

## Psychological autopsy and postmortem toxicology in forensic psychiatry

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### INTRODUCTION

The Centers for Disease Control and Prevention (CDC) defines “suicide” as “death caused by self-directed injurious behavior with any intent to die as a result of the behavior” (CDC 2014). This definition thus implicates the thoughts and behaviors of the decedent, which may be unclear from the evidence available to the medical examiner investigating an unwitnessed, nonnatural death. In these cases, the decedent’s mental state, as well as underlying precipitants and risk factors, become matters of legal significance on which the opinion of a forensic expert is often sought.

In 1957, to address such matters, the Los Angeles County Coroner, Theodore Curphey, MD, contracted with Dr. Edwin Shneidman and his colleagues at the Los Angeles Suicide Prevention Center to provide behavioral science consultation with respect to manner of death determinations in “equivocal” cases, where it was unclear whether the death was intentionally self-inflicted (Botello et al. 2013). Shneidman devised a protocol, christened the “psychological autopsy,” to help investigators “make a reasonable determination of what was in the mind of the decedent vis-à-vis his or her own death” (Shneidman 1994, 75). As one high-profile example, investigators employed Shneidman’s protocol in examining Marilyn Monroe’s death from a barbiturate overdose in 1962 and concluded it was the result of a “probable suicide” (Botello et al. 2013).

The psychological autopsy consists of a systematic retrospective investigation of the decedent’s state of mind at the time of death to determine (to the highest degree of certainty possible) whether the decedent was suicidal and, if so, what distal and proximal risk factors contributed to that suicide risk. In the psychological autopsy, the subject of the investigation has died and is unavailable for personal examination. Therefore, proxy informants, in addition to contemporaneous documentation, provide important data regarding the decedent.

In coroner’s death determinations, the psychological autopsy is sought to elucidate the “manner of death” (or “mode of death”). Manner of death is distinguished from “cause of death,” which refers to the immediate, mechanistic factors that terminated life, e.g., blunt force trauma to the head, myocardial infarction, etc. In contrast, manner of death captures the broader circumstances, typically certified as “natural,” “accidental,” “suicide,” or “homicide” (the so-called “NASH” categories). A case is deemed “equivocal” when uncertainty arises as to the applicable NASH category. Without further clarification, the manner is left “undetermined” by the medical examiner.

The psychological autopsy also investigates the “motive” and the “intent” associated with the suicide. “Motive” encompasses the decedent’s internal calculus of the reasons and circumstances supporting a decision to die by suicide, taking into account the current and prospective stressors and resources (Scott et al. 2006). “Intent” has been defined as the aim or goal to end one’s life, including the conscious awareness and expectancy that the method used will cause death (Berman 2005). Implicit in intent, “mental capacity” refers to the decedent’s ability to arrive rationally at the decision to die by suicide, considering such factors as intoxication, cognitive impairment, reality testing, and “sanity” (Scott et al. 2006).

This chapter will discuss the psychological autopsy with respect to applications; methodologies and limitations; interpretation and integration of toxicological results; ethical considerations; admissibility in court; and practical considerations for providing testimony.

## APPLICATIONS

From its origins in assisting the Coroner, applications of the psychological autopsy have since spread into the courtroom and beyond. In research settings, the psychological autopsy has helped expand the knowledge base for suicide risk factors and suicide prevention.

In litigation, the psychological autopsy may be utilized where the manner of death is relevant to criminal culpability or civil liability. In criminal cases involving suspected homicide, a psychological autopsy may support or refute a criminal defense that the decedent’s death was self-inflicted, as opposed to the result of foul play (Ogloff and Otto 1993). It has also been used to establish criminal responsibility for a known suicide. In *Jackson v. State*, the victim was a 17-year-old girl who died by gunshot wound after years of abuse by her mother, who had forged the victim’s birth certificate and forced her to work as a nude dancer (553 So. 2d 719 [Fla. 4th DCA 1989]). The criminal investigation established that the victim died by suicide, but a psychological autopsy was admitted into evidence against her mother to support charges of child abuse, procuring sexual performance by a child, and forgery (Harris 1990).

