

Deaf Murderers: Clinical and Forensic Issues

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Data are reported on 28 deaf individuals who were convicted, pled guilty, or have been charged and awaiting trial for murder. The unique forensic issues raised by these cases are discussed, and their clinical picture presented. A significant percentage of these deaf murderers and defendants had such severely limited communication skills in both English and American Sign Language that they lacked the linguistic ability to understand the charges against them and/or to participate in their own defense. As such, they were incompetent to stand trial, due not to mental illness or mental retardation, but to linguistic deficits. This form of incompetence poses a dilemma to the courts that remains unresolved. This same linguistic disability makes it impossible for some deaf suspects to be administered Miranda Warnings in a way comprehensible to them. This paper identifies the reasons for the communication problems many deaf persons face in court and offers remedial steps to help assure fair trials and police interrogations for deaf defendants. The roles and responsibilities of psychiatric and psychological experts in these cases are discussed. Data are provided on the etiology of the 28 individuals' hearing losses, psychiatric/psychological histories, IQs, communication characteristics, educational levels, and victim characteristics. Copyright © 1999 John Wiley & Sons, Ltd.

INTRODUCTION

Apart from the early work of Klaber and Falek, Tidyman's (1974) book, *Dummy*, on the alleged deaf murderer of two prostitutes, and the volume of Dubow and Gears (1992) on the general topic of legal rights of deaf people, little has been written about deaf persons who commit homicide. The more general subject of the unique forensic problems posed by deaf defendants also has been inadequately addressed (Harry, 1984, 1986; Harry & Dietz, 1985; Jensema & Friedman, 1988).

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Most of these issues have generality to the legal arena and to the understanding and description of violence in both hearing and deaf individuals.

This paper will offer some background information on deafness and an examination of some of the specific clinical conditions that merit consideration when evaluating individuals who are deaf and charged with a violent crime. More specifically, we will summarize the findings on 28 individuals who are deaf and who were charged with homicide. Because some of these cases were not or could not be tried, the individuals cannot be referred to as 'murderers' in the legal sense; however, we have selected only cases in which powerful evidence of guilt was available had the case gone to trial. We will use the term 'murderer' in this context.

Relevant Issues of Deafness

Deafness can be defined in several ways, all of which bear relevance to the assessment of this population. Audiologists assess the severity of the hearing impairment in terms of loss in speech range and degree of residual functional hearing; the medical community addresses the etiological factors and sequelae. Linguists and educators characterize deafness according to age at onset, with prelingual deafness referring to loss of hearing occurring prior to the acquisition of language. This latter definition highlights the important relationship of deafness to a lack of access to linguistic information such as societal values and expectations of behavior. Medical descriptions incorporate information relevant to organic disorders which may predispose some individuals to poor impulse control, lack of cognitive understanding of behavioral acts, etc. Cumulatively these factors weigh heavily on the assessment of culpability.

The American Psychological Association (APA, 1993) reported that individuals between the ages of 17 and 26 are at greatest risk to commit homicide. Since the onset of deafness for the vast majority of deaf individuals in this age range is prelingual, a description of the implications of the prelingual onset of deafness is important.

Prelingually deaf individuals are those who do not have adequate useful residual hearing for understanding speech and learning language. As a result, if not most, grow up with constricted vocabularies, limited understanding of English syntax, low educational achievement levels, and huge information gaps. Due to the etiologies of deafness, learning disabilities are also prevalent, but are extremely difficult to diagnose. Most tests that assess learning disabilities are English language based. Thus, they are invalid with most prelingually deaf subjects (Morgan & Vernon, 1994). For this population, there is often a large discrepancy between expected academic achievement, age, and IQ, which are typically the definitional criteria of learning disabilities.

These linguistic factors often combine to result in a markedly impaired capacity for understanding basic legal terminology, some social ethics, and conventional mores. This deprived social, cognitive, and linguistic state, not deafness *per se*, typically creates unique difficulties in the disposition of homicide and of other felony cases in which deaf persons are suspects or defendants (Vernon & Raifman, 1997).

Rainer, Altshuler, Kallmann, and Demin (1963, p.157) and Grinker (1969) recognized and described a minority of deaf individuals who have severely

constricted or minimal language functioning, huge information gaps, and little awareness of social norms or mores. They develop a constellation of symptoms and personality traits which has been given two labels: First, Altshuler and Rainer (1963) described this condition as a "Primitive Personality Disorder." Second, Norwegian psychiatrist Basilier, independently identified and named the same clinical syndrome "Surdophrenia" (Basilier, 1964). The sequelae of this syndrome are present in many of our subjects. The following case is illustrate:

Case No. 1. Congenitally deaf due to prenatal rubella, he never attended school and grew up in inner city Chicago. As an adult without any language or linguistic symbol system, he roamed about the city for a number of years before finding work in a wholesale produce market where he loaded and unloaded trucks. All went well for him until two events interceded: First, his mother died, leaving no one to love or to guide him. Then his "coworkers" introduced him to alcohol and to sex with prostitutes.

Soon thereafter, he was charged with killing a prostitute. Diagnosed incompetent to stand trial due to mental retardation, he was committed to an institution. After one year of observation, it was determined he was not mentally retarded, but was uneducable with regard to sign language, possibly due to aphasia. Thus, he remained legally incompetent, but with the reason changed from retardation to a lack of the linguistic capacity to participate in his own defense.

He then returned to the city where he grew up, the market where he worked, and his habit of frequenting bars and prostitutes. Six months after his release, he was charged with mortally stabbing another prostitute. He allegedly hid her in a closet, and checked out of the hotel where the corpse was found three days later. The case was highly publicized because it was the second time this deaf man was charged with murder. This time, he was tried, convicted, and sentenced to 14–25 years in prison. Four years later, this conviction was overturned on the grounds that "it was constitutionally impermissible, absent trial procedures, to effectively compensate for his disabilities". The court then declared him to have a mental illness (Primitive Personality Disorder) and ordered him confined to a psychiatric institution for therapy and extensive instruction in sign language with the ultimate purpose of preparing him to stand trial.

Now, almost two decades later, it is apparent that he will never learn enough sign language to be legally competent. He has been confined without a trial either in jail or in hospitals for 20 years for the second alleged crime and five years for the first.

