* (1993) which changed the criterion for admissibility of evidence [1]. The *Daubert* standard provides a rule of evidence regarding the admissibility of expert witnesses' testimony and guidelines for recognizing scientifically valid evidence. Prior to *Daubert*, in the United States expert opinion based on a scientific technique was inadmissible unless the technique was "generally accepted" as reliable in the relevant scientific community. General acceptance by the scientific community, while still relevant, is no longer a necessary precondition, and additional considerations include: has the theory been tested, has it been peer reviewed, what is the error rate, and are there accepted standards for its practical application? Scientific evidence need not be 100% reliable; anything that can alter the likelihood of material facts is potentially admissible, leaving it up to juries to decide how much weight to place on the evidence. Despite *Daubert*, the adversarial process, and a variety board certifying processes, there is currently no consensus in our field regarding what constitutes competency in forensic neuropsychology and other forensic experts.

While the forensic medical expert role has financial and other allure, it warrants a strong understanding of role boundaries and data limits. Healthcare professionals need to be extra cautious when participating in medicolegal matters. The normal

healthcare provider role of advocating or helping the patient maybe inconsistent with the responsibilities of a forensic role. The healthcare professional may need to avoid or resist attorney efforts at enticement into joining the attorney-client team [2]. A fact witness can be in an advocacy like role, but the expert witness needs to provide objective information.

The journal, *Annals of Forensic Research and Analysis* has the potential to serve as a forum for innovative ideas and forensic empirical research and can contribute to this fascinating and evolving field. Both empirical and conceptual manuscripts may

help facilitate journal readers understanding of this complex subject matter.

REFERENCES

1. Dixon L, Gill B. Changes in the Standard for Admitting Expert Evidence in Federal Civil Cases since the Daubert Decision. Rand Institute for Criminal Justice, Santa Monica: CA. 2001.
2. Martelli MF, Zasler ND, Johnson-Greene D. Promoting ethical and Objective Practice in the Medicolegal arena of disability evaluation. *Physical Medicine and Rehabilitation Clinics of North America*. 2001; 12: 571-575.

Cite this article

Perna R (2014) Forensic Medicine: The Task of Healthcare Providers in Medicolegal Matters. *Ann Forensic Res Anal* 1(1): 1004.