

Sign language dysfluency in deaf persons: Implications for interpreters and clinicians working in mental health settings¹

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Introduction

Many deaf persons who come into mental health and rehabilitation programs have significant language dysfluency. Poor skills in the spoken language of the community are common and are a natural consequence of being unable to hear this language. However, the language problems we are referring to are evident in their best language, usually a signed language. In fact, more than half of the deaf patients served on the Deaf Unit at Westborough State Hospital in Massachusetts were judged by the communication specialist to have severe language dysfluency in signing (Glickman, 2009). There are at least four common reasons why deaf persons manifest language dysfluency in their best language: 1. Many of the causes of deafness also cause neurological disorders affecting language acquisition. The neurological insults they experience predispose them to developing language and learning problems. 2. Most people born deaf can not acquire spoken languages naturally even with advances such as cochlear implants. The only languages that deaf children can acquire effortlessly are sign languages, and many deaf children grow up without enough exposure to models of proficient sign for them to become proficient signers themselves. Deaf children also experience widely varying language models and often have few models of native, first language users of sign to imitate. 3. Sudden brain injuries, such as those caused by strokes or traumatic accidents, can cause aphasias and 4. Severe mental illness can cause thought disorders affecting language. For any or several of these reasons,

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clinicians are likely to encounter deaf people who are severely dysfluent in their best language. This fact is profoundly important as poor language skills cause or contribute to many of the problems deaf people face. Poor language skills, for instance, is the first and most important characteristic defining the group of deaf persons referred to as “lower functioning,” “high risk,” “traditionally underserved” or “language and learning challenged.”

The purpose of this article is to summarize what we know about sign language dysfluency in deaf people and discuss its’ implications for sign language interpreters and mental health clinicians. We will focus primarily upon the implications of sign language dysfluency for clinical assessment. Treatment has been addressed elsewhere (Glickman, 2009). We will begin by reviewing the four main causes of sign language disorders in more depth. We’ll follow with a language sample from a deaf language disordered and psychotic patient hospitalized on a specialty psychiatric inpatient unit for deaf people, the Deaf Unit at Westborough State Hospital in Massachusetts. This is followed by a literature review and illustration of best practices for interpreters working with language dysfluent consumers in mental health settings including language samples from patients served by the Alabama Department of Mental Health. Best practices include not only familiarity with several interpreting strategies but also making decisions based on the task demands and available resources (R.K. Dean & Pollard, 2001; Robyn K. Dean & Pollard, 2005) As certified Deaf interpreters (CDI’s) are often brought into situations when deaf consumers are very dysfluent, we also consider the risks and benefits of this practice. Our focus then switches back to discussing some of the implications of sign language dysfluency for clinical assessment. How can clinicians make sense of what these language problems most likely mean? Finally, we conclude with a discussion of best practice for interpreter-clinician collaboration. Best practice occurs when both clinician and interpreter are aware of the problem of sign language dysfluency in some deaf people, the various interpreting options, and how to make some sense of these language problems. Best practice also means that the clinicians and interpreters are skilled collaborators with each other in this challenging interpreting and clinical task (Robyn K. Dean & Pollard, 2005; R. Pollard, 1998a).

Causes of sign language disorders in deaf people

a. Neurological problems related to causes of deafness.

Many deaf persons start out life with neurological compromises associated with the conditions that caused their deafness. One excellent source for a summary of numerous studies of the medical etiologies of deafness is provided by the National Child Traumatic Stress Network (*White paper on addressing the trauma treatment needs of children who are deaf or hard of hearing and the hearing children of deaf parents*, 2006). Table 1 is taken from this source. Another source is the book *The Psychology of Deafness* (Vernon & Andrews, 1990). The leading causes of deafness have been: prenatal rubella, meningitis, prematurity, complications of Rh factor and genetics. Of these conditions, hereditary causes are the least likely to produce multiple disabilities although 1/3 of genetic hearing loss is associated with a trait recognizable as a syndrome (e.g., Down Syndrome, Usher Syndrome, Fetal Alcohol Syndrome), and these syndromes can have multiple associated disabilities. The other four leading causes of deafness can all result in developmental delays, cognitive disabilities, and learning problems effecting language.

Insert Table 1 about here

The experience of the Westborough State Hospital Deaf Unit, corroborated by the clinical literature, is that clinicians often can't get reliable information about causes of deafness in our patients. Deaf patients with language and learning challenges usually cannot tell us, and only sometimes is reliable information available from family, case workers, or past medical records. Vernon and Andrews note that there is no known cause of the deaf persons' deafness 30% of the time. I (Neil Glickman) would conjecture that the percentage of unknown cause is higher in the language and learning challenged group, especially if they come from disadvantaged backgrounds. The early discovery of deafness in a child, followed by a rigorous collection of data and pursuit of interventions, is more typical of educated, resourceful families in the mainstream culture. Deaf children from these families will have had greater efforts devoted to understanding why they are deaf and more resources available for helping them. Therefore they are probably more likely to have a better chance at developing good language skills.

Deaf children, struggling with attention and behavioral problems, may be diagnosed with Attention Deficit Hyperactivity Disorder, but a deaf child without adequate language is highly likely to show problems with attention and behavior and is therefore vulnerable to misdiagnosis. This misdiagnosis can be motivated in part by the desire to seek a simple solution in medication whereas the real solution is the provision of an appropriate linguistic environment. Deaf children may also get diagnosed with learning disabilities, but a deaf child without adequate language is highly likely to have difficulty learning. There may or may not be a neurologically based learning disorder, and in the absence of appropriate language input, this may be impossible to determine. It is much easier, of course, to assume the problem lies in the brain of the child rather than in the classroom and home environments. Deafness etiologies like prematurity, meningitis, prenatal Rubella, CMV, may predispose the deaf child to learning problems, but even in these cases a lack of an appropriate learning environment should be presumed to be the dominant cause. One can only be confident that a cause of language disorder is *not* language deprivation when the child has had early and consistently rich exposure to good sign models. This happens in a minority of instances.

One such example of a deaf child of deaf parents, exposed to British Sign Language from birth, with normal intelligence, was recently published (Morgan, Herman, & Woll, 2007). This child used exaggerated gestures and facial expressions to compensate for poor language competence. He used repeated pointing and exaggerated facial expressions rather than grammar. Samples of his language show repetitions of single signs with few grammatical inflections. Using norms available for signing deaf children, he was found to be more than two years behind in language development. The researchers concluded that his example proves that specific language impairment can exist in deaf signers. They hypothesize that specific language impairment would occur in deaf children with at least the same incidence rate as hearing children; that is 5 -7% of the population. They could only measure this because they had a standardized instrument to use, the British Sign Language Receptive Test, norms, and a deaf child of deaf parents who had full, rich BSL exposure.

b. Language deprivation

Traditionally, when educators talked about “language” problems in deaf children, they were referring to problems in the spoken language of the larger hearing community. Deafness from birth interferes dramatically with the acquisition of spoken language. Determining how to help deaf children acquire language is the central preoccupation of Deaf education. Marschark, in the research synthesis prepared for the National Association of State Directors of Special Education and cited above, notes that there is still no consensus among educators about any one best educational practice. Marschark says that the research does show, however, the importance of an early intervention strategy to later language development. Deaf children who grow up in the optimal linguistic environment are usually those whose parents are fluent signers. They have had the earliest and most appropriate intervention of parents, prepared from the start, to communicate appropriately with them. Early exposure to sign language is central to language development in most deaf children, regardless of whether or not they receive cochlear implants.

The best predictors of language development and academic success, at least in the early school years, include effective mother-child communication, enrollment in early intervention programs, and early use of sign language. This is not to say that sign language will be the appropriate mode of communication for all deaf children. However, on average, deaf children who are exposed to sign language during infancy and preschool years have more effective communication experiences and surpass their deaf peers in language, social and cognitive development. They also show greater language fluencies in ASL and English as adults. Early indications suggest that many children with cochlear implants benefit significantly from exposure to sign language and spoken language because multiple sources of language information tend to support language acquisition rather than conflict with each other. (Marschark, 2001) (p. 39)

Deaf children of signing deaf parents grow up in language learning environments that maximize their ability to develop native fluent language skills. The majority of deaf children, however, grow up with language deprivation because their language learning environments are ill suited for their needs to receive information through their eyes. These deaf children acquire language later than their hearing peers who share a common language with their parents, and they are confronted with less consistent and skilled language models. Some deaf children are raised without ever seeing a competent signer. Some will be able to make use of medical interventions like cochlear implants and hearing aids, especially if they had a foundation in spoken language before losing their hearing or if they have better residual hearing, but for most their best chance at native language abilities will occur through a rich signing environment. In

clinical settings, we see many deaf persons who were raised in exceedingly poor language learning environments. They never developed native language abilities in any language, and this fact, much more than their deafness, is profoundly handicapping. The phenomenon of deaf persons without competent language skills is well known in the Deaf Community and among mental health, rehabilitation and educational professionals who work with deaf people. It is generally unknown among mental health professionals unfamiliar with deaf people, leading to high risks of misdiagnosis when dysfluent deaf individuals present for assessment and treatment in non-specialized mental health service settings.

The Deaf Unit at Westborough State Hospital in Massachusetts was, for 23 years, a specialty psychiatric unit for deaf persons with severe emotional and behavioral problems. Research stemming from this unit showed that the majority of deaf persons served there were not fluent users of any language (Black, 2005; Black & Glickman, 2005; Glickman, 2009). Since there is no reason to think the Westborough Deaf Unit was atypical, this is presumably the case in all specialized mental health and rehabilitation programs for deaf people. The literature on “traditionally underserved deaf” bears this out (Bowe, 2004; Dew, 1999; Mathay & LaFayette, 1990) as does most of the literature on inpatient treatment of deaf persons (Glickman, 2009)

Glickman (2008, 2009) presented examples of the kinds of language errors that were commonly seen among Deaf persons on the Westborough State Hospital Deaf Unit. These language errors were attributed mainly to language deprivation and not to mental illness although it is reasonable to assume that neurological problems contributed as well. These common errors were:

1. Impoverished vocabulary with many signs used incorrectly. The limited vocabulary is the most obvious form of language dysfluency seen, with some deaf patients communicating only with isolated signs or short sign phrases.
2. Inability to sequence events in time. This often includes a lack of signs and grammatical structures to indicate tense. These persons seem unable to tell any story, using a beginning, middle and end, much less the story of their own life. They jump back and forwards in time without indicating that they are doing so. This deficiency also makes it difficult for them to see cause and effect or to use conditional phrasing (if this, then that.)

3. Spatial disorganization. Inability to use the space around the signer grammatically. For instances, referents are not established and maintained in one part of the spatial field. Sign inflection involving movement through space is absent or inconsistent.
4. Syntax. The topic comment structure of much ASL is missing. Subjects are not established clearly. Nor are they related appropriately to verbs and objects. Pronouns (like an index finger to establish a person) may be used without any referent (the equivalent of saying “he” without establishing who “he” is first). Often these patients seem to be listing nouns or sometimes verbs without establishing relationships. They make heavy use of sign repetition as a poor substitute for grammar.
5. Mixture of gesture and pantomime with sign. Because their vocabulary is so poor, these persons make frequent use of gesture and pantomime. While competent signers may do this on occasion, usually for emphasis or for creative storytelling, they have the necessary language structure if they choose to use it, while these persons have no alternative but to act things out.

The treatment challenges when working with language disordered deaf persons are so prominent that the Westborough Deaf Unit ultimately had to devise major adaptations to best practices in cognitive behavioral therapy in order to work with them (Glickman, 2009).

c. Aphasias related to brain trauma

Sign language skills, like spoken language skills, can also be affected by aphasias, as the pioneering work of Poizner, Klima and Bellugi has shown (Klima & Bellugi, 1979; Poizner, Klima, & Bellugi, 1987). An aphasia is an acquired language disorder, usually resulting from lesions to the language relevant areas of the brain. Aphasias can result from strokes, tumors or closed head injuries. Aphasias in hearing people can result in the inability to comprehend language, to form words and name objects, to repeat phrases to speak in a grammatically correct fashion and to be unable to read or write. They may cause persons to invent words, persistently repeat phrases, substitute letters, syllables or words, and alter inflexion, stress and rhythm (prosody) Aphasias can manifest in problems such as difficulty narrating a story in an organized, linear fashion, slow output of words, limited vocabulary, inability to access specific nouns, use of the wrong noun or wrong verb, use of a pronoun without an antecedent (saying “he” before establishing who “he” refers to), and inability to express the point of a story. (Ash et al., 2006).