In this case, the court recognized Primitive Personality Disorder as a valid psychiatric diagnosis (*People v. Lange*, 1978). However, few forensic psychiatrists, psychologists, attorneys, or judges are aware of this clinical picture or of its forensic significance, as it is unique to prelingual deafness, a low incidence condition that few ever encounter. Because the presence of this disorder almost always means that the defendant is incompetent to stand trial on linguistic grounds, it poses a disposition planning challenge to the justice system which it has yet to resolve.

METHOD

Our subjects were 28 individuals who were deaf, charged with murder, and who were referred for diagnostic evaluations, often to assist in preparation for trial or treatment planning. All received psycho-diagnostic testing by an experienced

certified psychologist who has specialized in the evaluation of individuals who are deaf (M.V.) over the last 30 years. A minority were also provided psychiatric evaluation by a Board-certified psychiatrist who also specializes in work with deaf individuals (A.S.).

Evaluations were conducted in jails, psychiatric hospitals, attorneys' offices, or other clinical settings across the United States. They consisted of extensive interviewing in American Sign Language (ASL) and psychodiagnostic testing (usually Wechsler Performance IQ, Bender-Gestalt, Thematic Apperception Test, and the Draw-a-Person Test). In addition, specific academic achievement testing and an informal assessment of knowledge of legal terminology and sign language skills were conducted. Detailed neurological histories, including past head injuries, seizures, and other central nervous system (CNS) insults, including the etiology of deafness, were obtained. In more recent years, diagnostic medical testing, such as MRI, EEG, and PET scans, were also available for some subjects.

RESULTS

Sample Demographics

Age, Ethnicity, Race, and Gender

The sample was composed of 27 males and one female (Table 1) which is comparable to the national gender rates for all murders (DOJ, 1995). In regard to racial/ethnic descent, the sample was primarily composed of Caucasians and African Americans which differs from the racial and ethnic composition of murderers nationally. More murderers in the national sample were Hispanic or of

Table 1. Comparison of deaf murderers' and their victims' characteristics to hearing murderers and their victims

Characteristics	Deaf murderers	Hearing murderers ^a
	N = 28 (%)	N = 4070 (%)
Murderers		
Male	96	92
Female	4	8
Caucasian	46	27
African American	47	37
Hispanic	7	32
All other races	0	3
Between ages 17 and 34	82	76
Victims		
Male	42	83
Female	58	17
Caucasian	71	26
African American	22	33
Hispanic	7	38
All other races	0	3

Note. Victims of deaf murderers, N = 31, victims of hearing murderers N = 4200.

^aDOJ (1995).

other racial descent (Asian, Native American, Pacific Islander, Alaskan Native, etc.). The mean age of subjects when the homicides were committed was 22.8 years, with a range from 9 to 43. The majority (82%) were between the ages of 17 and 34, which is similar to national figures (Table 1).

Onset, Etiologies, and Degrees of Deafness

Twenty-six offenders were congenitally and/or prelingually deaf. Of the remaining two, one lost his hearing at age 15 and the other at age 6. Twenty-three had auditory losses so great as to preclude hearing and understanding spoken language. The remaining five had some residual hearing which enabled them to hear occasional words under optimal, quiet, one-to-one conditions.

Many of the identified etiologies of deafness of our subjects (Table 2) are known causes of brain damage. This is especially true of rubella which, in addition to deafness, results in the high prevalence of numerous comorbid conditions, including seizures, cognitive impairment, pervasive developmental disorders, impulsiveness, behavior disorders, etc. (Chess & Fernandez, 1980; Vernon & Andrews, 1990, pp. 41–46). Of the 25% who had a rubella etiology, two were also premature, increasing the likelihood of perinatal co-morbidities. The rubella deafened individuals, as a group, had multiple chronic behavioral, learning, and psychiatric problems consistent with the broad nature of the damage done by the rubella virus (Vernon, Grieve, & Shaver, 1980).

Subjects with other etiologies offered a slightly different clinical picture. Those with genetic deafness (21.4%) were not so broadly multiply disabled as the rubella group, with the exception of a mentally retarded individual (case 15) who had an unnamed genetic syndrome involving several additional physical anomalies. Two of the three individuals who were deaf secondary to Rh incompatibility had multiple handicaps, including cerebral palsy (cases 5 and 10). The third, by contrast, was a star athlete, but had a history of seizures and impulse control problems (case 6). The two individuals born prematurely had very low birth weights and impairments in addition to their deafness, which may have reflected a congenital infection or genetic syndromic etiology, albeit unrecognized (cases 7 and 17). In seven cases, the cause of deafness was unknown.

Co-morbid Conditions and Disabilities

Although complete physical examinations were not conducted as part of this study, six of the offenders had significant and visually apparent physical disabilities. Four (14.3%) had congenital anomalies, and two (7.1%) had a visual impairment. A seventh subject reported significant physical disabilities, that were less visually apparent. Other disabilities identified in subjects included cardiac problems, small stature, hypogonadism, spasticity, and bilateral hernias (see below for neurological history).

Psychiatric History

Eight of the defendants (28.6%) had a history of inpatient psychiatric care, and an additional nine (32.1%) had been treated as outpatients. Thus, 17 (60.7%) had

Table 2. Age at time of murder, performance IQ (PIQ), etiologies of deafness, psychiatric diagnoses, and English literacy grade equivalents by subject