Litigation over the denial of life insurance benefits often involves psychological autopsies. Where the policy at issue contains a suicide exclusion clause, payment of benefits to beneficiaries is denied when a self-inflicted death occurs within a specified time period from the start of the policy. Though intended to protect insurers against subterfuge by a newly insured person, public sentiment and policy tend to favor the beneficiaries of life insurance policies so as not to compound the beneficiaries’ loss with the denial of benefits (Schuman 1993). Accordingly, the insurance company has the burden of proving a death was a suicide, and it may obtain a psychological autopsy to meet this burden. Correspondingly, the intended beneficiaries may seek a psychological autopsy to bolster their claim that the decedent’s death was not a suicide. In *Evans v. Provident Life Ins. Co.*, the Kansas Supreme Court affirmed the admission of a psychological autopsy report opining that an insured decedent was suicidal at the time of his death (815 P.2d 550 [Kan. 1991]).

Even where manner of death is not equivocal, civil cases may still invoke a psychological autopsy to obtain a cross-sectional assessment of a decedent’s mental state and suicide risk prior to death. In malpractice actions against psychotherapists, a psychological autopsy may be proffered to opine on the foreseeability

of a decedent's suicide and thereby show proximate causation. Parties may also seek a psychological autopsy in wrongful death litigation involving possible "suicide-by-cop," product liability claims, workers' compensation claims, and military benefits awards to surviving families.

In research settings, the purpose of the psychological autopsy is not to determine whether suicide occurred, but rather to understand why it occurs. It is a practical and widely used approach to studying distal, proximal, and contributory suicide risk factors, i.e., underlying and acute psychological and situational preconditions to suicide. Because of the statistical rarity of suicide, e.g., 20.6 males and 5.5 females per 100,000 U.S. population in 2012 (Drapeau and McIntosh 2014), longitudinal studies requiring large sample sizes would be impractical. However, the case-control study design provides an alternative approach by comparing known suicide cases to matched control samples, such as known accidental deaths. Psychological autopsy studies utilizing this design have elucidated several risk factors associated with suicide, such as history of substance use disorders, depressive disorders, and prior suicide attempt, thereby enhancing clinical suicide risk assessment and prevention measures, as well as informing policy (Yoshimasu et al. 2008).

## METHODOLOGY

Since its inception, various protocols have been developed to establish a structure for the psychological autopsy (e.g., Ebert 1987; Snider et al. 2006; Knoll 2009). Common to these protocols is the targeted gathering of evidence, typically from review of available records (e.g., autopsy reports, postmortem toxicology reports, suicide notes, journals, correspondences, insurance policies, and wills, as well as psychiatric, medical, pharmacy, employment, military, legal, and academic records) and interviews of family survivors and acquaintances (i.e., knowledgeable observers). These approaches facilitate the systematic collection of psychological, psychiatric, medical, and social data, including first-person accounts of the decedent's developmental history, character, coping style, and last days of life, such that "conclusions can be drawn as to the intention of the decedent, therefore the decedent's role in effecting his/her own death" (Berman 2005, 365). However, no single approach has emerged as the standard protocol for the conduct of a psychological autopsy, and the selection, interpretation, and weighting of each source of evidence remain largely a matter of evaluator discretion, leading to inter-rater variability. This lack of a standardized protocol has raised concerns as to the psychological autopsy's reliability and validity (Pouliot and De Leo 2006).

One response to such concerns has been to create structured rating instruments addressing the range of factors to be considered in the psychological autopsy. The CDC developed the "Empirical Criteria for the Determination of Suicide" (ECDS) by selecting those factors that best correlated empirically with self-infliction and suicidal intention: autopsy evidence; toxicology; witness statements; investigatory evidence (e.g., police reports, scene photos); psychological evidence (e.g., observed behavior, personality, and lifestyle); evidence that decedent recognized high-potential lethality of means; recent and sudden change in decedent emotions; serious depression or mental disorder in decedent; indications of desire to die, anticipation of impending death, or expressions of farewell (e.g., verbally or via a suicide note); expressions of hopelessness; actual or threatened stressful events or losses; instability in immediate family; recent interpersonal conflicts; and history of poor physical health (Jobes et al. 1991). These factors

are organized into a 16-item instrument, with each item categorized as evidence of self-infliction, intention, or both. If a case achieves a score of three or more on both the self-infliction and intention scales (indicating there were at least three factors evidencing self-infliction and at least three factors evidencing intention), then it is deemed a suicide. A lower score on either scale is interpreted as an accidental death. The ECDS was subjected to a validation study that applied the protocol to a blinded set of cases that had previously been certified as suicide or accidental. The ECDS correctly identified 100% of the known suicides and 82.75% of the accidents (Jobes et al. 1991).