Unfortunately, these kinds of problems are seen frequently in deaf persons who have experienced language deprivation. Poizner's work alerts us to the possibility that these problems can be caused by brain injuries as well and points out the difficulties of differential diagnosis.

Poizner, Klima and Bellugi studied sign language patterns in deaf people who suffered brain damage from strokes. They were the first researchers to systematically study errors in signing. Indeed, they note at one point, that "deaf people have complained that we are interested *only* in their errors."(p. 97.) They found that the neurological organization of sign language in the brain was essentially a left brain phenomena, just as it is in spoken languages, and that aphasias manifest in sign languages just as they do in spoken languages. They came to their conclusions by studying the sign language abilities of a small number of deaf persons who previously had been fluent signers for whom they had clear evidence, such as brain imaging, which identified the location of the discrete brain damage. The following case studies are taken from their work (Poizner, Klima, & Bellugi, 1987)

One such patient was Gail D, a deaf woman who was previously a fluent ASL user, who, following a stroke, signed mainly with isolated signs, without any of the grammar of ASL. They compared her language skills with those of Judith M, a deaf autistic woman, raised in a deaf family, who did not begin signing until age 5. Judith M's language problems were developmental whereas Gails' were acquired late in life. Because Judith was raised in a linguistically rich signing environment, her language problems could be attributed confidently to neurological problems related to her autism. Judith's signing was noteworthy for echolalia, or repetition of what was signed to her, and for other autistic like behaviors. Gail had difficulty constructing signed sentences, as did Judith, but Gail previously had this ability, and made great efforts to sign appropriately now. Judith never had the ability to use ASL fluently and, unlike Gail, did not seem troubled by her difficulty communicating.

Another fluently signing deaf woman who suffered a stroke, Karen L, maintained her grammatical abilities but made mistakes within the parameters of signs themselves. That is, she used the wrong hand shapes, movements, or places of sign articulation. She also had difficulty establishing pronominal referents (i.e., who does the "he" refer to?) Other deaf patients who suffered strokes affecting the right hemisphere, where spatial organization skills are based, made mistakes with the palm orientation of signs. However, most or all of the grammatical abilities of

deaf persons suffering right hemisphere strokes remained intact. This important finding proved that the spatial properties of ASL are handled by the language and grammar portions of the brain, not those concerned with visual-spatial organization

A different kind of aphasia was found in Paul D, a deaf man who, prior to his stroke, was well known for his skill in both ASL and written English. After his stroke, he lost all ability to communicate, but over a few years most of it came back. However, he continued to make sign errors consistent with what is called Wernicke's aphasia. He substituted one noun for another (e.g., EARTH for ROOM), one verb for another (e.g., QUIT for DEPART), one classifier for another (the vehicle classifier for the person classifier) in ways that made understanding him difficult. He also used sign inflection incorrectly, for instance by using modified signs like WALK CONTINUOUSLY when the uninflected sign Walk was called for, or making up new signs (neologisms) by adding inflections inappropriately (e.g., he turned the sign BRILLIANT into a made up sign that would be translated as ALWAYS BRILLIANTING.) These errors were present in both Paul's signing and written English. For the most part, his language structure was correct in both languages but he couldn't select or use individual words/signs so as to convey his intended meaning. This was not a difficulty he had prior to his stroke.

The study of deaf persons with aphasias demonstrates that sign language disorders may have brain damage suffered in adulthood as a cause. Aphasias in deaf people would not be expected to occur any more commonly than in hearing people, but this research shows that clinicians should be alerted to the possibility, especially when examining older deaf person with evidence of stroke or brain injury. A sudden, dramatic loss of communication ability would clearly point towards the possibility of stroke and aphasia, although it could occur in an acute psychotic reaction. A more gradual loss of communication abilities in adulthood could suggest dementia, especially in the elderly, or a severe mental illness. The patients evaluated by Poizner's team were also all persons with well known fluency in ASL before their accidents. Brain damage may occur, of course, in someone who was not previously a competent signer, as well as someone who is mentally ill; meaning that in practice there may be multiple, compounding causes for a sign language disorder. Indeed, "clean cases," where a deaf person was a well known fluent user of ASL, and then has a discreet brain injury such as a stroke, and suffers an immediate, dramatic

decline in signing abilities, are much easier to diagnose than what is more typically seen in mental health settings.

d. Language dysfluency related to mental illness

Finally, language skills can be affected by thought disorders associated with conditions like schizophrenia. Along with hallucinations and delusions, patients may show disorganized thinking, an inability to put together words, signs and thoughts in a coherent way that makes sense. Patients may, for instance, demonstrate *loose associations* where there is only a marginal connection between one idea and the next. They may be unable to think abstractly, to see patterns or relationships, or to generalize as to what things may mean. They may be unable to think in logical, cause and effect terms. They may make up new words (*neologisms*) or make connections between words based not on meaning, but on sound (*clanging*). The phenomena of clanging has been identified in deaf psychotic patients also with the connections between signs based on their physical properties (handshapes, locations, movements, palm orientation) (Thacker, 1994, 1998). They may become stuck on a word, sign or idea and be unable to move forward in their thoughts (*thought blocking*).

The ability to construct a grammatically correct sentence, while it can be influenced by mental illness, is established through early language acquisition. The failure to inflect a verb properly most likely is due to language deprivation, whereas the hallmark of a thought disorder is the inability to organize or relate thoughts to each other, the “loose” connection between thoughts, and the lack of a reality based orientation to thoughts. People reveal such thought disorders through how they use language, and many of the kinds of errors caused by language deprivation are different from the kind of errors caused by psychosis.

In Great Britain, Alice Thacker has done pioneering work showing examples of thought disorders manifested in sign language (Thacker, 1994, 1998). She found examples of deaf persons with schizophrenia demonstrating the same kinds of thinking problems as hearing people with schizophrenia, only manifest in sign language. In particular she found evidence of:

- a. The linking of a sign to an English word that sounds similar (Interviewer: YOU SAY WOMAN INSIDE YOU HAVE? MEAN WHICH, BODY OR SOUL? Schizophrenic subject: SOUL (conventional sign) SOLE (pointing to bottom of foot). TWO FEET JUMP IN MY MOUTH
- b. Finger spelling backwards or moving signs backwards; placing signs in the wrong location
- c. Connecting signs based on their properties (handshapes, location, movement) rather than on meaning.
- d. Very loose associations; going off topic and not finding one's way back ("derailment").
- e. Repeating a sign or sign phrase or theme unnecessarily.
- f. Copying the signing of the examiner ("echolalia").
- g. Errors in the syntax or grammatical order of signs.

As we have seen, some of these errors can also be found in deaf persons with aphasia and others with deaf persons who have experienced language deprivation.

In an earlier work, Glickman (2009), the lead author attempted to parse out the kinds of language errors most likely due to language deprivation from those most likely due to mental illness and to list language patterns and other behaviors that aid in differential diagnosis. It is hypothesized that the following seven factors most likely provide diagnostic clues that the deaf person suffers from a thought disorder rather than (or in addition to) language deprivation:

1. Inappropriate (for Deaf Culture) facial and emotional expression.
2. Thought content that is not merely off the point but actually bizarre. The looser the connection between thoughts, the more this suggests a thought disorder.
3. Nonverbal behaviors suggesting hallucinations (eyes darting, preoccupation with phenomena unseen to the clinician.)
4. Guardedness, suspiciousness, and volatility. Clinicians communicating with psychotic persons often feel that they may explode any moment. There is a sense that they "aren't there." One does not usually experience this with language dysfluent, non-psychotic persons although they can also be volatile and impulsive.
5. In language deprived persons, the language problems have been long standing. There was not a point when the person communicated better than now. In a thought disordered mentally ill person, there is usually a worsening of communication skills from a previous baseline.

6. The personal appearance and behavior of psychotic persons are often striking and abnormal for their cultural context. Self care is often poor. The person may wear clothing inappropriate for the weather.
7. In most cases, when a patient's language is disorganized due to psychosis, the language will improve as psychiatric medication clears up the thought disorder. When the language is disorganized due to language deprivation, medication will not correct the problem (p. 74)

Just as Poizner et. al., demonstrated that aphasias can exist in deaf people by studying the sign language errors of deaf persons who had experienced brain injuries, Thacker demonstrated that thought disorders can exist in deaf persons by examining the sign language errors of deaf persons with schizophrenia. To make their respective points, the researchers had to study deaf persons who had relatively good sign language skills prior to their injury or illness. Both kinds of language errors would be confounded dramatically if the samples of deaf persons included those with the far more common problem of language disorder due to language deprivation. With this latter group, one can not say that their previously intact signing abilities suffered as a result of a new condition. Rather, their sign language skills were always impaired, and now they have one or more new problems (an aphasia, a severe mental illness), creating language deficit upon language deficit, and probably making it impossible to figure out any single etiology. The case load from the Deaf psychiatric unit at Westborough State Hospital shows that relatively clean examples (proficient signers who suddenly experience a dramatic loss in signing abilities) are rare. Far more common are deaf patients who, as best we can determine, have always signed poorly, who now may *also* have a mental illness. In a mental health setting, aphasias related to strokes or other forms of traumatic brain injuries are easier to rule out because we will have other evidence for such events, and there will be a story about a dramatic worsening of language skills following some event. Language deprivation, on the other hand, is ubiquitous. It will be found in a large percentage of the clinical population (Glickman, 2009). Indeed, when faced with a patient who demonstrates a severe sign language disorder, the most likely cause will have been language deprivation, and this should be the working default hypothesis.

Case example

Awareness of sign language dysfluency in patients served on the Westborough State Hospital Deaf Unit developed slowly. We began with the assumption that most of our patients would be competent ASL users and only slowly came to realize the pervasiveness of the problem of language dysfluency. There is very good reason for clinicians, especially hearing non-native signers, to be humble in their assessments of sign language skills in deaf people. These assessments depend on a great deal of specialized linguistic and clinical expertise. They also usually require a team as it is rare to find one individual who has all the clinical and communication skills required. However, in a specialized treatment program for deaf mentally ill people, it is possible to assemble and develop that expertise. The Deaf Unit at Westborough State Hospital existed for 23 years with reasonably stable staff. In its' last few years, mental status exams were done with this kind of careful expertise. Patients were routinely videotaped signing, and the clinical and communication team would study language samples together, identifying language deficits. This enabled the team to draw broad distinctions between language errors associated with language deprivation vs. those associated with thought disorders. (Glickman, 2007, 2009). Sometimes patients had poor sign language skills for several of the reasons cited above.

One such person we'll identify as Silvia. She experienced a very linguistically impoverished childhood, growing up deaf in a Spanish speaking third world country where she received minimal schooling and very poor exposure to any sign language. As an adult, she had limited contact with deaf people for many years. She experienced multiple kinds of serious trauma and she is also someone we believed to have developed schizophrenia. Our Deaf communication specialist Michael Krajnak interviewed her, asking common questions, and filmed her response. As an exercise, we had our three nationally certified, experienced mental health interpreters, all familiar with this consumer, as well as Michael and myself (Neil Glickman, not an interpreter but a skilled signer very familiar with this consumer), view the same videotape independently, and all attempt to transcribe through glossing² the first ten

² "Because ASL is not a written language, researchers in the deafness field have developed a method of using English words and various symbols to describe the content, syntax, and grammatical features of a given ASL statement. This is necessary to accurately describe critical features of ASL such as classifiers and other hand shapes, sign movements, directions of movement, and nonmanual markers, such as grammar indicators that are

minutes of it. Each was also asked to provide a more fluid translation in the third person, and to describe the language skills and deficits. In this interview segment, Silvia is seen talking to and about an apparent hallucination, which is identified here with the sign GHOST and an idiosyncratic gesture she uses for it. Presented here is the glossing done by Michael and then all five of our attempts to translate what she said during the two minutes of this interview. The language sample presented here is representative of the entire half hour interview.