Subject	Age	PIQ	Etiology of deafness	<i>Psychiatric diagnoses</i>		English literacy grade equivalent
				Axis I	Axis II	
1*	19,27	90	Rubella	305.00 Alcohol Abuse	315.31 Mixed Receptive–Expressive Language Disorder	Uneducated
2	26	110	Measles Encephalitis	305.00 Alcohol abuse	301.7 Antisocial Personality Disorder	3.0
3	20	108	Rubella	V71.09 No diagnosis	V71.09 No diagnosis	5.0
4	9	110	Genetic	304.80 Polysubstance Dependence Chronic otitis (as an adult, 309.81 Post Traumatic Stress Disorder)	312.8 Conduct Disorder (as an adult, 307.7 Antisocial Personality Disorder)	4.0
5*	24,24	79	Rh Factor	305.20 Cannabis abuse Hyperbilirubinemia	301.7 Antisocial Personality Disorder Primitive Personality Disorder	Illiterate
6	20,22	118	Rh Factor	312.34 Intermittent Explosive Disorder Hyperbilirubinemia 305.0 Alcohol Abuse (345.10 Epilepsy, grand mal)	301.7 Antisocial Personality Disorder	
7*	21	99	Prematurity	305.20 Cannabis Abuse	301.7 Antisocial Personality Disorder 315.31 Mixed Receptive–Expressive Language Disorder	Illiterate
8*	16	93	Unknown	305.0 Alcohol Abuse	301.7 Antisocial Personality Disorder	Illiterate
9	19	112	Unknown	305.20 Cannabis Abuse	301.7 Antisocial Personality Disorder	6.1
10*	23	115	Rh factor	V71.09 No diagnosis	V71.09 No diagnosis	Illiterate
11	30,30	117	Rubella	312.34 Intermittent Explosive Disorder (345.00 Epilepsy, petit mal) (345.10 Epilepsy, grand mal)	V71.09 No diagnosis	7.0
12	19	120	Unknown	300.14 Dissociative Identity Disorder 309.81 Posttraumatic Stress Disorder	301.6 Dependent Personality Disorder	10.0
13	43	102	Unknown	305.00 Alcohol Abuse	V71.09 No diagnosis	4.5
14	17	110	Genetic	V71.09 No diagnosis	301.7 Antisocial Personality Disorder	4.0

15*	16	65	Genetic	312.34 Intermittent Explosive Disorder	317 Mild Mental Retardation	Illiterate
16*	28	104	Rubella	295.30 Schizophrenia, Paranoid Type	V71.09 No diagnosis	Illiterate
17*	17	72	Prematurity	309.81 Posttraumatic Stress Disorder	301.7 Antisocial Personality Disorder	Illiterate
			Prematurity	V71.09 No diagnosis	315.31 Mixed Receptive–Expressive Language Disorder	Illiterate
18	18	114	Genetic	305.20 Cannabis Abuse	301.7 Antisocial Personality Disorder	Illiterate
				302.4 Exhibitionism		
19	28	121	Genetic	302.82 Voyeurism	301.7 Antisocial Personality Disorder	Illiterate
				304.8 Poly-substance Abuse	315.31 Mixed Receptive–Expressive Language Disorder	Illiterate
20	20	104	Rubella	304.80 Poly-substance Abuse	301.7 Antisocial Personality Disorder	Illiterate
					315.31 Mixed Receptive–Expressive Language Disorder	Illiterate
21*	17	70	Rubella	312.34 Intermittent Explosive Disorder	301.7 Antisocial Personality Disorder	Illiterate
			Prematurity	(345.10 Epilepsy, grand mal)	314.9 Attention-Deficit/Hyperactivity Disorder	
22*	28	100	Unknown	305.60 Cocaine Abuse	301.7 Antisocial Personality Disorder	Illiterate
					Primitive Personality Disorder	
23	29	123	Genetic	295.30 Schizophrenia, Paranoid Type	V71.09 No diagnosis	Graduate student
				309.81 Posttraumatic Stress Disorder		
				302.2 Pedophilia		
24*	17	80	Unknown	V71.09 No diagnosis	315.31 Mixed Receptive–Expressive Language Disorder	Illiterate
					Primitive Personality Disorder	
25	36	109	Encephalitis	305.00 Alcohol Abuse	V71.09 No diagnosis	G.E.D.
26*	25	78	Prematurity	305.00 Alcohol Abuse	V71.09 No diagnosis	Illiterate
			Rubella	305.60 Cocaine Abuse		
27	31	99	Rubella	295.30 Schizophrenia, Paranoid Type	V71.09 No diagnosis	3.1
28*	23	80	Unknown	V71.09 No diagnosis	315.31 Mixed Receptive–Expressive Language Disorder	Illiterate

Note.* Denotes subject is illiterate, lacks sign language fluency and does not have intelligible speech.

Table 3. Criminal history and substance use status at time of murder by subject

Subject	Criminal history	Substance use at time of murder
1	Motor vehicle theft Prior jail/prison time	High on alcohol
2	Burglary Assault Drug possession Drunk and disorderly Prior jail/prison time	High on alcohol and/or drugs
3	None	Sober
4	Theft convictions Drug convictions	Sober
5	Burglaries Prior jail/prison time	High on drugs
6	Assault	Unknown
7	Arson	Sober
8	Multiple car thefts Multiple charges for cruelty to animals Prior jail/prison time	Unknown
9	Possession of drugs	High on drugs
10	Abduction and rape of 13 year old girl	High on alcohol
11	None	Sober
12	None	Sober
13	Driving while intoxicated charge Prior jail/prison time	High on alcohol
14	No convictions, but constantly "in trouble"	High on alcohol
15	None	Sober
16	None	Sober
17	Joy riding Purse snatching	Sober
18	Shoplifting Indecent exposure	Sober
19	Shoplifting Illegal drug use	High on drugs
20	Shoplifting Illegal drug use	High on drugs
21	As a juvenile, many assault charges Prior jail/prison time	Sober
22	Long series of rape convictions Long series of burglary convictions Prior jail/prison time	High on crack cocaine
23	Attempted homicide Physically abused animals	Sober
24	None	Unknown
25	Prison time for assault	High on alcohol
26	One assault charge	High on crack cocaine and alcohol
27	Driving while intoxicated Assault charge	High on alcohol and cocaine
28	Driving while intoxicated Hit and run while driving	High on alcohol

previously diagnosed mental health disorders. Of the remaining 11 defendants (39.3%) who had not received mental health services, three had sought help, but services were unavailable.

Psychiatric Diagnoses and Substance Abuse Status

The most prevalent diagnosis was Antisocial Personality Disorder (Table 2) which was present in 50% of our subjects. This is consistent with their high prevalence

(75%) of criminal histories in addition to homicide (Table 3). Eighteen subjects (64.3%) had a history of drug and/or alcohol abuse. Eleven of the 14 individuals diagnosed with Antisocial Personality Disorder also had a history of substance abuse or dependence (Table 2).

