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LETTER TO THE EDITOR

Commentary on: Dror IE, Melinek J, Arden JL, Kukucka J, Hawkins S, Carter J, et al. Cognitive bias in forensic pathology decisions. J Forensic Sci. https://doi.org/10.1111/1556-4029.14697. Epub 2021 Feb 20.

See Original Dror et al Article *here*
See JFS Editor-in-Chief Preface *here*
See Authors' Response to Peterson et al Commentary on *here*
See Peterson et al Response to Authors' Response *here*
See Authors' Response to Peterson et al Response *here*

Editor,

It was with great concern that we read the article "Cognitive bias in forensic pathology decisions" by Dror et al [1]. This is a fatally flawed article and should be retracted. There are numerous errors in the paper. Only the most egregious will be discussed in our response.

The first, and perhaps the worst error made by the authors, is the statement, unattributed and untrue, that caretaker relationships are "medically irrelevant." In the first scenario presented, the caretaker was a biologically unrelated male. In the second scenario, it was a grandmother.

There is extensive literature on the medical relevance of this distinction [2–13]. For instance, Daley and Wilson found that preschoolers living with one natural and one stepparent were 40 times more likely to be abused [2]. A larger study published in 2019 found that the odds ratio of abuse in the case of a boyfriend caretaker was 169.2, while in the case of a grandmother, it was 0.34 [13]. Thus, the odds ratio for the boyfriend is 497 times that of the grandmother in that study. The authors of that study conclude "*In clinical practice, questions regarding caretaker features may improve recognition of the abused child.*" They state in their discussion *"Our findings highlight the importance of asking about the caregiver present at the time of injury as part of a medical history as certain caregivers portend a greater likelihood of abuse and injury severity, and the child's safety may be at risk if sent home to an unsafe environment*." We concur with our pediatric colleagues that this information is not only "medically relevant," but, unlike the authors of this paper, understand that it is important in manner determination, just as it is important in evaluation of injury in the living victim. Not only is the caretaker relationship a predictor of abuse, but it is also correlated with the type of abuse. For instance, Weekes-Shackelford and Shackelford found that biologically unrelated male caretakers are more likely to kill the children in their care by means of blunt trauma, while genetically related fathers were more likely to shoot or asphyxiate their victims [6]. To claim that the combination of biologically unrelated male caregiver and blunt trauma death is "medically irrelevant" flies in the face of the medical literature and established clinical practice.

The authors of this paper include senior forensic pathologists. It is unlikely that they are ignorant of the important literature cited here. The authors may believe that these studies are flawed, or the results are inaccurate. If so, they should make the case for their conclusions. They do not do so—no relevant literature is cited in their work. The fact that they merely claim that this information is "medically irrelevant" without recognizing that it is considered "medically relevant" to most of the medical community is as inexplicable as it is incorrect.

Second, the focus on race in this article moves the construction of the study from inexplicable to absurd. This is a study primarily of whether or not forensic pathologists recognize the medical literature on caretaker relationship. To introduce race in an obscure fashion (race of the decedent vs. race of the caretaker) appears as an effort to label the survey responders, and their colleagues by proxy, as racists. Had this survey been done with the races reversed, the result would have been that White cases were more likely to be called homicide and Black cases more likely to be called accident. That result, however, would not have been as easily picked up by the Washington Post and touted in the political and policy arenas.

There may be unconscious race bias in the field of forensic pathology, but the conflation of race with caretaker relationship in this article does not provide evidence of it. These authors essentially conflated caretaker relationship and race to provide themselves with an opportunity of making accusations of race bias—a perfect example of injection of structural bias into a conclusion. It is certainly not evidence that their proposals would remove it.

Third, the authors promote misunderstanding of the methods and purpose of manner determination. Manner determination is not a "scientific" determination. It is a cultural determination that places

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a death in a social context for the purpose of public health statistics [14,15]. Manner determination is by no means uniform in practice—for example, at least one large office deems death by drug overdose as "undetermined" with respect to manner, while many others by convention deem such cases "accidental." The criteria are guided by policy promulgated by the National Association of Medical Examiners (NAME) and the Centers for Disease Control and Prevention (CDC). This is why the NAME guidelines explicitly acknowledge that there is no "right" answer in many manner determinations, and that the goal is consistency rather than some nonexistent criteria for correctness [16]. Manner determination is designed to assist public health agencies and the CDC, and it is they who determine what should and should not be considered relevant. The fact that this tool for aggregate statistics often does not fit well in court is not a criticism of manner determination by forensic pathologists. It is instead a criticism of misuse of manner determination by the courts. The idea that a social determination that integrates medical findings with cultural and social context should not use cultural and social competencies is incorrect.

Fourth, there was no guard against the bias of the small population used in the survey. The National Association of Medical Examiners has in place a procedure for providing information for surveys such as this in order to make sure that the sampling is complete and unbiased. Rather than go through this simple procedure, the authors bypassed it in order to contact a selected subset of NAME membership. There was no indication of how the bias of this population was tested. Factors such as practice location, experience, and even office policy influence manner determination; none of these factors were delineated in this paper. In a paper purporting to describe the behavior of forensic pathologists, the authors do not know how many respondents were actually board-certified forensic pathologists. They did not ask.

The authors promote the use of linear sequential unmasking to hide information from the forensic pathologist through a theoretically unbiased system of outside experts. However, the fact that the authors promote this structurally biased and agenda-driven study as an example of unbiased science is itself an argument against the establishment of such gatekeepers. Such an unwarranted intrusion into what is essentially a doctor-patient relationship would replace physician judgment with the agenda and biases of those with no case "ownership" who in any case would not be asked to defend their judgments under oath in court.

This study represents an abject failure of the peer review process at the Journal of Forensic Sciences. Certainly, an argument can be made that race issues are a worthwhile discussion to have in forensic pathology; however, promulgation of structurally biased, agenda-driven studies such as this under the pretense of "unbiased" science is not the way to do it. This paper should be retracted by the editorial board of this journal. If it is not, the *Journal of Forensic Sciences* and the American Academy of Forensic Sciences risks ceding its reputation from advancing objectivity and rigorous scientific method in forensic science to promoting agenda-driven editorial content disguised as medical literature.

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