Glossing:³

--*What's your name?*

NAME S-N ghost S-I-L-V-I-A (sign name).

--What's the ghosts' name?

ghost S-A-N-D-E-S-A NAME UNDERSTAND BROTHER NONE {DOCTOR} NONE work?/arrest YES HERE {DOCTOR} NONE shrugs work EXPLAIN INFORM +++ [signs garbled] UNDERSTAND +++ OIC TEACH FINISH ghost ghost

Translations:

1. Name is S N. Ghost, I am Silvia. Ghost Sandesa is the name. Understand brother no doctor no work, yes here doctor none don't know work. Explain inform understand. Oh I see, I taught ghost.

conveyed only by facial expression. This written descriptive system is called *gloss* and is the standard manner in which people write about ASL language samples" (R. Q. Pollard, DeMatteo, & Lentz, 2007)P. 11

³ The following codes are used here:

+++	repetition
()	describing the action
{ }	Spanish Sign Language
<u>underlined</u>	Gesture
[]	Garbled/Not Clear signs

2. Name is SN. There (to hallucination). Name is Sandesa. (in response to question from interviewer). She switches to talking about herself. I am Silvia (spells and shows name sign). Points to hallucination. His (?) name is Sandesa. No brother. No doctor, here (pointing down to indicate here) Arrest (or WORK, unclear) Yes, here is doctor (using what may be Spanish sign or may be gesture for “doctor”). No doctor. Shrugs as in “don’t know”. Work (or arrest). Yes, I explain and inform many times. (sign mumbling). I really understand. (Uses a sign that may mean “oh, I see” but this isn’t clear). I taught. Ghost (hallucination)
3. I’m Silvia, Ghost’s name is Sandesa. Me or ghost have brother none, doctor none Doctor arrest or (work?) no inform, teach understand that’s all. Brother friend mama
4. Name S. Name with an F. I am Silvia. Silvia this is my sign name. That person F, Sandesa. You know? They have no brothers. They were arrested, yes and arrested and had to explain a lot and let them know. They understand and teach F, Sandesa. All done.
5. He has no brother, no doctor. She is now signing unclearly about work or being arrested. Yes... here there is no doctor. I don’t know. I explain, inform, inform, (with the wrong grammar on her face). Do you understand? Understand? Forever or Oh really. I taught done. ghost ghost.

All five staff spent time discussing the kinds of language errors Silvia showed. Looking at the interview as a whole, we noticed the following problems:

1. Her sign production was poor. She made mistakes with palm orientation, sign locations, and signing movements.
2. She signed outside of the normal signing space.
3. She was not using any regular ASL syntax, such as object-subject-verb.
4. She used brief sign phrases rather than whole sentences. She does not pause clearly enough to distinguish one “sentence” from another.
5. She repeated signs unnecessarily.

6. Pronominalization was missing.
7. Facial grammar was inappropriate. For instance, she stuck her tongue out (the “th” adverb normally indicating something done sloppily or carelessly) with the sign INFORM but she appeared to indicate a more emphatic emphasis inconsistent with the tongue being out.
8. She mixed signs and gestures and may have incorporated signs from another sign language (we couldn’t be sure.) She mouthed some Spanish words while signing. For instance, while signing NEXT-DAY, she mouthed “mañana.
9. She appeared to be signing TEACH when she meant LEARN.
10. There was no clear narrative with a beginning, middle and end. She appeared to make references to events in the past and then move to current events without any clear segway. There were no time or tense indicators except for an occasional FINISH sign.
11. The sign that she is using to indicate the hallucination is made up (an F handshape, palm frontward, moving downward from neck area with a shaking movement)
12. She did not use the spatial field to distinguish different locations, for instance, to identify where she grew up as distinct from here.
13. She jumped from topic to topic (ghost, brother, doctor, mama, police or arrest, slapping and eating a sub, etc) without clear segways.

In addition to these language problems, Silvia consistently dialogued with what we all took to be an hallucination. She gave this hallucination a name, Sandessa, but later referred to it as SS and SSSSSS. This patient is someone who has suffered from dramatic hallucinations for a long time. She is profoundly deaf, probably from birth. We can’t really be sure that she “hears voices” as this is normally understood, but there is no question in our team that she talks and signs to something and receives messages back. This is probably the clearest evidence we have for mental illness in addition to language deprivation and dysfluency.

All five evaluators struggled to understand her and to interpret adequately her dysfluent sign language. We agreed on many of the kinds of errors we saw. This kind of exercise was very liberating for this team because it freed us from the assumption that our patients must be making sense and that we had to make sense of what they were communicating. It helped us see the value in describing and analyzing the language patterns of patients when they show this kind of severe dysfluency.

The Deaf Unit team had the luxury of having native signers to draw upon to validate these impressions⁴. The language patterns of patients became a frequent topic of discussion. After a session in which interpreters would interpret for a dysfluent patient, someone might comment that “you were making her sound much more clear than she really was.” Our hearing psychiatrist, who knew very little sign, became much more tuned in to the language patterns of patients. As a team, we became equally concerned with what our patients said with how well they said it.

Interpreting for Deaf Persons with Language Dysfluency: Literature Review and Core Strategies

There is very little written on the subject of interpreting for deaf persons with language dysfluency. A literature review found 16 publications that mention the problem but only four provide any substantive discussion of the issue (Glickman, 2007; Karlin, 2003; R. Pollard, 1998a, 1998b) . No research has been conducted examining the effectiveness of varying interpreter responses to this challenge.

Tracie Karlin (2003) outlines the types of language errors made by deaf persons with schizophrenia, based on Alice Thacker’s work (Thacker, 1998) and discusses strategies for interpreting them. She explains that clinicians are often less interested in the specific message the patient communicates than in what the language patterns reveal about the consumers’ mental world. She favors, therefore, interpreters commenting on their behavioral observations, when potentially relevant to the purpose of the interview.

⁴ One can’t emphasize enough the need to be careful with such judgments. They should not be made by persons without an exceptional level of signing and interpreting ability. Hearing people who are not native signers should always check out their conclusions with linguistically informed native signers.

When facing schizophrenic sign, the message is not often as important as the cognitive process it reveals. This means your voicing, “I am Jesus Christ, and I am very smart and can fly” might not be as useful to a clinician as you saying, “he appears to be talking to someone invisible to us. He is telling them, ‘I am Jesus Chris. I am very smart and can fly.’”

Karlin also quotes from the RID Standard Practice Paper, “Interpreting in Mental Health Settings,” that “The interpreter can provide information and opinion related to the communication process, but not on the therapeutic process.” (R.I.D., 2007) In other words, it is well within the interpreter’s role to comment on a person’s language and communication abilities, if appropriate to the context, but not to offer an opinion about what language skills and deficits mean clinically.

Robert Pollard has written the most extensively on the subject and examines the interpreting role with dysfluent patients as a part of a mentored curriculum for mental health interpreters, including a section on strategies for interpreting with language dysfluent consumers (R. Pollard, 1998a). Pollard’s curriculum goes into some depth about the interpreting strategies recommended by the Registry of Interpreters for the Deaf in their standard practice paper (R.I.D., 2007) In this article, we draw most heavily upon his work.

Pollard identifies four strategies that can be used by mental health interpreters for interpreting dysfluent communication. *These are: use of the first person, third person, descriptive and glossing.* Each of these strategies can be illustrated with reference to a specific kind of language error.

First person is the strategy interpreters are most used to. The interpreter voices what the person signs as if he or she were that person. (e.g., “I feel sad today.”) This works best when the consumer’s language is reasonably clear and intact but the consumer is showing a distinct mood or varying his speed, tone or intensity. An example would be a consumer who is signing very slowly and with much effort, as if gravity is weighing down heavily on him. The interpreter could slow down the rate of speech used when voicing for the consumer and show the effort exerted through pauses, sighs or dragging the word out.

Some consumers may speak rapidly. If they are difficult to interrupt, their speech is described as “pressured.” Pressured speech can often be conveyed well with first person with the interpreter emulating the speed and intensity as closely as possible.

Third person is the strategy of saying “he or she is saying that...” Sign language interpreters are taught to avoid this normally and may think it represents bad interpreting. For instance, when hearing people who have not used interpreters before use the third person, saying, “tell her that...” it is common for interpreters to respond that “you can speak to her directly as if I am not here.” However, sometimes it is better for the interpreter to describe the language of the deaf consumer in this manner. For example, if a deaf consumer is very agitated, it could be disruptive for the interpreter to mimic the same level of agitation. This could make a difficult situation much worse. It would be better here for the interpreter to utilize third person strategy. The interpreter could explain in calm voice, rather than trying to match the intensity and specific word choices used by the consumer, that “the consumer/he is screaming that his siblings have stolen his money left to him by an uncle who passed away recently and now he has no money for food or rent.”

The more dysfluent the deaf consumer’s language becomes, the more necessary it becomes to use third person and/or to **describe** the consumer’s language. Pollard recommends the descriptive strategy be considered when the consumer demonstrates such aspects of thought disorder as pressured speech, clanging, neologisms or topic derailment. He also recommends it any time the interpreter is unsure of logic or meaning and when such a description may be clinically useful.

A neologism is a made up word, and as such would have no generally understood translation. It can be hard for interpreters and clinicians to be confident that an unrecognized sign is a neologism. It could be a home sign⁵, a regional variant, a gesture, ethnic variant, or even a sign from a different sign language. Sign language is also more fluid than English and allows signs to be formed in creative and unique ways while still maintaining meaning. An example in English would be “The dilajistics are after me.” An example of a neologism in sign language provided by Roger Williams, Director of Deaf Services for the South Carolina Department of Mental Health, is a consumer who knew that aliens were coming to earth because “computer keypad signed on the nose.” Faced with an apparent neologism interpreters probably should describe it and comment on it. “I don’t recognize that sign. It appears to be something that the consumer has made up, but it is similar to the sign for a “computer keyboard used to input information” but it is placed in an unusual space, on the nose.

⁵ A home sign is a sign used only by the deaf person and people who communicate with him or her regularly, usually family.

In topic derailment, the person changes topics mid discourse and is unable to stay on point. This is illustrated in the following segment of an interview, conducted by the first author and audiotaped, with a hearing psychiatric patient at Westborough State Hospital.

“I’m just afraid of great things happening. I’m not afraid of little wars. I’m just afraid of the... (inaudible). I’m afraid of big wars...and the main problem I’m having over the last days or weeks or so is who I am. They say I’m a liberal intellectual and I’m a Christian sometimes and it’s always a pleasure to be with you. I’m very happy with you doctor. I appreciate all you have done to me. You’ll have to excuse my nastiness. It’s caused by....I was very dismayed. I prayed for a little bit for a boy this morning from a suburban high school who was gay and who was shot to death by another student, by a straight student. Blew him away, you know?”

, This is a direct quotation, but if it were an interpretation from sign, a first person strategy can work well. When this strategy breaks down the interpreter can utilize **third person** narrative and **descriptive** strategies that would look like this: “As far as I can tell, the patient is jumping from topic to topic in a way that doesn’t make sense. He mentions he is afraid of big wars, then says the problem he has had in the last days or weeks is with who he is. He talks about people considering him a liberal intellectual and a Christian but then he changes the topic to say he is happy with you, doctor. He asks you to excuse his nastiness, and says he was upset, and prayed this morning for a boy in a suburban high school who was gay and who was shot to death by a straight student. I’m having some trouble following him.” This same example is made difficult by the first person strategy, because the interpreter will often inadvertently create connecting links that do not exist in the original language. When the interpreter corrects a language problem in this way, it can hide the thought disorder from the clinician. Pollard suggests that in these circumstances, the interpreter request a post session meeting with the clinician to explore this further

The **descriptive strategy** is often used with the **third person strategy** but differs in that it refers to commenting on the person’s language. In third person, the interpreter voices the content “he is saying that...” while in the descriptive strategy, the interpreter then comments on how the language is produced, such as, “he is signing very rapidly and it isn’t clear to me who he is talking about.”