Consequently, in our sample the combination of Antisocial Personality Disorder and substance abuse was highly associated with serious other criminal behavior in addition to homicide (Tables 2 and 3). Half of the homicides committed by the subjects occurred while under the influence of drugs and/or alcohol (Table 3), in comparisons with the national rate of 65% (APA, 1993, p. 38). Cocaine was the principal drug abused by 14 of the subjects which corresponds with abuse rates found in the literature for the general population (Satel, Southwick, & Gavin, 1991). Twenty-one percent of the sample had no Axis I diagnoses, while 32.1% had no Axis II diagnoses.

Four of the defendants were psychotic at the time of the murders. Three of these individuals were diagnosed with paranoid schizophrenia (cases 16, 23, and 27), and the remaining individual (case 12) had a Dissociative Identity Disorder. Of the four cases with Intermittent Explosive Disorder (cases 6, 11, 15, and 21), all had long histories of uncontrollable rage attacks. Three of these four cases had grand mal seizures (cases 6, 11, and 21). Case 11 also had petit mal seizures. Case 15 was mildly mentally retarded, with multiple additional genetic defects.

Seven subjects had Mixed Receptive–Expressive Language Disorders, a learning disability that compounds a deaf person's communication difficulties and exacerbates frustration. There was insufficient data to assess the prevalence of learning disabilities. Although not a DSM-IV diagnosis, 13 of the 28 subjects in this sample clearly met the criteria for the previously described Primitive Personality Disorder, as diagnosed by the senior author, using the criteria set by Altshuler, Rainer, and Basilier (Vernon, Raifman, Greenberg, & Monteiro, in press).

Intellectual Functioning and Neurological History

The mean IQ of the sample group was 100.7 (SD = 17.01), which is well within the average range and similar to the distribution found in the general population (Table 2). As indicated earlier, the major causes of brain damage are, in many instances, the same as the leading etiologies of deafness (Braden, 1994, pp. 42–43). For this reason and because brain damage can be a causal or mitigating factor in homicide, it is important to look at the prevalence of this condition in deaf offenders and defendants. Eighteen of the 28 subjects had medical or psychodiagnostic evidence suggestive of brain damage. Of these, 8 had medical histories of brain damage (cases 1, 2, 5, 6, 7, 11, 13, and 21), 1 had mental retardation (case 15), 3 had seizure disorders (cases 6, 11, and 21), 1 had aphasia (case 1), 7 had learning disabilities (cases 1, 7, 17, 19, 20, 24, and 28), and 16 had pathological performance on the Bender-Gestalt Test (cases 1, 2, 5, 6, 7, 8, 11, 13, 16, 17, 19, 20, 21, 26, and 27).

Communication Characteristics

As previously indicated, prelingual deafness imposes its greatest limitations in the area of communication (Vernon & Andrews, 1990, pp. 97–117). The 28 subjects in

this sample were especially communicatively disabled, relative to the deaf population as a whole. With regard to speech, only one individual could talk intelligibly (case 25). By contrast, 67.9% of the sample had no intelligible speech. The remaining 28.5% had speech that was between 10 and 30% intelligible. Lipreading skills were not formally assessed. Relative to sign language, 14.3% had none, and 21.4% knew only a few signs. Fewer than half (42.9%) were fluent users of ASL, and the remaining 21.4% had "marginal fluency," meaning they could communicate basic needs and some concrete, everyday events in sign language.

The third basic dimension of communication which has heightened importance for a deaf individual is literacy skills. Over half (57.1%) were functionally illiterate, meaning they read English at a grade equivalent of 2.9 or lower, while 25% read at between a third and fifth grade level (Table 2). The remaining 17.9% read at sixth grade level or above, three of whom had some college, one at the graduate level.

These communicative issues bear particular relevance to overall competency, especially competence to stand trial. The 13 cases marked with an asterisk in Table 2 were illiterate, lacked fluency in sign language, and could not speak intelligibly. Together they had a mean IQ of 86.2. Each of these represents a probable case of linguistic incompetence to stand trial, ergo, legal incompetence. Thus, under current law they either have to become linguistically competent, which is often impossible, or else be released.

Homicide Characteristics

Past Criminal History

Twenty-two subjects (78.6%) had previous criminal records (Table 3). Of these, 12 had extensive and ongoing involvement with criminal activities. The majority carried weapons such as guns and knives. All of these are likely factors contributing to the homicides (Table 3).

Victims

There were 31 victims in this sample because four of the offenders killed two individuals each (cases 1, 5, 6, and 11), and one victim was killed by two subjects simultaneously (cases 19 and 20). Females were victims at a much higher rate (58%) than found in a national sample of murder victims (17%) (Table 1). With regard to hearing status, 7 of the victims were deaf (22.6%) and 24 (77.4%) had normal hearing. When the victims were deaf, the homicides tended to be due to domestic arguments, infidelity, jealousy, or to be concurrent with rape. The racial/ethnic descent of the victims in this sample differed greatly from that of the general population in that the majority were Caucasian (Table 1). There were significantly fewer African Americans and Hispanics than reported in national murder data (Table 1).

Crime and Weapons Data

Of the victims, 7 (22.6%) were killed with guns, 12 (38.7%) with knives, 5 (16.1%) by strangulation, and 5 (16%) with blunt objects. One (3.2%) was a victim of

arson, and one was an infant battered to death. Of the 31 deaths, the premeditated crimes involved the use of guns in 6 (19%) of the cases. Nationally, 68% of murderers use guns, 13% knives, and 11% use fists or blunt objects (DOJ, 1995).

Legal Disposition

In 15 (53.6%) of the cases, the offender was found guilty, and in 3 cases (10.7%) a plea bargain was arranged. Five (17.9%) were released due to linguistic incompetence and/or a failure to give the Miranda Warning in a manner comprehensible to the deaf defendant. In these latter cases, evidence obtained was sufficient to prove guilt but was not admissible due to the failure to adequately 'Mirandize.' Three defendants (10.7%) were incompetent to stand trial due to mental illness and were referred to psychiatric hospitals. Two cases are currently pending. Although the three defendants with firm diagnoses of Primitive Personality Disorder were, in our opinion, incompetent to stand trial, all but one trial (case No. 1) terminated with either a plea bargain or incarceration following a guilty verdict.