Despite its elegance, the use of the ECDS is not without qualifications. It was not intended to obviate the investigator's clinical decision making, and it excludes traditional suicide risk factors, such as previous suicide threats or attempts, measures to prevent rescue, rehearsal of suicidal behavior, and preparations for death (Jobes et al. 1991). Moreover, the ECDS does not calculate probabilistic suicide risk. Rather, it was designed to provide medical examiners with a standardized instrument to help distinguish a suicide death from an accidental death for purposes of improving the accuracy of epidemiological data. To this extent, the ECDS may be overly deterministic, especially for forensic settings where more is required than merely sorting suicides from accidental deaths. The ECDS scoring system may also come across as conclusory, such that in litigation settings, expert opinion relying on the instrument may invite exclusion where testimony on an ultimate issue is barred.

An alternative protocol was developed based on a survey of suicidologist-forensic experts who considered the following areas of inquiry to be essential: documentation/records; site of death; demographics; recent symptoms/behaviors; precipitants to death; psychiatric history; physical health; substance abuse; family history; firearm history; attachments/social supports; emotional reactivity; lifestyle/character; and access to care (Snider et al. 2006). The "Semi-Structured Interview for Psychological Autopsy" systematizes the survivor interview along four domains: precipitants/stressors; motivation; lethality; and intentionality (Werlang and Botega 2003).

Though these protocols do offer a conceptual structure for the collection of autopsy data, true standardization remains unrealized. Most conspicuously, no decision rules govern what type or amount of evidence is sufficient to rule in or rule out suicide as the manner of death. However, standardized data points and domains have been defined (Snider et al. 2006), affording some assurance of reliability. At any rate, the lack of standardization is not unique to psychological autopsies and is common to many protocols in the behavioral sciences, including the typical psychiatric interview. Provided the psychological autopsy focuses on the degree of suicide risk, as opposed to whether the death was actually a suicide, it avoids overstepping into an ultimate issue that is reserved for the finder of fact.

## RESOLVING INCONSISTENCIES IN THE EVIDENCE

The psychological autopsy frequently involves consideration of inconsistent or contradictory evidence (indeed, ambiguity is likely what prompted the psychological autopsy to be conducted in the first place). In manner of death determinations, medical examiners have variable access to information typically found in coroner's investigator reports, police investigation reports, medical records, and pharmacy records. Through discovery, the forensic expert may have a much larger database than that previously available to

the medical examiner. Despite, or perhaps because of, an increased access to sources, the forensic expert commonly confronts inconsistencies in the evidence that may or may not be resolvable. Where such inconsistencies cannot be reconciled, the expert witness may offer alternative opinions based on competing versions of the facts.

One potential source of inconsistencies is the survivor interview. A survivor's recollection of the circumstances surrounding the relevant death is fraught with inherent bias, both conscious and unconscious, which may arise out of the survivor's feelings of guilt, anger, or shame, or out of personal interest in the outcome of the psychological autopsy. However, survivors provide key pieces of information about the decedent's personal history, which can provide specific observations and temporal information pertaining to circumstances shortly before death. Accordingly, while performing the interviews, the forensic expert should exercise judgment in assessing the interviewee's credibility and assigning commensurate weight to the information elicited. Such evidence should be integrated with that gleaned from other sources, particularly the death scene, physical autopsy, postmortem toxicology, and observations of other informants who had significant contact with the decedent in the days and weeks prior to death. Use of these supplemental sources offers some assurance that the ultimate interpretations will be valid (Beskow et al. 1990).

## POSTMORTEM TOXICOLOGY

Another source of evidence requiring careful interpretation is the postmortem toxicology results. The role of intoxicants is often central in determining the decedent's intent at the time of death, both with respect to mental capacity and lethality. If drug or alcohol use is suspected, the psychological autopsy should address whether the decedent was too intoxicated to have formed intent and whether the suicide was by drug overdose. Thus, it is useful for the forensic expert to have some working knowledge of basic toxicology. It is also important to be aware of misconceptions and pitfalls, e.g., so-called "lethal" levels of drugs; use of postmortem toxicology results to estimate antemortem concentrations or drug dosage; and the routine and uncritical use of toxicology textbooks or tables to determine cause of death (e.g., see Berman et al. 2003; Palmer 2010; Gill et al. 2013). Discussion with an experienced forensic toxicologist and/or forensic pathologist, review of corresponding expert reports, and/or review of the relevant scientific literature will also assist the forensic expert in understanding the case.