In the example from the hearing patient cited above, no one would think this person was not a fluent speaker of English. People would recognize his skill in English but note that his thinking appears

off in some way. This is usually the case with persons suffering from thought disorders. They do not give the appearance of not being fluent or native users of their language but of being very confused and illogical. They do not usually, for instance, forget subjects, verbs or objects or inflect verbs incorrectly. More commonly, they are just putting thoughts or ideas together oddly. This is in striking contrast to many deaf persons who are dysfluent because of sign language deprivation. In extreme cases, their language skills can be so poor that they are incoherent or barely able to communicate an idea, even to native signers. When a deaf consumer's language skills are exceptionally poor, the interpreter must rely increasingly on third person, description and even on the strategy known as glossing.

Glossing is sometimes referred to by interpreters as a word for word translation of the source material. More correctly, it is the process of applying a common label given to a specific sign for the sake of convenience or expediency. For example, a variety of English words (angry, enraged, livid) might all be glossed with the sign ANGRY even though the different shades of meaning are conveyed through how the sign is made. Glossing can be a technique utilized in interpreting especially when the language is very dysfluent or incoherent.

Pollard (1998a) gives the following example which combines glossing with third person and descriptive strategy. The interpreter explains that he is attempting to provide the clinician with individual words or short clauses that as near as possible represent the language sample he is seeing. He says,

“She is saying something about her mother and a devil and something about an argument, but she is not speaking in complete sentences and she is using past tense and present tense in a way that doesn't make sense to me”. (p. 95)

Additionally, some of the message that is being signed may be glossed as follows....

”Mother...went (somewhere)...devil with red eyes glaring, coming...(something about) shouting and hitting...mother was girl a long time ago...the devil wont' wont....(I missed some here)...you know the devil...I'm 50 years old.” (p. 95)

Many interpreters and linguists are uncomfortable with glossing as interpretation because it can make the deaf person appear to have poorer language skills than he does. ASL and English have very different grammars and literal transliteration from ASL into English, just like such transliteration from

other foreign languages into English, gives the appearance of bad English. For example, here is a glossing of some perfectly grammatical and fluent sentences from ASL:

ME HAPPY TODAY, WHY? TODAY, BIRTHDAY, MINE. FRIEND JOE,
SAM VISIT WILL. TALK. TALK. TALK. FINISH. GO-OUT SHOP, SHOP, SHOP,
FINISH. MOVIE, WATCH. FUN. ENJOY.

The glossing does not capture non-manual aspects of ASL grammar which is one reason that glossing looks like bad English. Glossing should not be used, therefore, with persons who are signing well, and must always be used carefully, with explanations (as Pollard provides above) with hearing people who are unfamiliar with ASL⁶ However, we often fall back on some type of glossing when we attempt to transcribe into written language what a deaf person is signing. Indeed, interpreters sometimes use glossing as an “easy way out” with deaf dysfluent consumers. Psychologically, they may deal with the challenges of such consumers by passing along the confusion in this way. They are saying, essentially, “Here. You guys figure this out.”

If ASL had an accepted, standardized written form, glossing wouldn’t be necessary. ASL linguists have developed notational conventions to represent the grammatical features of ASL (such as facial expressions and sign inflections) that are not captured well in glossing, but few people other than linguists and sign language teachers know these conventions. Thus, whenever glossing is done, it inevitably makes the deaf person appear even more language impaired. Glossing may be more acceptable with clinicians who have some familiarity with ASL and who want in certain situations to know specifically the signs that are being used, as much as possible.

All these strategies can be summarized by using the familiar children’s song, “Jack and Jill.” For instance, **first person**, told from the point of view of Jill would be:

Jack and I went up a hill to fetch a pail of water. He fell down and broke his crown and I went tumbling after.

Third person is how the story is normally told.

⁶ This could be explained as follows: . “I will attempt to provide you with a rough equivalent of the concepts expressed as one possible interpretation. However, the English words that I am presenting are not a complete representation of the signs being conveyed, as single words do not exist in a vacuum and need the structure of the sentence for its complete meaning to be understood.”

Jack and Jill went up the hill to fetch a pail of water. Jack fell down and broke his crown and Jill came tumbling after.

Glossing would look something like this:

JACK JILL THEY-TWO MOVE UP HILL. JACK FALL ROCK HEAD HIT HURT FINISH. JILL FALL ROLL-DOWN.

The **narrative** strategy would look like this:

The consumer is telling the story of “Jack and Jill.”

In the **descriptive** strategy, comments are added to clarify the person’s use of language:

The consumer is telling the story of “Jack and Jill.” However, his expression is more stoic than I am used to seeing. Every time he signs Jill’s name he adds (as in a side comment) “kill son, kill mother.” His left hand is fidgety, not producing language, but moving in a short quick movement.

Finally, although interpreters use this less frequently, one could cite one more strategy in which background information is provided:

The roots of the story, or poem, of Jack and Jill are in France. Jack and Jill are said to be King Louis XVI - Jack -who was beheaded (lost his crown) followed by his Queen Marie Antoinette - Jill - (who came tumbling after).

Interpreters would be using this strategy if they provided clinicians with information on the deaf person’s language history. For example, if the clinician asks the consumer the question, “who is the President of the United States?” and the person responds with the name of the president of the National Association of the Deaf, the interpreter might provide this information to the clinician. It would be useful to the clinician to know that the person understands the concept of “president” and did not make up this name. The clinician could then probe further if he or she wishes. This strategy was used above in the example where the interpreter explained that a person with deaf siblings who attended a deaf residential school would normally sign more proficiently than the person being interviewed.

Interpreters need to be careful to limit their comments to their areas of expertise (R.I.D., 2007). Sometimes clinicians unfamiliar with deaf people and interpreters ask the interpreter to make clinical judgments such as “is he hallucinating?” or “why doesn’t she make sense?” The interpreter’s expertise is

in the area of language and culture. As someone who is not trained to make clinical assessments, an appropriate response would be to help the clinician understand the interpreter's role. The interpreter could say, "I'm not trained to make that type of determination. What I can provide you is access to the person's language and also discuss how they are using language"

Overall, best practice for interpreters involves becoming familiar with all these strategies and using them in combinations as suit the circumstance.

Interpreter decision making: using the demand control approach to select interpreting strategies

Interpreter methods will vary, depending not only on the cause of the dysfluency, but the setting, goal of the environment and many other factors. Dean and Pollard's Demand-Control schema provides a tool for analyzing the demands of any given interpreting situation and considering the appropriate interpreting choices, or controls (R.K. Dean & Pollard, 2001; Robyn K. Dean & Pollard, 2005). Dean and Pollard call the variables which influence how something that is said is interpreted "demands." The options or choices that the interpreter has for making the spoken or signed message intelligible to the other are called "controls." Each transaction will present challenges (or demands) unique to that transaction and will, necessarily require different approaches (or controls). Language dysfluent deaf consumers present especially difficult demands for interpreters. These demands are compounded when the clinician knows nothing about deaf people and when both parties hold unrealistic expectations for what interpreters can accomplish. The demand control schema gives interpreters a way of discussing these challenges and will be drawn upon here in relation to interpreting for language dysfluent deaf persons.

The strategies discussed in the literature review focus primarily on dysfluent language that can occur as a result of mental illness. As noted above, there are other possible causes of language dysfluency in deaf people. The far more common cause is sign language deprivation, and the kinds of language errors that such language deprived persons show are typically different than persons with intact language who develop mental illnesses.

Interpreting choices include simultaneous or consecutive timing. Most sign language interpreters work in what is referred to as simultaneous modality. In simultaneous interpreting, the target message is produced a few or several seconds behind the source message, while the interpreter is still receiving the source message. The processing of the message happens very quickly. In consecutive interpreting, the interpreter renders the message into the target language

after the person, whether it be the speaker or signer, has stopped producing the source language. This option takes longer but allows the interpreter to more completely process the meaning and implications of the message.

Consecutive interpreting can be useful to the interpreter in mental health settings when working with dysfluent consumers since it allows for a fuller, more accurate understanding of the source-language message to be understood before interpreting it into the target language. Consecutive interpreting also allows the interpreter time to assess if the language produced is typical or to identify what patterns of language dysfluency are exhibited. It also has the added advantage of providing at least some 3rd person descriptive narrative of dysfluent language to the therapist as a part of the interpreted message.

While there are many reasons why an interpreter would choose consecutive interpreting, there are times within mental health where an interpreter might choose to utilize simultaneous techniques. For example, when a client is very incoherent, the interpreter may be unable to mentally hold on to the message, and consecutive interpreting may be impossible. The interpreter might explain that the message doesn't make sense and then gloss it simultaneously. There may also be times when the consumer is an above average speech reader and is hypervigilant about the interpreter's word choices. In this case, delaying the interpretation or providing commentary on the language might hinder the therapeutic process. A general rule of thumb is that the more fluently the language is produced, the more likely the interpreter is to work in simultaneous modality. The more dysfluent the language is, the more likely it is that a consecutive approach would be the most effective.

An example of a language sample from a sign language deprived person follows from the Alabama Department of Mental Health. It is presented first glossed into written English, with spatial and linguistic markers indicated, because this gives the closest exact transliteration of what the person signs. However, this glossing will be incomprehensible to most people.

“P on right shoulder”++ YOU KNOW “P”++ fs-PFT “P” “POSS”left”
DORM++ POSS”left” DORM SHE IX-loc”right” TROUBLE++ “sigh” (hands
on knees) (pause) (open mouth). MAD ME MAD TROUBLE MAD ALL fs-
EVERS”left” [fingerspelling not clear] NO-PROBLEM (shocked face) ME

UMMM, ME UMMM, “zip-my-lips” UMMM ME “ ”!oh!” ”calm-down” ME
 ”calm-down” ME (negative head nod) fs-WISNERS [fingerspelling not clear]
 fs-WINESI [fingerspelling not clear] ME ENTER”left” HEAR CARRY-OUT
 TRASH ALL DAY ME !FINE! (pause) HEAR “talk++-right ear” YES (body
 leans to right) YES CAN HEAR(y/n-q) YES CAN HEAR(y/n-q). ME (body
 leans to left) “talk++” HEAR++ “talk++-right ear” fs-WISWERS
 [fingerspelling not clear] INTERPRET EXPLAIN QUOTE ME ALL-DAY ME
 KNOW-THAT SERVE REALLY-not! (pause) (open mouth) WORK ME
 WORK ME WORK. TEACHER++ WRITE++ PAPER WRITE ME fs-
 WISPNWS [fingerspelling not clear] ME TABLE EXPLAIN ME CL:5”area-
 left” CL:5”area-left to center”CL:V”chairs-multiple placements of chairs”++
 (NMS:mm). ME TALK++ CHAT++ DEAF HARD-OF-HEARING DEAF
 HEARING (2h)NONE DEAF. HEAR++ (1h)NONE HEAR++ (1h)NONE
 HEARING NONE HEARING NONE.

Interpreting this in the usual first person technique doesn’t help much. Using first person, the interpreted message would sound something like this:

“P” a person named ‘P’ you know ‘P’? Her Dorm. She’s in trouble. I’m mad, I’m mad. Trouble mad. All. Every. No problem. I, umm, umm, zip my lips, umm, me. I calmed down. I enter hear carry out the trash all day. Fine with me. Can hear people talking, yes, yes. Can hear? Yes. can hear? I talk a lot, hear, talk a lot. The interpreter explains to me all day. I know that they really didn’t serve. I work, I’m working. The teacher writes a lot on paper and I write to.....I, table, I will explain about the chairs all over the place. I talk and chat to deaf, hard of hearing and deaf people. Deaf people can’t hear. I can’t hear people at all.”