DISCUSSION

Competence

As stated earlier, certain deaf defendants represent a unique form of linguistic incompetence not seen in any other group (Vernon & Andrews, 1990, pp. 137–138). These individuals with this profound limitation, which includes illiteracy, poor understanding of sign language, and alexithymia, are linguistically unable to participate adequately in their own defense and/or in some cases even to understand the charges against them (Vernon and Raifman, 1997). This extreme life limitation, i.e., living without a formal language system, is often difficult for persons inexperienced in deafness to understand or to imagine.

Additionally, there are few formal signs for most legal terms and for much of the vocabulary used in court proceedings (Vernon & Raifman, 1997). In general, participation in court necessitates fluency in a symbolic language system in which legal terms can be explored and ultimately understood. Even if the court engages a competent sign language interpreter for deaf individuals with minimal language skills, such as those with Primitive Personality Disorder, it is often impossible to convey the equivalent of what is said in court by using sign language comprehensible to these individuals. Terms such as "plea bargain," "prosecutor," "the right to remain silent," "district attorney," "felony," "misdemeanour," "sentence," "probation," and numerous other words are extremely challenging or impossible to interpret (Vernon & Raifman, 1997). These terms can be spelled letter by letter on the hand, but deaf defendants who are functionally illiterate (grade level 2.9 or below) will not understand the words even when spelled by the interpreter. In addition, such deaf defendants lack the understanding of English syntax required to use or understand the words in sentence form, even if they are able to read them individually through fingerspelling.

Most recently, efforts have been made to overcome this obstacle by engaging a team of interpreters, one who translates from spoken English into ASL, and the relay or “intermediary” interpreter who translates from ASL into natural gestures, mime, or the individual’s homesigns (idiosyncratic and individualistic nonverbal signs). Although the end product of this endeavour does not approach equivalence, it is often the best that can be done. As a result, even under these ideal circumstances, such deaf defendants are very often unable to grasp what transpires in court proceedings and cannot adequately participate in their own defense. For example, they cannot challenge a police officer’s description of an arrest or grasp the chronology of events described in court. Thus, such linguistic deficits often render them incompetent to stand trial.

By contrast, hearing persons who are illiterate can hear and understand court testimony and communicate with their lawyers orally. If they do not understand English, an interpreter can translate the proceedings into their language, e.g., German, French, or Spanish. Most foreign languages do have equivalent terms for legal jargon and other English words used in court or can be explained in culturally relevant terms. As previously indicated, deaf individuals with minimal language or who lack a symbolic language system may not have the capacity to encode or organize their thoughts using the medium of language. They may also lack the capacity to abstract that which cannot be seen in the here and now. In addition, these individuals may have no understanding of how language conveys internal experiences such as thought, intent, or affect. This state of affairs far exceeds the problems of usual courtroom translation.

The judicial system has never developed a satisfactory way to deal with deaf defendants who are linguistically incompetent (Vernon & Raifman, 1997). In some cases, such defendants have been put in prison or mental hospitals and provided lessons in sign language (*Jackson v. Indiana*, 1972). For a few, this is successful, but for most it is not possible for them, as adults, to learn enough meaningful sign language in a reasonable amount of time to enable them to gain the linguistic skills needed for competence to stand trial. This can be seen in a number of our subjects, e.g., case 13 (*Holmes v. State of Florida*, 1986). The other obvious issue that comes into play is that once the deaf defendant understands the ultimate goal for the sign language training i.e., standing trial for their crime motivation for learning understandably wanes. An example of this is the following:

Born deaf, case 13 was a late adolescent in a special education class in Miami high school at the time of the homicide. Often truant and with an extensive record for juvenile offenses, he had a reading level of grade 1.8 and was not fluent in sign language. Streetwise, suspicious, and aggressive, he was resistant to authority and had numerous anti-social behaviors. One day, while he was fighting with another student on the school playground, a young male teacher interceded. A struggle ensued, which culminated in the youth fatally stabbing the teacher.

A preliminary hearing was conducted to determine whether case 13 was competent to stand trial. Two experts in deafness were called to testify. They disagreed, one stating that the defendant had the linguistic capacity to participate in his own defense and to understand the charges against him. The other, who was fluent in sign language, evaluated case 13’s reading level using a standardized reading test, administered a performance IQ test, and made a clinical assessment of his sign language skills. Based

on this data, it was his view that case 13 was incompetent to stand trial on linguistic grounds and that he was incapable of ever mastering sign language or English well enough to become competent.

The judge ruled in favor of the former expert and the trial began. It soon became apparent that, due to his linguistic incompetence, case 13 could not understand what was transpiring in court nor could he respond coherently to questions asked of him. The judge then stopped the trial and declared the defendant incompetent. Consequently, case 13 left court a free man despite the presence of many witnesses to the crime, the murder weapon with his fingerprints in evidence, and an overwhelming amount of other proof of his guilt.

In our 28 cases, the evaluators found 13 subjects to be linguistically incompetent to stand trial or sufficiently restricted linguistically so that a strong case could have been made for their incompetence. Of these, 3 were ruled linguistically incompetent by the court and 2 were released despite their probable guilt. One remains confined in a state psychiatric facility, and after twenty years is still being taught sign language on the assumption that he will eventually learn it well enough to be linguistically competent to stand trial. The other cases were plea bargained, and some were released due to the inadequate administration of the Miranda Waiver. A few had special trial arrangements made to adjust for their communication limitations (Vernon & Raifman, 1997).

Just as it is wrong to release deaf people guilty of murder because they are linguistically incompetent, it is also illegal to try persons who cannot participate in their own defense or understand the charges against them. Unfortunately, because linguistic incompetence is a condition unique to only a segment of the prelingually deaf population, the judicial system has not established the procedures necessary to handle such cases. As we have indicated, sometimes the court recognizes the dilemma and is forced to release guilty killers (*Maryland v. Barker*, 1977). In other instances, the linguistic incompetence is ignored. Defendants are tried as if they were competent, or plea bargains are negotiated. Special adjustments in trial procedures have begun to be discussed in the literature (Vernon & Raifman, 1997).