The most challenging part of postmortem forensic toxicology is interpreting the results and explaining what they mean to nonspecialists, such as legal professionals and juries (Drummer et al. 2013). This requires a broad knowledge of the pharmacology and toxicology of licit and illicit drugs, their mechanism of action in the body, and their potential for causing intoxication and death. Tables of therapeutic, toxic, and fatal concentrations of drugs are available, although these should be used cautiously (Schulz et al. 2012). The notion of "lethal drug levels" or some concentration threshold that leads to incapacitation and death is hard to defend, because so much depends on the dose taken, route of administration, development of tolerance, body weight, and the nature of any concomitantly ingested substances. Development of tolerance is especially important with regard to toxicity of opioid drugs (Davis 2014). Certain drug combinations are more dangerous than others, such as when ethanol is taken with sedative-hypnotics (barbiturates or benzodiazepines) or when selective serotonin reuptake inhibitor (SSRI)

antidepressants are taken with the painkiller tramadol, which may cause a life-threatening “serotonin syndrome” (Pilgrim et al. 2010).

The validity of the toxicological results is contingent upon the appropriate selection and collection of specimens for toxicological analysis. In the postmortem context, blood is the most important specimen for analysis, because the concentrations of drugs present in the blood typically are a direct reflection of the concentrations reaching the brain. Depending on the concentrations of centrally acting drugs in blood, tentative conclusions can be drawn about toxicity and potential lethality. However, the results of toxicological analysis are susceptible to several sources of error, ranging from the way the specimen is collected to the interpretation of assay results.

Sampling site and handling of the blood specimen can have significant effects on the reliability of the analytical results. The preferred source of blood for postmortem analytical toxicology is from a peripheral sampling site, such as a femoral vein. The worst possible source is from the chest cavity, because of the risk of contamination from drugs unabsorbed in the stomach or at higher concentrations in lung and liver than in the blood (Kugelberg and Jones 2007). Biological fluids taken for toxicological analysis should be preserved with sodium or potassium fluoride (1%–2%) and then refrigerated or frozen (Drummer 2010). Fluoride ions act as enzyme inhibitors, which help to prevent bacterial metabolism of glucose into ethanol, especially if the body is decomposed or microorganisms have spread from the gut into the blood. Because of the risk of alcohol being produced in the body after death, a realistic cut-off concentration should be used when reporting a positive blood alcohol concentration (BAC) at autopsy, e.g., 0.01 gram %. However, there is much to recommend use of a higher cutoff, such as 0.02 gram %, especially in traumatic deaths (Kugelberg and Jones 2007).

A positive BAC should be confirmed by analysis of ethanol in alternative specimens, such as stomach contents, urine, and/or vitreous humor. The sugar content of urine voided by healthy individuals is negligible, so there is no substrate for postmortem synthesis of ethanol. Given the anatomic separation, there is low likelihood of bacteria spreading from the gut to the eye and introducing newly synthesized ethanol to the vitreous humor. Analysis of biomarkers of ethanol ingestion, such as the nonoxidative metabolites ethyl glucuronide (EtG) and ethyl sulfate (EtS), can also help to ascertain if ethanol is the product of postmortem fermentation (Maenhout et al. 2013). Both EtG and EtS are produced when ethanol undergoes metabolism in the liver, so their presence in postmortem blood specimens indicates that the decedent had probably ingested alcohol while alive (Krabseth et al. 2014).

To analyze drugs and their metabolites in the circulatory system, whole blood is utilized in postmortem forensic toxicology, whereas plasma or serum is utilized in clinical pharmacology and therapeutic drug monitoring programs. Because many drugs bind to plasma proteins, the concentrations in plasma or serum are higher than in red cells and in whole blood. Unfortunately, this difference is often ignored, making it difficult to compare postmortem drug concentrations with therapeutic drug concentrations. For example, plasma-to-blood distribution ratios are 1.15:1 for ethanol, 1.8:1 for diazepam, and 2:1 for tetrahydrocannabinol (THC), the major psychoactive drug in marijuana.

Another factor to consider is the phenomenon of “postmortem redistribution,” which refers to movement of drugs out of body tissue depots and into the blood after death (Pélissier-Alicot et al. 2003). Concentrations of drugs sequestered in body organs and tissues are higher than those in peripheral blood. Consequently, redistribution after death results in higher postmortem central (e.g., heart) blood concentrations that may overestimate the actual blood concentrations at the time of death. The extent

of postmortem redistribution is gauged by comparing heart blood concentration to femoral blood concentration. High heart-to-femoral ratios suggest that postmortem redistribution has occurred (Han et al. 2012).