Utilizing third person narrative and descriptive techniques consecutively the interpreter could offer the following interpretation.

“The consumer, Billy, is discussing a female whose name begins with a ‘P.’ (the name was spelled out, but was unclear) this individual appears to have some association with the dorm. He is stating that the female may be in trouble or has caused some trouble and that he is upset about it. There is some information that I am not understanding. He seems to be telling himself to calm down. Billy is fingerspelling something, which is not clear, that is something like ‘WISNERS.’ He has now switched topics and appears to be talking about carrying out the trash. It is something that he has been involved in all day. He is talking about hearing and repeating the sign for ‘hear’ several times and stating that he can hear or that the person WISNERS can hear and interpret. He is again talking about work and a school setting including a teacher and writing and placement of chairs. He is fingerspelling a word. I’m uncertain if it is the same word, but it is similar. He is talking about talking and mentions deaf, hard of hearing and hearing people (possibly communicating with people of varying hearing loss?) and the fact that deaf people cannot hear.”

Clearly, this is a vast improvement. Providing additional descriptive information for the clinician on the way the message is conveyed may be even more helpful.

“The consumer is signing as if the story is urgent. The story frequently jumps from the present to the recent past to his childhood without any indication of shifts in time or topic. Individual names are not spelled out completely. Many words are poorly or incompletely formed and could be representative of a number of meanings. For example, I’m not sure if he means hearing people or that he can hear and the meaning is not clear from the context. Also, I’m not sure if it is an interpreter present or that someone is explaining information to him because the sign is produced almost as a combination of the two signs. There are several times when signs are repeated, and seem to indicate emphasis or clarification. There appears to be an element of disbelief, and possibly frustration, throughout most of the message. There are

some signs that I am not familiar with and could possibly be a gesture used with his family or variant of the word.”

The third person descriptive and consecutive technique is less distressing for interpreters because it allows them to reveal the form of the dysfluency which they observe. It also affords interpreters an opportunity to process the content of the message more fully and in a more accurate and coherent manner. This is more useful to the clinician.

There are multiple demands upon the interpreter in this type of situation. Interpreters are likely to consider their control choices, resulting demands and consequences of those decisions. Some of these that an interpreter might consider are:

- Interpreters often do not feel comfortable voicing incomplete and incoherent sentences.
- Interpreters may be unsure whether the dysfluency is a fact or whether the problem lies with their own inabilities.
- Interpreters may be concerned about the opinion of the clinician or consumer who may think that the problem lies in the interpreters' lack of sufficient skills.
- Interpreters may be concerned that the clinician may draw inappropriate conclusions about the deaf person's intelligence or over generalize to draw wrong conclusions about limited language and cognitive abilities of deaf people.
- Many interpreters are trained to think that when there is a communication problem, the source is always the poor skills of the interpreter. This is connected to the idea that “the consumer is always right” (or always fluent) and it is also connected to a desire to present deaf people in their best light. This makes interpreters reluctant to reveal such language problems.
- Interpreters often fear that when the deaf person is not presented in the best possible light or the outcome is an undesirable one, that they will be blamed by the deaf person and, by word of mouth, the Deaf community, for their perceived lack of skills or inappropriate attitude.

- Interpreters are taught that it is important to match the register⁷ of consumers so that intelligent deaf people sound equally intelligent in translation. But what about the deaf person who is not clear or coherent or intelligent? Interpreters may be uncomfortable matching the register when it reveals the deaf consumer in a less flattering light.
- Sometimes clinicians may not be interested in or have time to discuss nuances regarding language skills. If the interpreter senses this to be the case, he or she knows that providing this kind of expert interpretation will actually be unwelcome.

Clearly, it takes a great deal of skill and confidence for an interpreter to know whether, when they don't understand deaf consumers, the problem lies with themselves, their consumers (or, for that matter, with incoherent, unskilled or insensitive clinicians). This is one reason why mental health interpreting, like legal interpreting, requires very advanced skills. Nonetheless, the goal should be accuracy, presenting the language skills and deficits as objectively as possible.

One of the most important controls is a pre-assignment understanding of the goal and resources of the clinical environment. For example, what is the clinician's goal for the session? Is the clinician primarily concerned with communicating, as in a counseling session, or is the clinician doing a mental status exam where understanding how the consumer uses language is crucial? How experienced is the clinician in working with deaf people and collaborating with interpreters? Can the interpreter obtain a pre-session with the clinician (a control) during which these issues can be explored? These demands shape the interpreters decision making

Interpreters assessing demands and employing controls perform a kind of dance where they are continuously analyzing and when necessary changing their interpreting strategy. For instance, the interpreter adjusts her strategy based on her assessment of the clinicians' prior experience with deaf people and approach to this particular task. If the clinician seems overwhelmed, perhaps experiencing the "shock withdrawal paralysis syndrome" that sometimes accompanies first encounters with deaf people (Schlesinger & Meadow, 1972), the interpreter

⁷ 29

⁷ Register is the level of discourse used for a particular purpose or in a particular social setting. They are identified as frozen, formal, consultative, informal and intimate.

may choose to offer more support and education. If the interpreter sees that the clinician is brusque and uninterested in the language nuances, she may decide to do the job as efficiently as she can and not offer any education or guidance. On the other hand, when the interpreter sees that the clinician is open, receptive and strongly motivated to understand the language dynamics, she may be more willing to reveal and discuss the language dysfluency she is observing. The interpreter may also consider other concurrent demands (Dean and Pollard, in press) such as how much time is available. If little time is available, the interpreter may stick to first person and add brief comments like “this part is unclear” or “I’m unsure what he meant here.” When more time is available, especially if there is the possibility of a post-session, the interpreter can obviously offer much more information.

Another pre-assignment control that the interpreter can bring is the knowledge base about language dysfluency. Interpreters may want to seek out training, therefore, on the most common kinds of language problems, the most common reasons they occur and the best strategies for interpreting them. While interpreters would want to avoid overly liberal decisions such as stating, “the consumer is psychotic” or “the consumer just produced a neologism,” realizing that such phenomena exist is likely to be very helpful. Gaining this knowledge can assist interpreters when they realize that sometimes the consumer really isn’t clear. This facilitates an effective dialogue with clinicians.

Once the actual interpreting has begun, controls include those presented earlier in this discussion such as decisions to use first person, third person, narrative/descriptive or glossed techniques. They may also include making adjustments to interpretation such as signing slower, using less movement, voicing in a way that does not exacerbate an emotionally charged setting, utilizing listing techniques, gesture, pictures, or manipulatives such as toy figures and other visual tools, etc. The controls listed here and presented throughout the article are not exhaustive. Ideally, the clinician will be involved in helping the interpreter make these decisions because then they are working effectively as a team. Some examples of this decision making process, with the interpreter using different controls, follow:

The setting is the intake assessment and the clinician asks the consumer, “Do you know what day it is today?” The interpreter chooses to sign TODAY WHAT? This interpretation is actually not as clear as the English question. The clinician may be asking the day of the week

but the consumer may think the question pertains to the weather. The consumer may, therefore, not respond in the way the clinician expects. Maybe the consumer is psychotic or perhaps he has language or cognitive problems or maybe the question as signed is too vague, as in this example. The interpreter might therefore interpret the question like this: TODAY MONDAY TUESDAY WEDNESDAY WHAT? This is probably more directive and specific than the clinician wanted. The interpreter could also say to the clinician, “I have asked him your question. However, it is very common in ASL to offer suggestions or further guidance on the type of answer you want, like an example. This would be considered an appropriate translation. Would you like me to do so?”

The same question might be asked as part of the morning community meeting. In this case, the group leader is less interested in an assessment of mental status and more interested in orienting patients about the world around them. Knowing this, the interpreter may be more willing to sign TODAY MONDAY TUESDAY WEDNESDAY WHAT? without consulting with the group leader. The environmental situation (i.e., the purpose of this meeting) leads to the interpreter making a different interpreting choice (i.e. using a different control.)

Another setting finds a forensic psychologist working with an interpreter to determine whether a patient is competent to stand trial. The psychologist asks, “do you know the main job of the jury?” and the interpreter signs J-U-R-Y PEOPLE SITTING-IN-TWO-ROWS, FOR-FOR⁸? The patient signs back mouthing “TRAVEL” while nodding yes. The interpreter could just provide this translation but it would be more helpful for the interpreter to comment, “the signs for JURY(sitting in rows) and TRAVEL are somewhat similar and the consumer seems to be confusing them. He is responding yes but I believe to the concept of travel. Would you like to clarify or rephrase the question?” However, if the setting is a group meeting and the therapist asks the same question, the interpreter might choose to correct the patient, “NO. TRAVEL NO. MEAN PEOPLE IN-COURT SITTING-IN-ROWS. In this latter situation, the goal of the environment, a demand, is to seek participation from consumers and to educate them, not to assess their competency to stand trial. This leads the interpreter, assessing her controls, to a different decision.

⁸ FOR-FOR? Is a common gloss for a sign meaning “why?”

Post assignment controls include the ability to have a post-session conference with the clinician to discuss the communication and interpreting dynamics that occurred. Interpreters also gain more controls as they learn more about language dysfluency and obtain supervision from experienced mental health interpreters and clinicians.

Another post assignment control is examining the dysfluency that occurred during the session. The Alabama Department of Mental Health has utilized a Communication Assessment to examine language abilities and to help analyze language discrepancies. This assessment tool is presented in Table 2. Interpreters, both hearing and deaf, as well as signing therapists can utilize this as quick checklist to document patterns of language anomalies to discuss with the team or therapist later. While the interpreter would most likely not be checking items off during the session, it does provide a basis for various types of language patterns to watch for and to discuss in a post session conference.

Insert Table 2 about here

Another example follows, this time of a language sample from an interview with a deaf individual who grew up with a deaf brother and sister and attended a state residential school. He suffered a traumatic brain injury from a car accident in his mid twenties, and his language skills declined significantly after that accident.

Interviewer: YOUR NAME WHAT?⁹⁹

Consumer: J-A-M-E-S-J-O-N-E-S me (names changed for confidentiality)

Interviewer: LIVE WHERE?

Consumer: live where? T-Y-L-E-R (city changed for confidentiality)

Interviewer: OLD HOW-MUCH YOU?

⁹⁹ The interviewer's ASL is glossed here to illustrate that the interviewer is not language dysfluent in English. The glossing just makes it appear so.

Consumer: 17-19-35

Interviewer: SCHOOL WHERE?

Consumer: S-C-O-O-L

Interviewer: WHERE?

Consumer: M-O-N-O-T-Y

Interviewer: NAME MOTHER WHAT?

Consumer: MOTHER J-A-N-E-T N-J-S

Interviewer: FATHER NAME WHAT?

Consumer: FATHER M-C-H-E-L O-J-S

Interviewer: BROTHER SISTER HAVE?

Consumer: BROTHER/SISTER S-E-V-E (taps on forehead)

Interviewer: BROTHER HAVE?

Consumer: HAVE J-O (pause) S-H-A-N-O-N-J-O-S (name changed for confidentiality) ME, GIRL, (taps on forehead)

Interviewer: YOU ENJOY FUN WHAT?

Consumer: H-I-I-J-U-Y (nods head)

A discussion of some demands and controls in the assignment are listed below.

Demands

- The consumer may not be understanding the interpreter. If that is true, how much should the interpreter alter her language to fit the consumer?
- The consumer is signing unusually slowly. Should the interpreter also slow down to an unnaturally slow speed?

- The consumer has fingerspelled incorrectly. The interpreter knows that it is common for deaf people to misspell English words and names, but this information could be clinically significant. Should the interpreter repeat the names with the same misspelling (MCHEL OJS for MICHAEL JONES) or present the names as if they were correctly spelled?
- The consumer's signing is not reflective of what one would expect from a deaf person who has deaf siblings and attended a state residential school. It is very likely that the person signed more fluently earlier in his life. The clinician would probably not know this, but it is very significant information diagnostically. Should the interpreter offer these observations?
- The interpreter has no prior knowledge of the consumer's language skills before the session begins. Should the interpreter arrange for a pre-view meeting?