Problems of Psychological and Psychiatric Diagnoses

In addition to the special problems posed by the unique issue of linguistic incompetence, deaf defendants pose some difficulties in psychiatric and psychological diagnostic assessment, e.g., identifying condition such as psychosis and mental retardation. Federal legislation, particularly the Americans with Disabilities Act of 1990, mandates equal access to all public and private services, such as psychiatric or psychological assessments and court proceedings. Case law supports the provision of a qualified sign language interpreter for those deaf individuals who communicate preferentially in American Sign Language (*Aikins v. St. Helena Hospital*, 1994; *Mayberry v. Von Valtier*, 1994; *Vacco v. Mid Hudson Medical Group*, 1995). One recent court ruling found that therapists working with deaf individuals must, themselves, be fluent in sign language and knowledgeable about deaf culture, meaning that the use of a qualified interpreter does not meet the criteria of providing equal access in psychotherapy (*Tugg v. Torvey*, 1994). These

rulings raise liability issues for psychiatrists and psychologists, especially those rendering forensic evaluations in homicide and other felony cases (Raifman & Vernon, 1996).

Deafness can mask psychopathology in some cases, and in others it can create an illusion of pathology when it is not present (Vernon & Andrews, 1990, pp. 203–230). Hence, in addition to the issue of evaluation for linguistic incompetence to stand trial, psychiatric and psychological experts in homicide and major felony cases involving deaf defendants need to be familiar with the unique problems posed in diagnosing psychiatric disorders in deaf individuals.

Miranda Waiver

One of the basic guarantees of the U.S. Constitution is that all citizens of the United States must be informed of their legal rights at the time they are arrested and prior to questioning by the police. The rights involved are those covered under the Fifth and Sixth Amendments to the Constitution which have been affirmed by the Supreme Court (*Miranda v. Arizona*, 1966). A key issue is that the burden is with the State to secure a *knowing, intelligent* waiver of these constitutional rights from the accused (Vernon & Coley, 1978).

Written and Oral Administration

The exact wording of the Miranda Waiver varies from state to state. However, research has shown that the reading level required to comprehend the different forms of the Waiver range from sixth to eighth grade, based on standardized measures of readability (Vernon & Coley, 1978). Only 10 to 15% of prelingually deaf persons achieve a reading level as high as seventh grade (Center for Assessment and Demographic Studies, 1992). Hence, 85 to 90% of such deaf defendants could not be administered their rights in written form.

Sometimes attempts are made to give the rights orally. The average deaf person understands only about 5% of what is said to him by lipreading (Vernon & Andrews, 1990, p. 100). Therefore, it is obvious that to orally administer the Waiver to a deaf person would be a denial of the individual's constitutional rights.

Interpreting the Miranda Waiver in American Sign Language

While ASL is a rich and expressive language, it lacks terms (signs) for many legal, academic, and abstract concepts. For educated deaf persons, this poses no problem. They can either read the Miranda Warnings, or, if they are administered in sign language, comprehend the fingerspelling of words for which there are no signs. However, to fingerspell words and phrases such as "the right to remain silent," "constitutional," "anything you say can be used against you in court," "you have the right to talk to a lawyer and have him present at any time during questioning," "right," etc. to a deaf person who is illiterate, or who reads below sixth grade level and has not mastered English syntax, has little meaning (Vernon, Raifman, & Greenberg, 1996).

Problems in these Administrations

Research elucidating the problems posed by using written, oral, or signed forms of the Miranda Warnings with deaf people reading below a sixth grade level has been previously described (Vernon & Coley, 1978). As a consequence of the problem of administering the Miranda Waiver to deaf suspects, the Police Executive Research Forum, an organization of the 50 largest police departments in the U.S., produced and distributes a video cautioning police officers not to attempt the Miranda Waiver with uneducated deaf defendants, or to question them without the defendants' lawyers present (Vernon, 1992). Expert witnesses addressing behavioral aspects of deafness should be aware of the special issues involving deaf defendants, including the administration of the Miranda Warnings so that deaf defendants are not denied their constitutional right and compelled to witness against themselves or forfeit legal assistance in their own defense. Furthermore, the Waiver inadequately given to illiterate or semi-literate deaf suspects either orally, in writing, or in sign language often results in evidence being inadmissible at trial (Vernon & Raifman, 1997), as happened with three subjects of the present sample (cases 7, 10, and 18). In more than 15 of these cases, there were serious doubts that the deaf defendants had been satisfactorily administered their rights, a problem which might have been prevented had a competent forensic psychiatrist or psychologist been involved.

Many deaf suspects with limited communication skills will often put their signature to documents they do not understand, such as Miranda Waivers, Search and Seizure Permits, leases, loans, etc. (Myers, 1968). They are conditioned to doing this after years of a reliance on those in authority and on the advice of others, particularly in relation to signing written documents. In addition, individuals who are deaf often nod or smile, appearing to indicate their understanding and assent when, in fact, they may comprehend little of what is said (Farrugia, 1989; Higgins, 1980; Stedt & Rosenberg, 1987). For example, they will often initial and sign a Miranda Waiver even though they have no concept of what it means (Vernon *et al.*, 1996). Case 10 illustrates the problem:

Case 10. A 24-year-old congenitally deaf man was brought in for police questioning in the highly sensationalized murder of a young woman. Prior to police questioning, he was ostensibly informed of his legal rights, i.e., given the Miranda Warning. The police claim he waived these rights. What actually happened was that the functionally illiterate deaf man was presented with a copy of the Miranda Warning in written form, which he signed.

A month later, when the suspect was again questioned by police detectives, an attempt was made to give the Miranda Warning in sign language through an interpreter. As he had done before, the suspect signed the Waiver, indicating that he had been given his Rights and understood them. He then signed a written confession given to him, which indicated that he had killed the victim. The issue in both the written and signed administrations of the Waiver remains the same, namely, whether or not the suspect was informed of his constitutional rights in a comprehensible manner. In this case, the court decided that the deaf defendant's poor knowledge of sign language and his low reading level precluded his understanding of the Miranda Warning both in written form and in sign language. Hence, he was found innocent of the charges because the evidence gained after the Miranda Warning was ruled inadmissible (Maryland v. Barker, 1977).