Other valuable biological specimens in postmortem toxicology include hair, fingernails, and urine. Hair strands are particularly useful when subjected to segmental analysis, which allows the creation of an approximate timeline of drug intake during life (Barbosa et al. 2013). The trace analysis of drugs in hair strands can be used to verify the decedent's compliance with medications, such as antidepressants or antipsychotics (Barbosa et al. 2013). Hair is a viable specimen even if the body is decomposed and blood specimens too contaminated for sampling and proper analysis. Both hair and nails are obtainable from exhumed bodies, allowing detection of drug intake long after death.

Urine specimens are readily available at autopsy for analysis in large volumes, with concentrations of drugs and metabolites that are higher than in blood samples, and with longer time windows for detection. However, the composition of urine is variable depending on fluid intake and state of hydration. Some urine samples are more dilute than others (some authors suggest normalizing drug test results according to creatinine concentration), and the urinary pH affects drug concentrations, especially the excretion of basic drugs. A positive postmortem urine drug test furnishes proof that particular drugs were used but does not establish exactly when they were used; whether the decedent was acutely intoxicated at the time of death; or the specific degree of drug-related impairment experienced by the decedent at the time of death. Moreover, postmortem urine drug concentrations cannot be extrapolated to determine the dosage of the drugs consumed or the drug concentrations in the blood at the time of death.

The results of postmortem toxicology are indispensable to the psychological autopsy, because they provide important information as to cause of death (e.g., acute poisoning) as well as the decedent's mental state at the time. However, the forensic expert should be aware of common sources of error in the collection and processing of specimens and in the interpretation of the analytical results. Such awareness will help ensure that reliable toxicological evidence is used for the findings and opinions set forth in the psychological autopsy.

## ETHICAL CONSIDERATIONS IN SURVIVOR INTERVIEWS

Care must also be taken to protect the interests of the survivors during the psychological autopsy. Out of respect for the bereavement process, and to minimize survivors' tendency to idealize their loved one in the early stages of grief, the investigator should allow 2 to 6 months to elapse before contacting survivors (Beskow et al. 1990). The investigator should respect categorically any refusal to participate or request to withdraw from participation. Informed consent should be obtained, with the advisement that the interview is not intended to be therapeutic. Therapeutic effects of the survivor interviews may be inevitable, as survivors often experience them as cathartic, allowing ventilation of difficult feelings about the decedent and his or her death. Survivors may participate in order to contribute to the state of knowledge concerning suicide risk and prevention, thereby sublimating feelings of grief, anger, or abandonment, and salvaging some greater good from personal tragedy (Wong et al. 2010).

The interviewer should neither disavow nor deliberately avoid these salutary benefits, but should keep them from clouding the purpose of the evaluation or confusing the interviewee. The risk is that the interviewee will mistake the interview for treatment and perhaps even identify the interviewer as a therapist, leading to disclosures that are either outside the intended scope of the interview or affirmatively counter to the interests of the interviewee (e.g., if an insurance beneficiary admits a belief that the death was in fact a suicide). Nevertheless, the interviewer should be alert to any mental health needs that become apparent during the interview. The interviewer stands in a position in such cases to recommend that the interviewee seek psychological counseling, while consistently maintaining a forensic, as opposed to therapeutic, stance during the encounter.

## REPORT WRITING

The investigation culminates in a detailed written psychological autopsy report, which should state the purpose of the evaluation and present the psychiatric–legal question (e.g., “Did the decedent possess a mental state consistent with suicide at the time of death?”). A discussion of the cause of death, including findings from the scene investigation, witness statements, physical autopsy, and toxicology report, should be included before entering into a detailed but concise synthesis of relevant biographical information about the decedent, including major active psychosocial stressors, relationship status, mental health history, and impressions from survivor interviews. The report should pay particular attention to life events in the days, weeks, and months immediately preceding death. In accordance with the American Academy of Psychiatry and the Law’s “Ethical Guidelines for the Practice of Forensic Psychiatry,” the forensic expert should acknowledge that a personal examination of the decedent was not conducted (Ogloff and Otto 1993). If an instrument such as the ECDS is used, a brief discussion of the relevant protocol and associated reliability and validity data should be included.