Pre-Assignment Controls

- The interpreter can ask to review the consumer's chart, including psycho-social background, medical history, diagnosis and current level of stability.
- The interpreter can inquire about the language ability of the consumer, if known.
- The interpreter can ask the clinician if there is anything significant the interpreter should know based on their previous experience.
- The interpreter can go into the therapist's office and explain to the therapist that you she will be introducing herself to the consumer and briefly assessing language needs.
- The interpreter can discuss with the prior interpreter or an interpreter who has worked with this consumer before how they perceive the language needs of the consumer.

During Assignment Controls:

- One control is the use of first person simultaneous method of voicing with the inclusion of some descriptive comments. For instance, the interpreter could say, "He is fingerspelling his father's name as MCHEL OJS, it appears that some of the letters may be missing or in the wrong order or he is fingerspelling SCHOOL as SCOOOL".
- The interpreter could utilize first person simultaneous method and spell the names back as they appear.

- The interpreter could voice the fingerspelled names as intended, for example, Michael Jones, rather than MCHEL OJS and then meet with the therapist after the session to provide additional information on what was seen during therapy.
- The interpreter could use third person consecutive/narrative and state that “The consumer is responded to the questions normally by copying the last word that you voiced and then appears to be processing the information and providing a response in a slow and awkward manner. Many of the names are not spelled correctly. Most of the responses are on the level of one word to short phrases.”

Post-Assignment Controls

- The interpreter can meet with the clinician to explain that the language is not typical for someone with his educational experience and language exposure.
- The interpreter, depending on the goal of the environment and whether his or her assignment will continue beyond this session, could consider use of a communication specialist, gestures, pictures, manipulatives, etc. for future appointments.
- The interpreter could continue expanding their own fund of knowledge base in working with consumers who are dysfluent by reading articles, taking trainings, etc.

Thus, the interpreter has many options and goes through a complicated decision making process. The demand control schema provides an effective guide for such complex decision making.

Using a certified deaf interpreter or communication specialist

When most hearing interpreters are asked how they work with extremely dysfluent consumers, their response is often, “call in a certified Deaf interpreter (CDI).” The use of such a communication specialist, who is typically a Deaf individual who has exceptional communication abilities, including in visual gestural communication, is one solution to communicating with deaf people with severe language dysfluency. Both the Deaf Unit at Westborough State Hospital in Massachusetts and the Bailey Deaf Unit at Greil Hospital in Alabama rely heavily upon a staff communication specialist whose many roles include that of

relay¹⁰ interpreter between staff who do not sign expertly and language dysfluent deaf patients. There are now programs to train and certify Deaf relay interpreters and the role of CDI is becoming increasingly recognized. (Bienvenue & Colonomos, 1992; Boudreault.P., 2005; Forestal, 2005)

However, in the spirit of the Demand-Control Schema, with every new control, such as the addition of a CDI, there are resulting demands. There may be few individuals qualified to work as a Deaf interpreter or communication specialist, especially outside large populations of the Deaf community or in rural areas. When the same hearing interpreters are questioned about how frequently they actually work with communication specialists, the answer is not often, even in assignments with language dysfluent consumers. There are even fewer communication specialists who are trained to work in mental health settings. While a CDI may be extremely helpful for the purposes of communication, when the clinician is interested in understanding what the consumer understands, the addition of a CDI can muddle the process considerably. If, in counseling, the addition of one interpreter changes the dynamic between clinician and consumer, the addition of two interpreters may change the dynamic into something clinicians are very unprepared for

An example of a communication specialist, acting as a CDI, working with an interpreter, follows:

A forensic psychologist was interviewing a deaf consumer to determine his competency to stand trial. The hearing forensic psychologist asked “Do you know who the judge is and what their role is?” The hearing interpreter signed this for the Deaf relay interpreter. The relay interpreter in turn proceeded with various interpretation attempts. The hearing interpreter provided a narrative interpretation of what was going on for the forensic psychologist explaining that,

¹⁰ Relay interpreter is usually a deaf person who is fluent in their native language and has competency in working with home signs, gestures, etc. and usually has an intimate knowledge of the deaf community and its history. They often work with hearing sign language interpreters and may also be referred to as a certified deaf interpreter, deaf interpreter or visual communication specialist.

“The interpreter has used signs that are generally accepted in the Deaf Community to ask your question and the consumer was not responsive and looked somewhat confused or unsure. The interpreter then used an expansive technique where he describes the ‘man up front with the black robe and a gavel’ and the consumer still did not respond in a way that indicated he understood the question. The interpreter is now using a gestural system of describing a television set as a box that you watch and change channels, to which the consumer responded by nodding affirmatively. The interpreter is describing through gesture an old black and white television show, such as Perry Mason, where the judge wore a black robe and had a white wig. The consumer nodded affirmatively that he had recognized what the interpreter was explaining. The interpreter then asked using a combination of basic signs and gestures ‘Who is he?’ ‘What does he do? What is his job?’ and the consumer shrugged that he did not know.”

If the hearing interpreter had chosen to simply wait until the deaf interpreter had completed their interpretation and voiced “no” the psychologist would have no understanding of language skills of the consumer, which is directly relevant to the issue of competence. (Solow, 1988; Vernon & Miller, 2001, 2005; Vernon & Raifman, 1997) The psychologist might even have misunderstood some of the affirmative head nods as responding “yes” to the question asked and be confused when the interpreter voiced “no.” Most clinicians would want this level of detail about the consumer’s language skills and the interpreting process in order to draw appropriate conclusions regarding issues like mental status and competency.

When two interpreters work in tandem, while striving for collaboration, they may struggle over varying opinions regarding the communication process. For example, a hearing psychologist was interviewing a deaf consumer with the aid of a hearing interpreter and a communication specialist/CDI. A question was passed from the psychologist to the interpreter to the CDI, and when the deaf consumer began to respond, the interpreter began to voice the response. However, at that moment, the communication specialist stopped the interpreter and told her, “I will tell you what to voice when I’m done.” The relay interpreter then tells the hearing interpreter to voice a response that the hearing interpreter believes is much more clear than the consumer actually was presenting. The hearing interpreter acquiesced. When asked

later, why she acquiesced to the CDI, the interpreter responded, “because he (the communication specialist) was deaf.”

The dilemma inherent in this scenario is that the hearing interpreter and the CDI now have information about the language level and processing ability of the consumer that the therapist is unaware of and that could be important for clinical assessment. This disconnect can impact not only the understanding that the therapist has regarding the language level of the consumer, but also the clinician and consumer’s ability to develop a therapeutic relationship.

The hearing interpreter deferred to the deaf relay interpreter out of her sense that the relay interpreter was more expert. The hearing interpreter might also have experienced the equivalent of the shock-withdrawal-paralysis that hearing clinicians sometimes experience with deaf consumers in which they become overwhelmed and temporarily forget their skills (Schlesinger & Meadow, 1972). Perhaps the hearing interpreter was simply trying to maintain the peace in the sometimes rocky relationships between interpreters and deaf individuals. However, another hearing interpreter might have felt more confident in her own interpretation and might have believed that the relay interpreter was overly distorting the consumer’s message. This easily becomes territory for power conflicts.

While the use of a CDI or communication specialist is highly valued for their language competency, there are important factors to consider. In the same way that naive clinicians imagine that the provision of an interpreter fixes all the communication problems, the provision of a deaf interpreter can allow the naïve interpreter to believe that now “all is good.” In reality, language interpretation remains a highly complex process even when the client is a fluent language user. It is even more complex when the client is very dysfluent. The interpreter or interpreting team are making complicated choices which can influence the assessments that clinicians make.

The gap between the thought worlds (Namy, 1977) of the clinician and the deaf language dysfluent consumer is immense and the addition of a CDI plus a hearing interpreter does not bridge it. It may enable basic conversations to happen but it is very unlikely to bring the deaf consumer into meaningful therapy. The two interpreters can not, for instance, make up for a

consumer who has little understanding of the purpose and nature of counseling, little inclination or ability to introspect, and little experience of using dialogue as a means of problem solving or developing insight..

On the Westborough Deaf Unit, where more than half of the unit's patients have severe language dysfluencies, the treatment could simply not get done without a communication specialist and other staff with native signing abilities. But this is a Deaf mental health setting where the treatment is already adapted for deaf people. In such a setting, signing clinicians can work alongside deaf interpreters effectively. Whenever administrators at Westborough made efforts to mainstream unit patients, to send them to hearing treatment groups with an interpreter, unit staff struggled to help them understand that these patients lacked the language abilities and psychological sophistication to make effective use of these venues, whether they have one or two interpreters. For the most part, these patients could not be mainstreamed for group therapy with interpreters. (O'Hearn & Robert Q. Pollard, 2008). This is the main reason that specialized Deaf treatment settings are needed. (Glickman, 2009; Glickman & Gulati, 2003)

A patient we'll call Joe was hospitalized on the Westborough Deaf Unit after he told staff in his hearing day program and group home that he wanted to kill himself. Joe was mildly mentally retarded, a graduate of a deaf residential school, and could use ASL to communicate basic needs. The first author, who was the psychologist on the unit, initially thought that Joe's ASL was reasonably good. He used complete, grammatical sentences, had no trouble telling a linear narrative, use tense features correctly, etc. The clinical team determined quickly that Joe was not depressed or suicidal. Rather, Joe lacked the ability to articulate well his feelings and ideas and to resolve conflicts with other people. He was in a living and work environment where most of the people he met signed poorly or not at all. He was extremely frustrated with this so he complained often that he "hates hearing people." Joe was very adept at pretending to understand, at giving the empty nod, and it was very likely that the hearing people around him were also pretending to understand and giving the empty nod. No one who worked with him could help him develop the skill of using language to articulate his feelings, and he periodically became angry and hostile and signed that he wanted to die. In Joe's case, as in the cases of many deaf persons who are referred in psychiatric crises, the clinical challenges could not be separated

from the communication challenges. Joe reported he was suicidal because he literally lacked the words and ability to describe his emotions more accurately, and the linguistically inappropriate environment in which he lived and worked made this problem worse.

When the hearing signing staff on the unit, including the first author, started working with Joe in treatment, we thought we were clear and were understanding each other. But when our communication specialist and other native signers attended the sessions, they checked in with him about his understanding and exposed the inadequate communication that was occurring. They were also able to relay interpret. With this communication assistance, we set up a treatment plan that had Joe practice telling hearing people, including this author, when he didn't understand them, and ask for appropriate assistance. Each time he did this, and did not pretend to understand, he was enthusiastically praised. Not only was this teaching him some important assertiveness skills, it was teaching him the skill of communicating feelings appropriately instead of claiming he wanted to kill himself. Thus, the treatment, in a signing environment, was made possible by the presence of communication specialists. Unit staff were also able to point out to his community providers how the inadequate communication in his home and work setting was contributing to his alleged suicidal crises.

The first author, along with other clinical staff, deaf and hearing, on the Westborough Deaf Unit, had the luxury of being able to do psychotherapy with the assistance of a communication specialist for many years. Of course, it would be better if the clinicians were also native signers, but it is rare to find people who have all the communication and clinical abilities that are needed. Thus, small treatment teams which involve signing clinicians AND a communication specialist seems to be more achievable than finding one super-clinician. Indeed, many of the deaf paraprofessional staff who came to work on the Deaf Unit saw this also and have gone on to pursue certification as relay interpreters. They saw how they could turn their excellent communication skills into marketable jobs.