There have been other cases in which deaf defendants were released from murder charges or had them reduced due to the defendant's inability to comprehend the Miranda Waiver (*Minnesota v. Goehring*, 1992; *Oregon v. Mason*, 1980).

Recommended Administration Procedures

To protect against the above and to assure that deaf defendants have the same protections as the general population, all administrations of the Miranda Waiver and subsequent police interrogation should be videotaped (videotape is to sign language what audiotape is to spoken language). When authorities rely on the sign language interpreter's voice translation, they do not have a direct transmission of what was signed. Instead, they have only what the interpreter believes to have signed or says was signed (Vernon *et al.*, 1996).

Determination of whether or not the subject was actually informed of his legal rights when presented in written form can be done by assessing the readability level of the version of the Miranda Warning used as well as the reading level of the subject. To do this, a standardized academic achievement test should be administered to the suspect or defendant, and a readability measure applied to the written version of the Miranda Warning. In case 10, the Stanford Achievement Test for the Hearing Impaired, Primary Battery, revealed the defendant's reading level to be equivalent to grade 2.8, while the Miranda Warning required a reading level of 6th to 8th grade (Vernon & Coley, 1978; Vernon & Raifman, 1997). Thus, the subject did not functionally receive the Warning and was, in effect, denied his constitutional rights.

Forensic experts in cases involving deaf defendants also need to establish whether or not the defendant possesses the sign language competence required to understand and knowingly waive his Miranda Rights when they are administered in this form. A skilled interpreter or communication specialist fluent in sign language may do this through a sign language evaluation. This evaluation should include an assessment of the deaf suspect's knowledge of the actual terms used in the Miranda Waiver. It is also critical to have an assessment of IQ using a performance intelligence test, as well as a copy of the videotaped recording of the administration of the Miranda Waiver and the interrogation which followed.

Brain Damage and Seizures

As previously indicated, the major causes of deafness and of brain damage overlap. For example, meningitis, premature birth, prenatal rubella, head injuries, etc. are leading etiologies of both deafness and brain damage (Vernon & Andrews, 1990, pp. 40–67). Consequently, there is a disproportionate amount of brain damage in the deaf population, some of which contributes to violence and homicide. Thus, it is especially important in the case of deaf defendants to carefully consider the role that this organic brain damage may have played in the crime. Appropriate imaging evaluations and psychoneurological testing are often necessary. The following case illustrates the problem:

Case 11. The defendant, a male, is congenitally deaf due to prenatal rubella, with a seizure disorder, behavioral symptomatology and neurological evidence of generalized

brain damage. In addition to the rubella infection in the first trimester of life, with its pervasive central nervous system involvement, he also had a history of aseptic meningitis and measles encephalitis early in life, and a family history of seizure disorders (Chess, Fernandez & Korn, 1978; Vernon & LaFalce, 1990).

Since preschool, aggressive outbursts, hyperactive behavior, and violence have been presented; he attacked a teacher with a pipe when six years old, frequently assaulted his father (once with a chair), hit a classmate on the head with a metal clock, struck his girlfriend, and threatened to attack her psychotherapist. These incidents of violence were generally preceded by a "glassy stare" and a tremor (postulated to be petit mal seizures). In some cases, following the violence, there would be a grand mal seizure and he would "black out" with postictal amnesia. However, when properly medicated with Dilantin, No. 11 was relatively seizure free and non-violent.

Prior to his double murders, he had an intense love affair with a deaf woman, Angela, which lasted for more than a year. Near the end of the relationship he lost his job, had serious financial problems, and could no longer afford his Dilantin. Without his medication, he experienced increased rage and more frequent petit mal and grand mal seizures.

As the stresses mounted, their relationship worsened and began to include physical violence, for which they both entered into psychotherapy. When her therapist advised his girlfriend to stop seeing him, she agreed to a 30-day separation. This increased his depression and suicidality. When he attempted to visit her despite the separation, an argument ensued, and her mother walked angrily toward him, raised two cooking utensils over her head, and signed "Get out! You're crazy!" He reported that when she moved toward him waving the knife and fork, he thought she was going to attack him.

The next thing he remembered was arousing from a grand mal seizure, lying in a pool of blood, with both his girlfriend and her mother dead beside him from a total of 75 stab wounds.

In court, the defense was that No. 11 did not have control of his impulses at the time of the stabbings, nor was he consciously aware of his behavior (temporarily insane as a function of his chronic brain syndrome and seizure disorder). To support this theory, it was shown from case history data that previous violence was usually preceded by petit mal seizures.

This case has implications for defendants who are not deaf, but who have epilepsy and/or other forms of brain damage who may commit crimes of impulse in an epileptic or seizure state or its aftermath.

Treiman (1986), in a review of the literature on epilepsy and violence, reports that when ictal violence does occur in individuals with seizure disorders, it is triggered when people advance toward the epileptics as if to attack them. In the past, when epilepsy has been presented as part of an insanity defense, the premise has usually been that the ictal episode causes violence *per se*. As Treiman (1986) and Malmquist (1996) have indicated, during a grand mal seizure there may be some random lashing out, but there is little or no capacity for conscious directed behavior. They argue that the use of the insanity defense in seizure related killings makes a mockery of the insanity defense and conclude that the person would have to be hospitalized for life because seizures cannot be "cured." While epilepsy may not be curable, it can often be treated with medication or surgery so as to eliminate or greatly reduce the violent behavior.

The degree to which the seizure condition in petit mal and immediate post-petit mal states renders the individual unable to control his impulse or appreciate the wrongness of his behavior is difficult to determine. It is probable that the uncontrolled firing of the neurons in the brain in petit mal and "semi"-seizure states affects the frontal and temporal lobe functions of the brain, impairing their capacity to inhibit aggressive behaviors emanating from the limbic system. It was this theoretical position that contributed to a plea bargain involving a reduction in charges against case No. 11.

