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LETTER TO THE EDITOR

Authors' Response to Young Commentary on

See Original Dror et al Article *here*
See JFS Editor-in-Chief Preface *here*
See Young Commentary on *here*

Editor,

In his Letter, Young states that based on our experimental dataset we "conclude that race biases medical examiners in manner of death decisions." However, that is incorrect. What we actually say, repeatedly, is that "The data *do not allow* us to ascertain whether they were biased by the race of the child or/and characteristics of the caretaker" (emphasis added) [1]. We also further state that our study has a "limitation of *not knowing* which specific irrelevant information biased them (the race of the child, or/and the nature of the caretaker)" (emphasis added) [1]. Even in the death certificate dataset, where the race variable *per se* was found to be significant, we caution that "We must be careful in drawing conclusions about bias from these archival data" [1].

Apart from this point, we share Young's concern when he states that "backward reasoning… is highly susceptible to bias" and can be "disastrous" in forensic pathology. When drawing inferences about manner of death, pathologists must avoid the logical fallacy of *affirming the consequent* [e.g., 2] because, as Young explains, there is often "a vast number of possible sets of events" that could explain a given autopsy result.

Young's invocation of the fictional *detective* Sherlock Holmes also raises an important question about the proper role of a forensic examiner in general, and forensic pathology in particular. The use of the Sherlock Holmes image promotes "[P]ractitioners [too] often [take] their self-image, their ideals, and their mission, not from a flesh-and-blood human who had advanced the science of their enterprise in some empirically reliable way" [3, p. 6]. Popular media affords examples (like the TV series "Quincy" in the United States and 'Silent Witness' in the United Kingdom) which portray pathologists as detectives whose role is to support and be part of the prosecution (or defense) team. The problem is that Sherlock Holmes "does not practice science" [3, p. 9].

Forensic pathology is based on science and, as such, must be impartial, independent, and reliable as much as possible [4, 5]. Some view forensic pathologists as being part of the "prosecution team" which raises serious concerns. Indeed, nearly a quarter of forensic pathologists have reported that they are considered "prosecution witnesses" within their jurisdiction, and 42% reported that they are expected to divulge details of their conversations with the defense to the prosecution [4].

Young's Letter agrees with much of our findings, for example, when he states that "78 pathologists rightfully refused to determine a manner of death." Hence, according to Young, the other examiners who determined the manner of death as homicide or accidental did not make the "rightful" determination. As Young says, "there was not enough information to know what happened", and rather than deciding it was undermined [6], the participants were biased by non-medical irrelevant information to reach a conclusion of homicide or accidental death.

It is critical to research and debate how to best determine manner of death, including what information should be relied upon in making such decisions (and when, how, and by whom). Young's Letter raises important issues, such as that "thinking that one can reason backward and get the right answer is both foolish and unjust" and that "many forensic pathologists and child abuse pediatricians have allowed many to be falsely accused and imprisoned, but none of these doctors want to admit it." Our paper provides some data that reveal potential problems in forensic pathology decisions, and these data make it imperative to have a proper and professional discussion of these issues.

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