Commentary: A Homicide-Suicide Assessment Model

Anders Goranson, PsyD, James Boehnlein, MD, and David Drummond, PhD

In this issue of the *Journal*, Dr. Paolo Roma and colleagues review international research spanning 60 years and highlight the centrality of psychiatric factors in the phenomenon of homicide-suicide (H-S). This commentary examines several challenges presented by definitional variability and the use of general sources as data. We suggest directions for future research, particularly using the established violence literature, to move toward intervention and management of H-S. We also examine the similarities between H-S and stalking and reflect on the potential for the stalking literature to inform the understanding and management of H-S.

J Am Acad Psychiatry Law 40:472-5, 2012

The comprehensive findings of Roma et al. regarding the literature on homicide-suicide (H-S) are confirmative and not altogether surprising when examined through the lens of established violence research. As much violence research often does, this study highlights the substantial knowledge gaps concerning certain subtypes of violence and the abundant opportunities for growth in this area of study. In assessing H-S, several problems emerge with definitional variability and the use of potentially inadequate sources of data. Lack of standardization in defining types of H-S and mental illness, as well as the inclusion of general data sources, such as newspaper accounts, raise significant methodological concerns. Nonetheless, the overall findings hold promise as the initial building blocks for intervention strategies. Many of the variables found by the authors to be associated with H-S, or dyadic death, mirror wellestablished mental health risk factors of violence in general. Of particular note are depression and substance abuse disorders.^{2,3} In line with the authors' goal to improve prevention, this commentary postulates how these findings speak to existing research on

Dr. Goranson is a Fellow, Northwest Network Mental Illness Research Education and Clinical Center (MIRECC), Portland VA Medical Center, and an Instructor, Oregon Health and Science University, Portland, OR. Dr. Boehnlein is Associate Director for Education, VA Northwest Network MIRECC, and Professor of Psychiatry, Oregon Health and Science University, Portland, OR. Dr. Drummond is Affiliate Associate Professor of Psychiatry, Oregon Health and Science University, and private consultant, Drummond Consulting and Training Services, Portland, OR. Address correspondence to: Anders Goranson, PsyD, 3710 SW U.S. Veterans Hospital Way, Portland, OR 97239. E-mail: anders.goranson@va.gov.

Disclosures of financial or other potential conflicts of interest: None.

correlates to violence and how the current literature on violence assessment may aid in cultivating ecological utility from H-S data. We urge that future research go beyond the authors' recommendations, which highlight the importance of psychiatric disorders, to include the identification of other variables associated with violence (both risk for and protection against) and develop comprehensive treatment modalities. By doing so, we move toward a better understanding of the unique factors that set H-S behavior apart from other forms of interpersonal violence (particularly its apparent kinship to stalking) and also toward the how, when, where, and with whom of prevention and management.

Newspaper Surveillance and Definitional Variability

Because Roma *et al.*¹ cast an impressively wide net, minor problems arise in the sources of data selection in their study that can adversely affect the conclusions drawn from certain types of data. In their Discussion section they note, ". . . we included studies in which newspaper surveillance was used, but this way of obtaining data, even if it permits the examination of a large number of cases, is inaccurate" (Ref. 1, p 467). This limitation raises the question of why this form of data would be used in the study at all. Although they are useful when seeking an overview, tracking an event through time, or determining a geographic focus, newspapers or other nontechnical general sources of data are rife with problems. As noted by Roma *et al.*, ¹ such data are often unreliable;

however, we broaden this critique by highlighting likely difficulties in relying on media accounts because of standardization, bias, and cultural influence. Coupled with problems of definitional variability, these factors raise concerns about validity. Considering the easily identifiable domestic and international cultural biases potentially at work, one would ideally want a more thorough description of how the authors determined which articles employed "valid psychological and psychiatric evaluations" (Ref. 1, p 467). This and a statement of exactly what percentage of the final 31 studies involved newspaper surveillance would perhaps alleviate these concerns.

The authors' stated purpose for their study was "... to give an initial description of the prevalence of mental illness in H-S" (Ref. 1, p 467), a goal that they have clearly accomplished. In replicating the findings of researchers who examined correlates to violence, they have determined similar variables associated with the H-S phenomenon. Despite clearing this hurdle, they cite several methodological challenges regarding variability: the "definition of H-S"; "the definition of mental illness"; and "great variability among studies about the different types of H-S" (Ref. 1, p 467). We concur with the authors' acknowledgments, which point to both challenges and pathways for future researchers. Although this study makes clear gains in the understanding of the H-S phenomenon, greater definitional standardization in the future will only strengthen the utility and validity of these findings.