At the end, the report includes a summary of the behaviors and mental state of the decedent at the time of death and whether they were consistent with suicide. The expert should address “factors descriptive of high intentionality, which include conscious awareness of consequences; goal of cessation; expectation of fatal outcome; implementation of a method of high lethality; minimal rescuability or precautions; premeditation [i.e., planning]; and communications [of intent]” (Berman 2005, 369). The report should provide a probabilistic assessment of suicide risk (e.g., mildly, moderately, or severely elevated) at the time of death. The level of certainty should be commensurate with the setting in which the opinion is offered, with a confidential report to the coroner countenancing a slightly wider range of certainty than expert testimony in court. In formal legal proceedings, the forensic opinion should be offered with a “reasonable degree of medical certainty” (or “medical probability,” depending on the legal jurisdiction), which is generally equivalent to “more likely than not.” The forensic expert should not overstate the level of confidence in the assessment or create a misleading impression of certainty about suicide (Berman 2005).

## ADMISSIBILITY AND TESTIMONY



If the psychological autopsy will be offered as expert opinion evidence in a contested legal matter, it must satisfy the requirements of legal admissibility, which in the United States, depending on the jurisdiction, is governed by one of two evidentiary standards. The older Frye standard, still observed in a number of states, uses the criterion of “general acceptance” in the field (*Frye v. United States*, 293 F. 1013 [D.C. Cir. 1923]). Under the newer Daubert standard, used in federal courts and adopted by many states, the court must find that the expert is properly qualified and that the opinion will assist the finder of fact (*Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 1993).

To qualify as an expert, the proffered witness must possess the “knowledge, skill, experience, training, or education” to offer understanding and insights above what would be obvious to the layperson (Federal Rules of Evidence 702). The forensic expert should be prepared to discuss his or her qualifications in mental health and suicidology, as well as in the conduct and analysis of the psychological autopsy. Thus, before undertaking a psychological autopsy, the forensic expert would be well served to obtain additional knowledge, training, and/or experience in suicidology and psychological autopsy, as well as basic aspects of the coroner investigation.

Whether the psychological autopsy will assist the finder of fact hinges on “a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid” (*Daubert*, 509 U.S. at 12). To determine scientific validity, *Daubert* set forth a nonexhaustive list of factors for consideration, including testability, peer review, known error rate, standardization, and general acceptance (*Daubert*, 509 U.S. at 12–13). Generally, the *Daubert* standard favors admission of scientific opinion evidence, commonly shifting discretion to the finder-of-fact to determine weight and credibility.

The forensic expert nevertheless should be prepared to defend the use of the psychological autopsy in terms of its general acceptance in the field, the validity of its techniques and practices, or both. That defense may include a frank acknowledgement of the psychological autopsy’s limitations, including the lack of a standardized protocol, the absence of consensus on terminology, and the inability to determine with certainty that the death was a suicide. That said, the psychological autopsy is no less valid than other forensic mental state evaluations, such as for criminal insanity or testamentary capacity. Moreover, the psychological autopsy has for decades been used and generally accepted as the state of the art in the postmortem assessment of mental state. Furthermore, the psychological autopsy has been subjected to peer review, inasmuch as several hundred research reports relying on the psychological autopsy have been published in peer-reviewed journals. Finally, though the decedent has usually not been examined personally, such direct access to the decedent’s thoughts is not necessary for the forensic expert to arrive at an opinion on the decedent’s mental state to a reasonable degree of medical certainty after careful analysis of the available evidence in its totality (*Jacobs and Klein-Benheim* 1995).

## SUMMARY

The psychological autopsy is a forensic retrospective investigation and assessment, which serves as a powerful tool to assess the likelihood that a sudden, unexplained death is a suicide, as well as to understand the factors that contributed to the suicide. With its systematic approach to examining the psychological and contextual circumstances preceding suicide, the psychological autopsy has assisted in

analyzing equivocal death cases and has helped survivors understand the decedent's behavior. Additionally, it has been used in a variety of legal, quality improvement, and research contexts. Despite potential criticism with respect to methodology, courts have frequently found the psychological autopsy to be scientifically valid and helpful to the finder of fact in legal settings. Though unable to make a definitive determination that any particular death was a suicide (which would go to the ultimate issue in litigation), the psychological autopsy can make a probabilistic assessment of suicide risk and can provide useful insights to coroners, courts, researchers, and survivors.

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