This being said, clinicians also need to understand that the content of messages always changes somewhat in the process of language interpretation, and it can change considerably when a relay interpreter is introduced. For example, when asked by a hearing clinician "Do you remember the reason why you came into the hospital?" the hearing interpreter interpreted

REMEMBER ONE-YEAR-AGO FIRST TIME COME-TO HOSPITAL? BEFORE HAPPEN WHAT? TELL ME. The communication specialist broke this down further. REMEMBER. ONE YEAR AGO. (shows calendar, flips through pages of the calendar to show time passing). YOU BLOW-UP, HIT STAFF, BREAK WINDOW (acts it out). FINISH. POLICE ARREST YOU. BRING YOU HOSPITAL HERE. REMEMBER? “In this case, the interpreting process introduced the specifics that the clinician wanted the deaf patient to reveal. If the clinician understood that the relay interpreter was changing the question by introducing the answer, the clinician would probably ask the interpreters to ”just ask the question the way I do” But the interpreters would then have to respond that the consumer can not understand the question framed in this general way. The clinician needs to know about this translation problem, and the interpreters and the clinician need to problem solve this together.

While the use of a CDI/communication specialist is often recommended in working with consumers who have dysfluent language, very little has been done to address the unique demands that come with the addition of this team member. The Alabama Department of Mental Health offers an annual mental health interpreter training that also includes deaf interpreters as part of their participant base. But, because neither hearing nor deaf interpreters have training in analyzing demands that may occur within this partnership in mental health settings, the controls are often a default response and may or may not be appropriate. There is little relevant literature on the topic. Research and training for hearing and deaf interpreter teams working in mental health settings is badly needed.

Despite the challenges that may arise when adding another team member to the process. There are many benefits of using a Relay Interpreter or Certified Deaf Interpreter. The Deaf relay interpreter can help ensure a more accurate understanding of the message, provide balance to any perceived hearing vs. deaf hierarchies, provide clarification to obscure or dysfluent language and allow for linguistic or cultural collaboration to ensure that the best possible determination is made.

Implications for counselors

One of the key variables clinicians attend to in consumers is their language skills. When people have poor or unusual language skills, this is clinically significant. It can point to any

number of clinical problems and it can reflect on a person's intelligence and capacity for problem solving and coping with life difficulties. Naturally, clinicians who do not speak the consumer's language are at a huge disadvantage and should be very conservative in drawing conclusions based on the consumers' language skills. They are heavily dependent upon the competence, professionalism and specialized mental health training of interpreters to even notice the language patterns; and they are also at a disadvantage in lacking an appreciation of what is culturally normal for these consumers. These challenges are formidable enough with consumers using foreign languages. Clinicians inexperienced with deaf people, using a disability perspective on deafness, often don't understand that the same cross-cultural factors apply. Even if they picked up somewhere that the Deaf Community has a culture, they will probably not be familiar with how common it is for deaf persons to show sign language dysfluency, why this is so, and what this implies for adapting their interviewing style. Some of the key issues they should consider are these:

1. Are the language problems even noticed? It may be a sad commentary on the state of mental health care of deaf persons to say that it entirely possible, even likely, that severe language problems may go wholly unnoticed by examining clinicians. How could this be? First, mental health clinicians outside of deafness will generally not be familiar with the nature and prevalence of language problems in deaf people and they won't ask the right questions. They are far more likely to notice problems that occur in written English and, unfortunately, to misattributing what these English language problems mean (R. Pollard, 1998b). Secondly, most interpreters working in mental health settings have not been trained adequately with strategies for dealing with dysfluent language. They will be focused on facilitating communication, not on letting the clinician know about the language problems of the deaf person. For all the reasons cited above, the interpreting process is likely to mask the language problems of the consumer. Thirdly, these are the kind of situations into which Deaf relay interpreters may be called. The reason for adding this second interpreter may not be clear to the clinician. The relay interpreter will have even more skills in bridging the communication gap. This is very likely to help with communication, but also very like to cover up the language deficits of the deaf consumer. Fourth, clinicians untrained in working with deaf people, and many otherwise competent sign language interpreters, will not necessarily have a procedure for communicating about the consumers'

language and for collaborating effectively with each other. The interpreter may believe it is inappropriate to do so. The examiner, not understanding the language dynamics, may not know what questions to ask or may not see the interpreter as a full partner in this process. “Just interpret it” can be the message conveyed to the interpreter who, sensing an unreceptive clinician, doesn’t even try to explain what is happening linguistically.

2. The second set of issues occur when the clinician is made aware of the language dysfluency problem but lacks the knowledge to interpret what it means. The most likely misinterpretation will be to attribute the language problems to either a thought disorder or to mental retardation. These are historically the two wrong conclusions most frequently drawn about deaf people by unqualified psychological examiners. Without a solid background in deafness, most clinicians lack the knowledge base to make sense of this problem, and they will attribute it to what they know (thought disorder) rather than what they don’t know (language deprivation in deaf people).

3. Diagnosis of language disorders may be central to the results of the evaluation. They may be central in determining, for instance, whether the person has suffered a stroke. In forensic evaluations, language disorders may be the reason a deaf person is found not competent to face trial (Vernon & Miller, 2001; Vernon & Raifman, 1997). This is not the usual reason hearing persons are found not competent. More commonly, the reason is mental illness or cognitive limitations. For forensic evaluators outside of the deafness field, language deprivation is rarely or never a reason to find someone not competent. This problem almost never occurs in hearing people. Diagnosis also effects disposition. It is much easier to restore a mentally ill person to competence by providing appropriate medication than it is to establish competence (for the first time) in a deaf person who has had language deprivation. The latter would not benefit from psychiatric hospitalization, even on a Deaf specialty unit, if the reason for incompetence is language deprivation.

4. Because of translation difficulties as well as differences in thought worlds and funds of information, psychiatric interviews need to be adapted for deaf persons, especially those with language and learning challenges. Pollard (1998a) has addressed this in the most detail. There are special considerations for each aspect of the clinical interview with the deaf person including differences in initial presentation, presenting complaint, use of language, display and

interpretation of affect, and assessment of mental status. Hearing people normally bring to interactions with deaf people an array of usually unconscious biases (e.g., that deaf people always experience deafness as a terrible tragedy, that speech is a superior means of communication compared with sign) and naïve beliefs (e.g., lip reading is an effective means of communication, deaf people are more inclined to paranoia) and considerable training is needed to do psychiatric evaluations well with deaf people. . Assessment of thinking patterns based on language skills is the most complex and challenging part, and clinicians new to deafness are well advised to be extremely cautious in drawing conclusions based on language that goes through an interpreter or two. (Glickman, 2007; R. Pollard, 1998b) Conducting a psychiatric interview appropriately with a deaf person, especially one with language dysfluency, requires specialized training.

5. If a result of the assessment is a recommendation for psychotherapy, then the nature of the psychotherapy has to be carefully thought through. Psychotherapy is normally a process heavily dependent upon the ability to use language well, and it is arguable how appropriate it is as an intervention for persons unskilled in language use. Clinicians at the Deaf Wellness Center at Strong Memorial Hospital in Rochester, New York, have adapted Dialectical Behavior Therapy so that it is a better fit with deaf people (O'Hearn & Robert Q. Pollard, 2008). Glickman has proposed major adaptations to best practices in CBT for deaf persons with language and learning challenges. These include a more concrete focus on psychosocial skills, a developmental framework and a reliance upon specially crafted pictorial aids.(Glickman, 2009)

6. When the clinician becomes aware of significant language problems in the deaf consumer, she or he will try to make sense of them. As mentioned, there are 4 main causes: neurological problems associated with the etiology of deafness (and maybe resulting in learning disabilities, autism spectrum disorders or mental retardation), inadequate exposure to sign language growing up, mental illness and a sign language aphasia. If reliable information is available about the etiology of the consumers' deafness, then neurological problems may be hypothesized in some conditions (see Table 1). The most likely cause, however, will be language deprivation, and this should really be the default assumption if no other information is available. Of course, patients may have multiple causes for language disorders.

7. Other issues relevant to diagnosis are:

- a. Is there evidence of a higher level of communication skill before the evaluation? If the decline is sudden and dramatic, some kind of aphasia or brain injury is likely. The evaluator should look for other evidence of such brain injury. If the decline has been more gradual, then this may suggest a thought disorder provided other symptoms are present. However, language skills may also decline rapidly in an acute psychotic process.
- b. The evaluator should be conservative in drawing diagnostic conclusions based on language skills alone. The state of our knowledge is still too primitive, the translation difficulties too great, and more than one cause may exist. Some symptoms can have multiple causes. For example, neologisms or made up words may be impossible to distinguish from home signs (used only by a particular deaf person and his or her family) and may occur in people with language deprivation, acquired aphasias or mental illness. Aphasias in adults who previously signed fluently (such as the persons presented in the Poizner book), are probably the safest to diagnose, but such unambiguous cases are probably the exception, not the rule.
- c. Generally speaking, language deprivation is going to affect the ability to construct grammatical sentences (having a subject, verb and object; using grammatical properties well, constructing complicated and abstract ideas, inflecting verbs appropriately) Problems like a missing pronoun or verb or tense structure likely point in that direction. Thought disorders may show some of these problems but the hallmark of a thought disorder is a “lose” idea, the lack of connection between one thought and another, as well as thoughts that are bizarre. Mentally healthy people with language deprivation would not be expected to have bizarre ideas (e.g., the TV sportscaster is sending me a message about my family). Some people with severe language deprivation who communicate mainly in gesture or pantomime can nonetheless be very clear and organized in their thinking. Language patterns that seem more bizarre and loose suggest mental illness. Language patterns that are merely impoverished or ungrammatical suggest language deprivation.

- d. For a clinician to conclude confidently that this deaf person with a language disorder also suffers from a thought disorder, additional corroborating information should exist. (Gulati, 2003) On the Westborough Deaf Unit, staff put great emphasis upon behavioral observations. It also helped enormously to be able to observe a person over time and not have to draw a rapid conclusion out of ambiguous data.
8. We need to recognize the specialized skill it takes to diagnose and/or provide counseling to a deaf person with a severe language disorder. While there are a small number of mental health clinicians who also have this level of communication skill, it is unrealistic, in the vast majority of situations, to expect to find this clinical skill and this communication skill in the same person. Those few clinicians who do have both the communication and clinical skills are usually Deaf or hearing native signers (people who grew up with ASL as a first language). They are a rare and highly valued resource, but it is unrealistic to expect most second language learners of ASL to reach that level of competency.

Hearing people may think that all deaf signing clinicians automatically have this level of skill but, in fact, many do not. Clinicians who are competent but not native signers, and who are able to work easily with deaf people who are competent signers, may be completely unqualified to work with deaf consumers who are severely language disordered. We should not expect them to. Communicating with, much less providing counseling to, deaf people who are severely language disordered is an entirely different skill. *Therefore, the standard of care for assessment and treatment of such persons should be two people: a communication expert, who in most instances would be a Deaf person, and a signing clinician.* Each of these people, in turn, be trained and experienced in mental health and deafness. This standard is certainly high and may be impossible to realize in most settings but it is a more realistic statement of what it takes to actually work well with these persons than pretending that any signing clinician or any clinician with any interpreter is sufficient.

Conclusions regarding best practices

In this article, we've been describing best practice in mental health work with deaf persons with severe language dysfluency. Best practice assumes that clinicians and interpreters both have a great deal of specialized training. However, it is relatively rare for this to happen.

It is far more common for one or both of members of the team to be unprepared for the interpreting and clinical challenges of evaluation and treatment of deaf dysfluent signers. What, then, might be some “rules of thumb” for interpreters and clinicians just becoming aware of this issue?

First, it is important to educate yourself. For interpreters, this means getting specialized training in mental health interpreting and practicing the strategies for interpreting for language dysfluent consumers such as the Mental Health Interpreter Training (MHIT) developed by the Alabama Office of Deaf Services. We think that Dean and Pollard's Demand-Control approach is particularly helpful to guide interpreter decision making (R.K. Dean & Pollard, 2001; Robyn K. Dean & Pollard, 2005). This training approach has been incorporated as a part of the aforementioned MHIT. For clinicians, it means pursuing appropriate consultation and supervision regarding evaluation and treatment of deaf persons. For interpreters, it means seeking supervision from an interpreter mentor and a clinician. Indeed, doing such clinical work with deaf people without the appropriate training is arguably as unethical as that of working with any other group with unique language and cultural issues.