Moving Toward an H-S Model of Risk Assessment and Management

In addition to the recommendation of Roma et al. concerning psychiatric factors, developing a model unique to H-S incidents will require additional careful evaluation of known psychosocial, medical, economic, cultural, developmental and psychiatric variables on a case-by-case basis. This assessment can be accomplished through further specifying those variables that have the greatest correlation with acts of H-S when compared with H or S alone. In hypothesizing variables of interest, several suspects emerge. One rather stark variable that we will touch on more in relationship to H-S's commonalities with stalking is the role of intimacy. Congruent with the literature, the existence of a current or previous intimate relationship would be a common variable between attacker and victim in H-S cases.⁴ Does the duration, intensity, and context (e.g., divorce, separation, duration of marriage, and progeny status) surrounding the identified relationship correlate with a higher rate of affective or predatory violence?

An additional suspect variable found to be strongly related to violence is the concept of irritability and its relationship to the hyperarousal symptoms of PTSD.⁵ Building on Agnew's General Strain Theory of criminality,6 which postulates a connection between negative affect and violence, additional studies have determined a significant association between the irritability associated with the hyperarousal symptoms of PTSD and violence. Found in previous research to be linked to high rates of recidivism and domestic violence, irritability has also been correlated with increased risk for substance abuse, a variable that also increases violence risk. 3,8-10 Identifying methods of capturing and measuring the degree of irritability in H-S cases could have substantial value in determining its contribution to violence risk.

This is not to discount the role of protective factors in buffering against acts of violence.² In examining domestic incidents (since nearly all research on H-S involves male-on-female offenses), are there variables in high-risk couplings that tend to protect them from progressing toward an H-S event? Potential findings from recent research on veterans and protective factors against violence tend to cluster around the categories of basic needs and overall wellbeing.¹¹ The meeting of needs, such as money for food, clothes, or housing, has been found to be protective. Overall well-being incorporates meaningful social support connections, housing, and effective medical care (particularly for the treatment of chronic pain and sleep disorders). The good news is that we have effective means of addressing these areas and that the focus is shifting toward the combined use of risk and protective factors in managing the potential for violence. One program that is attempting to incorporate both risk and protective factors is Elbogen's amalgam treatment, Client-Centered Anger and Life Management (CALM). CALM involves group and individual therapy that provides a variety of skills training; triages targeted care to treat cooccurring risk factors, such as sleep disturbance, chronic pain, substance abuse, and depression; and promotes protective factors by connecting veterans to existing VA resources that focus on housing, employment, and social support. CALM is currently undergoing pilot testing at the University of North Carolina-Durham. Preliminary findings are encouraging, and a full study should be published shortly.¹²

Not quite as nascent are the number of effective, more widely available treatments for substance abuse, depression, suicidal ideation, chronic pain, and sleep disorders that could be harnessed to address known risk factors. The next step in refining the understanding of H-S appears to be gaining a better grasp of the variables associated with it, determining the progressive stages an individual goes through before attacking, and leveraging protective factors for further risk prevention.

What Stalking Teaches Us About H-S

In refining the ability to assess and manage potential violent acts, another possibility is to examine the potential overlap between H-S and stalking. In cases of stalking, the ultimate failure of the narcissistic linking fantasy leads a perpetrator to the idea that if he can't have the victim, nobody can. The devaluative restoration of this fantasy is well articulated in Shakespeare's Othello; "I will kill thee, and love thee after." ¹³ In looking at the overall demographics of stalking cases, an estimated 1 in 400 stalking victims ultimately is killed, and of those cases, an unknown percentage of homicides are followed by suicides.¹⁴ An examination of H-S cases involving a previous intimate relationship suggests that a proportion may actually represent stalking cases carried to the extreme. Most of the literature cited by Roma et al. 1 involves male-on-female offenses within the context of a previous intimate relationship. This finding is consistent with the Centers for Disease Control's National Violent Death Reporting (NVDRS), which determined that 90 percent of the murder-suicides in the survey involved male perpetrators. 15 The Violence Policy Center identified a predictable pattern within H-S cases involving a dyad of a female attempting to break off a relationship with an obsessed male. 16 In addition, an estimated one-third to three-fourths of all murder suicides involve a male perpetrator who suspects his partner of infidelity. ¹⁷ In considering these similarities, the study of stalking and possibly the typology may be of additional assistance in understanding the complexities of the H-S phenomenon. 18 Developing typologies with various levels of general threat may also telegraph effective modes of intervention. Using a typology similar to that of Mullen et al. 18 (rejected, intimacy seeking, incompetent, resentful, and predatory) may provide the beginnings of a template to aid in the assessment of risk, as well as the structure and scope of intervention.