Misdiagnosis and Malpractice

There is a high prevalence of psychological and psychiatric misdiagnosis of deaf defendants, especially those born deaf or deafened prelingually. Errors are most often made by psychologists who incorrectly diagnose mental retardation or mental illness because the wrong psychological tests are administered or the communicative and linguistic implications of deafness are not well understood or accommodated, or both (Vernon & Andrews, 1990, p. 203). For example, the MMPI was given to case 10 who had a reading level of grade 2.8. Contrary to the test's manufacturer's claims, deaf subjects require a tenth grade reading level to comprehend the MMPI (Rosen, 1967) and possibly the MMPI-2. When case 10 marked the multiple choice answer sheet for the MMPI, he did so essentially randomly. Thus, he came out with a psychotic diagnosis which the psychologist felt was substantiated by the jumbled syntax and confused vocabulary of his written language. Such written language is common in prelingually deaf people with low educational levels. It is almost always the result of not having mastered English due to early onset deafness, and language and experiential deprivation, not the result of a psychotic process.

Similarly, this impairment in the comprehension of written English and in writing can result in huge errors in measuring IQ of deaf individuals. Some deaf individuals with IQs as high as 120 have been misdiagnosed and hospitalized as mentally retarded due to these errors (Vernon & Andrews, 1990, p. 203). Such mistakes are usually made because the psychologist uses a verbal IQ test rather than a performance IQ measure with a deaf person who lacks fluency in English. One result is a community poorly served by, and likely to avoid contact with, the mental health system (Steinberg, Sullivan, & Loew, 1998).

With the passage of the Americans with Disabilities Act of 1990, deaf people have been given the legal right to equal access to psychiatric and psychological services (Raifman & Vernon, 1996). Three recent court decisions (*Tugg v. Towey*, 1994; *Concerned Parents to Save Dreher Park Center v. City of West Palm Beach*, 1995; and a consent decree, *Vacco v. Mid Hudson Medical Group*, 1995) consolidate the legal mandate to provide deaf patients with sign language interpreters or signing therapists. If necessary, separate, additional services must be provided to assure equal access. As indicated earlier, in the *Tugg v. Towey* (1994) decision in particular, there is a requirement that the therapist or counselor, and by extension the psychodiagnostician, be knowledgeable about deaf culture and competent in sign language. Although there is also a contrary opinion for medical care (*Banks v. District of Columbia*, 1994), it is clear that if a psychiatrist or psychologist who is

not knowledgeable about deafness becomes involved in the evaluation of a deaf individual charged with homicide or a major felony, the evaluator is ethically and legally bound to provide full access as a consequence of the ADA and recent court rulings related to the act. Court decisions based on expert opinion not meeting the criteria set by these court decisions would also be subject to appeal (Raifman & Vernon, 1996).

Use of Sign Language Interpreters

Practitioners not competent in sign language will need a sign language interpreter when evaluation a deaf suspect or defendant (Steinberg, 1991). However, there are problems involved in using interpreters of any language that those who have worked through them will recognize. This is especially true of sign language interpreters (Vernon & Andrews, 1990, p.297). A main difficulty in using interpreters is that it is impossible to adequately monitor what is being said. In a situation in which the psychiatrist or psychologist is ultimately responsible, control is lost because he/she must depend on what the interpreter believes and states is being said or signed. In the case of sign language, what is being signed is often a matter of great subjectivity and ambiguity for several reasons. One is that, for many English words, especially legal ones, no signs exist (see earlier section). Second, the grammar of sign language is different from that of English. Some ideas, such as those conveyed in the perfect tense or passive voice, time concepts, and conditionals tend to be more confusing in sign language. Third, not only does the skill of interpreters vary tremendously, but the sign language fluency of deaf defendants also has a wide range. In some instances, case 1 for example, the deaf suspect/defendant never attended school or interacted with other deaf people. In these situations, where the deaf person lacks fluency in sign language, it is often impossible to have adequate communication, even with a skilled interpreter. Thus, because a trial is completely language dependent, even with the provision of skilled interpreters, the deaf defendant can be found incompetent to stand trial.

A corollary problem is that when some interpreters cannot fully communicate with or understand the defendant or suspect, frequently they will cope by interpreting what they think may have been stated, unbeknownst to the evaluators. This should not happen. Instead, all parties involved should be informed when the interpreter becomes aware of a communication problem or breakdown during an interpreted interaction. A third problem that arises in much forensic interpreting is the interpreter signing at a level far above the deaf defendant's level of understanding, e.g., this may be done in court in an effort to keep with the pace of the proceedings. More often, it is done because the interpreter lacks the skills to convey the necessary meaning at a sign language level the deaf person can understand.

Although the profession of sign language interpreting is still relatively new, professional training and certification of sign language interpreters is now available in most states. Further, an increasing number of states are requiring licensure of sign language interpreters as a protection for the deaf and hearing consumers who use them, yet are unable to assess for themselves the quality of services delivered by an interpreter. For those involved with forensic evaluation and consultations involving deaf suspects and defendants only professionally trained and certified

interpreters, preferably those with legal interpreting certificates, should be used. Additionally, it may be helpful for the psychiatrist or psychologist to spend 20 to 30 minutes with the interpreter before and after an evaluation to clarify communication and cultural issues, to obtain another opinion on the quality of communication with the defendant, etc.

Experts need to be aware of interpreting issues and bring them to the attention of the court and the attorneys. This is especially true if videotaping of either confessions or interrogation was not done. If videotaped sign language and English interpretation of the Miranda Warning, investigative interviews and/or court proceedings are available for review, sign language experts can be used to identify any inadequate sign language/English interpretation. Such inadequacies have formed valid bases upon which many successful appeals of murder and other felony convictions have been based.

SUMMARY

Deafness and the deaf defendant pose unique challenges for forensic experts and the criminal justice system. These 28 individuals charged with murder and evaluated by the authors demonstrated the impact of an inadequate language/communication system, and the strong association between the neurological impairment associated with the underlying etiology of deafness and violent behavior. All of these problems were compounded by the tremendous frustration deafness imposes. In many ways, this population underscores the manner in which biological, environmental, and social factors converge in the genesis of violence.

Interventions once a deaf individual is suspected in a crime, and certainly after the deaf defendant has been charged, require full access to information both for the defendant and for the individuals involved in the justice system, including experts. Legal mandates assure access, except in the circumstance of linguistic incompetence, which necessitates a more careful and more multidisciplinary approach.

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