Summary

"Who knows what evil lurks in the hearts of men?" intoned the introduction to the classic radio serial, "The Shadow." 19 When posing questions about the study of violence, the most appropriate answer may be, "... we're getting there." This qualification reflects the often elusive nature of the truth when studying violent behavior. Notorious for its multifactorial nature and unpredictability, violence prevention maintains a rapidly progressing but ever beguiling task, even more so when tackling a subset of violent behavior, such as Roma *et al.* have attempted in studying H-S. We are grateful for the contribution that they have made to the understanding of H-S and the factors that could be explored in its prevention and management. Their findings regarding psychiatric diagnoses and substance abuse align strongly with numerous established correlates to general violence. Despite the challenges posed by the use of general data sources and definitional variability, the study's findings hold notable promise as the building blocks for the development of specific models of assessment and intervention to mitigate risk for H-S. Future research to identify other variables that differentiate H-S phenomena would very likely benefit from exploring H-S's relationship to intimacy and irritability, as would an examination of any protective factors against H-S. In addition, examination of the similarities between H-S and stalking is recommended. Previous research on the etiology, typology, and management of stalking may prove to be invaluable templates for the development of interventional strategies for H-S. In sum, Roma et al. provide a strong initial first step in understanding H-S and reducing the immeasurable pain and devastation of the people affected by the phenomenon.

References

- Roma P, Pazzelli F, Pompili M, et al: Mental illness in homicidesuicide: a review. J Am Acad Psychiatry Law 40:462–8, 2012
- White S, Meloy JR: WAVR-21: A Structured Professional Guide for the Workplace Assessment of Violence Risk. San Diego: Specialized Training Services, 2010
- Monahan J, Steadman H, Silver E, et al: Rethinking Risk Assessment: The MacArthur Study of Mental Disorder and Violence. New York: Oxford University Press, 2001
- 4. Jenkins DM: Appendix A: when should threats be seen as indicative of future violence? Threats, intended violence, and the inti-

Goranson, Boehnlein, and Drummond

- macy effect, in Threat Assessment and Management Strategies: Identifying the Howlers and Hunters. Edited by Calhoun FS, Weston SW. Boca Raton, FL: CRC Press, 2009, pp 151–99
- Elbogen E, Wagner H, Fuller S, et al: Correlates of anger and hostility in Iraq and Afghanistan war veterans. Am J Psychiatry 167:1051–58, 2010
- Agnew R: Foundation for a general strain theory of crime and delinquency. Criminology 30:47–88, 1992
- Savarese V, Suvak M, King L, et al: Relationships among alcohol use, hyperarousal, marital abuse and violence in Vietnam veterans. J Trauma Stress 14:717–32, 2001
- 8. Elbogen E, Johnson S, Wagner H, *et al*: Protective factors and risk modification of violence in Iraq and Afghanistan war veterans. J Clin Psychiatry 73:e767–73, 2012
- Taft C, Kaloupek D, Schumm J, et al: Posttraumatic stress disorder symptoms, physiological reactivity, alcohol problems, and aggression among military veterans. J Abnorm Psychol 116:498

 507, 2007
- Mason W, Hitchings J, Spoth R: Longitudinal relations among negative affect, substance use and peer deviance during the transition from middle to late adolescence. Subst Use Misuse 44: 1142–59, 2009
- 11. Van Male L, Goranson A, Elbogen E, et al: Multidisciplinary approach to violence risk assessment in health care, education, and corporate settings. Presented at the 120th Annual Convention of

- the American Psychological Association, August 2–5, 2012, Orlando, FL
- 12. Elbogen E: Assessing and managing violence risk among Iraq and Afghanistan veterans. Presented at the 4th Annual Traumatic Brain Injury and Suicide Prevention Conference, Mental Illness Research, Education, and Clinical Center (MIRECC) Veterans Integrated Service Network (VISN) 19, September 9, 2011, Denver, CO
- Meloy JR: The Scientific Pursuit of Stalking. San Diego: Specialized Training Services, 2006
- Pathé M: Surviving Stalking. Cambridge, UK: Cambridge University Press, 2002
- Centers for Disease Control: National Violent Death Reporting System, 2007. Available at http://www.cdc.gov/violenceprevention/ nvdrs/index.html. Accessed August 3, 2012
- American roulette: the untold story of murder-suicide in the United States. Washington, DC: Violence Policy Center, 2002. Available at http://www.vpc.org/graphics/amroul.pdf. Accessed August 23, 2012
- 17. Marzuk P, Tardiff K, Hirsch C: The epidemiology of murdersuicide. JAMA 267:3179–83, 1992
- 18. Mullen P, Pathé M, Purcell R: Stalkers and Their Victims. Cambridge, UK: Cambridge University Press, 2000
- Chrisman D, Sweets W, Charlot H: The Shadow. New York: Street & Smith Publications, 1930