Secondly, it is important that the interpreter and clinician have pre and post sessions with each other in which the language and cultural issues can be discussed. Interpreters and clinicians need to ask each other whether they are comfortable having this discussion. Clinicians need to be aware that the expertise of interpreters usually extends to language and culture, not to psychology. They need to develop skill in asking interpreters the appropriate questions. Interpreters should recognize that they have the option of not just interpreting but also being a language and culture informant.

Thirdly, clinicians who are inexperienced in collaborating with interpreters, who are monolingual and uninformed about language differences, are advised to approach this task with humility. Insisting that the interpreter just “interpret what I say, word for word” reflects gross naiveté about languages. It also puts the interpreters in an impossible situation. They *can not do it*. Languages don't map upon each other in this simple way. The interpreters are likely to conclude from this experience that these clinicians are linguistically and culturally insensitive and not someone they want to work with again (Robyn K. Dean & Pollard, 2005).

The key idea really is collaboration. Clinicians and interpreters must be a team of professionals working together. One is not superior to the other. One does not work for the other. They must talk with each other about the task before them and be open and non-defensive about what they don't know.

Table 1¹¹

Some Causes of Childhood Permanent Hearing Loss,
Possible Physical Problems, and Developmental/Psychological Difficulties
Cause Possible Co-Occurring Difficulties References

Cause	Possible Co-Occurring Difficulties	References
Genetic Factors (Heredity)	<p>Children whose hearing loss is genetically based are the least likely of all major etiological groups to have multiple disabilities.</p> <p>□□ However, approximately 1/3 of genetic hearing loss is associated with another trait recognizable as a syndrome (e.g., Down Syndrome, Usher Syndrome, Fetal Alcohol Syndrome) that can negatively affect physical and psychological well being.</p>	<p>Kelly, 1994; Grundfast, 1992; Grundfast, Atwood, & Chuong, 1999; Karchmer, 1985; Vernon, 1969a, 1969b, 1976, 1982)</p>
Complication of Rh Factor	<p>□□ Cerebral palsy</p> <p>□□ Aphasia</p> <p>□□ Developmental delay/mental retardation</p> <p>□□ Multiple disabilities</p>	<p>(D. F. Moores, 1987; Vernon, 1982)</p>
Meningitis	<p>High incidence of physical and cognitive disabilities (e.g., aphasia, developmental delay/mental retardation, learning disabilities,</p>	<p>(Dodge, 1992; Karchmer, 1985; D. F. Moores, 1987; Schuyler & Rushmere, 1987;</p>

¹¹ This chart is reprinted with permission from the report, Addressing the Trauma Treatment Needs of Children who are deaf or hard of hearing and hearing children of deaf parents, National Child Traumatic Stress Network, page 17. www.NCTSN.org [References cited in this table are available in this report.](#)

	<p>behavioral/emotional problems).</p> <p>☐☐ Children may suffer severe physical and neuropsychological sequelae and have difficulty in educational programs.</p>	Vernon, 1967)
Maternal Rubella	<p>Physical difficulties may include hearing, vision, urogenital, and endocrine disorders</p> <p>☐☐ Major, frequently late-occurring neuropsychological sequelae (such as developmental delay/mental retardation, autism, abnormal behavior patterns, impulsivity, hyperactivity, rigidity and specific learning disabilities).</p>	(Cunningham, 1992; Hutchinson & Sandall, 1995; D. F. Moores, 1987; Sison & Sever, 1993)
Prematurity	<p>Infants under 3.5 pounds who experience anoxia or intracranial bleeding are at risk for later developmental problems.</p> <p>☐☐ Infants with a hearing loss who are born prematurely often have physical and psychological sequelae (e.g., developmental delay/mental retardation, cerebral palsy, and learning and emotional disabilities).</p>	(American Academy of Pediatrics, 1995; Bergman et al., 1985; Duara, Suter, Bressard, & Gutberlet, 1986; Hille et al., 1994; McCormick, 1997; McCormick, Brooks, Workman-Daniels, Turner, & Peckham, 1992; D. F. Moores, 1987; Vernon, 1969b, 1982)
Syphilis Bacterial Infection	<p>May be asymptomatic at birth, but may later manifest signs of intellectual delay, visual disability and sensorineural hearing loss.</p>	(American Academy of Pediatrics, 1995; Blackman, 1997)
Herpes Simplex Virus Infection	<p>Approximately two-thirds of all herpes simplex virus infections are body-system pervasive.</p> <p>☐☐ More than half of all survivors have permanent neurological impairments (e.g., learning disabilities) and accompanying visual system disturbances and hearing loss.</p>	(Hutchinson & Sandall, 1995; McCollister, 1988; Sison & Sever, 1993; Stagno & Whitley, 1985)

<p>Cytomegalovirus (CMV) Infection</p>	<ul style="list-style-type: none"> □□CMV is a common cause of congenital hearing loss. □□One out of 100 infants born with CMV is asymptomatic. □□10% to 15% of affected infants will likely develop central nervous system damage (i.e., hearing loss, developmental and intellectual delays, psychomotor difficulties). □□CMV-related learning problems may go unidentified until formal schooling begins. □□Schildroth (1994, 31) noted that “CMV has pernicious educational consequences” for children who are deaf or hard of hearing. 	<p>(Bale, Blackman, Murph, & Andersen, 1986; Barbi et al., 2003; Blackman, 1997; D. F. Moores, 1987; Pappas, 1985; Schildroth, 1994; Schuyler & Rushmere, 1987; Sison & Sever, 1993; Stagno, Pass, Dworsky, & Alford, 1982)</p>
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Table 2

Communication Assessment (Evidence for Sign Language Dysfluency)

	Observations
Evidence of decline in signing: sudden	
Evidence of decline in signing: gradual	
Sign vocabulary very limited	
Topic comment structure absent	
Subjects omitted	
Verbs (actions) omitted	
Signs are repeated unnecessarily	
Copies signing of other person	
Facial grammar absent or inappropriate	
Verb directionality missing or wrong	
Signing space utilized poorly	
Made up signs	
Time referents not established	
Incorrect or absent use of FINISH sign	
Story jumps back and forward in time inappropriately	
Absence of number incorporation in time signs	
Signs in isolated signs or phrases, not	

sentences	
Body shifting to indicate speaker and perspective is absent	
Pace, rhythm, pausing of signs is unusual	
Using gesture when signs are available	
Absence, limited or incorrect use of classifiers	
Sign formation poor	
Narrative lacks clear beginning, middle or end	
Sings too slowly or too rapidly	
Refers to self in third person	
Does not understand "if, then" constructions	
Seems unconcerned about being understood	
May be pretending to understand	

References

- Ash, S., Moore, P., Antani, S., McCrawley, G., Work, M., & Grossman, M. (2006). Trying to tell a tale: Discourse impairments in progressive aphasia and front temporal dementia. *Neurology*, 1405-1413.
- Bienvenue, M., & Colonomos, B. (1992). Relay interpreting in the 90's. In L. Swabey (Ed.), *The challenge of the 90's: New standards in interpreter education, Proceedings of the eighth national convention of interpreter trainers* (pp. 69-80). United States: Conference of interpreter trainers.
- Black, P. (2005). *Language dysfluency in the Deaf inpatient population*. Unpublished Doctoral dissertation, Fielding University, Santa Barbara, California.
- Black, P., & Glickman, N. (2005). Language deprivation in the Deaf inpatient population. *JADARA*, 39(1), 1-28.
- Boudreault, P. (2005). Deaf interpreters. In T. Janzen (Ed.), *Topics in sign language interpreting: Theory and practice* (pp. 323-355). Philadelphia: John Benjamins.
- Bowe, F. G. (2004). Economics and adults identified as low-functioning Deaf. *Journal of Disability Policy Studies*, 15(1), 43-49.
- Dean, R. K., & Pollard, R. Q. (2001). The application of demand-control theory to sign language interpreting: Implications for stress and interpreter training. *Journal of Deaf Studies and Deaf Education*, 6(1), 1-14.
- Dean, R. K., & Pollard, R. Q. (2005). Consumers and service effectiveness in interpreting work:: A practice profession perspective. In M. Marschark, R. Peterson & E. Winston (Eds.), *Interpreting and interpreter education: Directions for research and practice* (pp. 259-282). New York: Oxford University Press.
- Dean, R. K. & Pollard, R. Q. (in press). The importance, challenges, and outcomes of teaching context-based ethics in interpreting: A demand control schema perspective. *Sign Language Translator and Interpreter*.
- Dew, D. W. (Ed.). (1999). *Serving individuals who are low-functioning deaf*. Washington, D.C.: The George Washington University Regional Rehabilitation Continuing Education Program.
- Forestal, E. (2005). The emerging professionals: Deaf interpreters and their views and experiences in training. In M. Marschark, R. Peterson & E. Winston (Eds.), *Sign language interpreting and interpreter education: Directions for research and practice* (pp. 235-258). New York: Oxford University Press.
- Glickman, N. (2007). Do you hear voices?: Problems in assessment of mental status in deaf person with severe language deprivation. *Journal of Deaf Studies and Deaf Education*, 12(2), 127-147.
- Glickman, N. (2009). *Cognitive behavioral therapy for deaf and hearing persons with language and learning challenges*. NYC: Routledge.
- Glickman, N., & Gulati, S. (2003). *Mental health care of Deaf people: A culturally affirmative approach*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Gulati, S. (2003). Psychiatric care of culturally Deaf people. In N. Glickman & S. Gulati (Eds.), *Mental health care of Deaf people: a culturally affirmative approach* (pp. 33-107). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Karlin, T. (2003). "Umm, the interpreter didn't understand": Interpreting for individuals with thought disorder. *Views*, 20(4).
- Klima, E., & Bellugi, U. (1979). *The Signs of language*. Cambridge, Massachusetts: Harvard University Press.

- Marschark, M. (2001). Language development in children who are deaf: A research synthesis. from www.nasdse.org/forum/htm
- Mathay, G., & LaFayette, R. H. (1990). Low achieving deaf adults: an interview survey of service providers. *Journal of the American Deafness and Rehabilitation Association*, 24(1), 23-32.
- Morgan, G., Herman, R., & Woll, B. (2007). Language impairments in sign language: breakthroughs and puzzles. *Internal Journal of Language and Communication Disorders*, 42(1), 97-105.
- O'Hearn, A., & Robert Q. Pollard, J. (2008). Modifying dialectical behavior therapy for deaf individuals. *Cognitive and behavioral practice*.
- Poizner, H., Klima, E. S., & Bellugi, U. (1987). *What the Hands Reveal about the Brain*. Cambridge, Massachusetts: The MIT Press.
- Pollard, R. (1998a). Mental health interpreting: A mentored curriculum [Videotape and users' guide]. Rochester, New York: University of Rochester School of Medicine.
- Pollard, R. (1998b). Psychopathology. In M. Marschark & M. D. Clark (Eds.), *Psychological perspectives on deafness* (Vol. 171-197). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Pollard, R. Q., DeMatteo, A., & Lentz, E. (2007). A prose recall test using stories in American Sign Language. *Rehabilitation Psychology*, 52(1), 11-24.
- R.I.D. (2007). *Interpreting in mental health settings standard practice paper*: Registry of interpreters for the deaf
- Schlesinger, H. S., & Meadow, K. P. (1972). *Sound and sign: Childhood deafness and mental health*. Berkeley, CA: California University Press.
- Solow, S. N. (1988). Interpreting for minimally linguistically competent individuals. *The Court Manager*, 3(2), 18-21.
- Thacker, A. (1994). Formal communication disorder: Sign language in deaf people with schizophrenia. *British Journal of Psychiatry*, 165(818-823).
- Thacker, A. (1998). *The Manifestation of Schizophrenic Formal Communication Disorder in Sign Language*. Unpublished Doctoral Dissertation, St. George Hospital Medical School.
- Vernon, M., & Andrews, J. F. (1990). *The psychology of deafness*. New York City: Longman.
- Vernon, M., & Miller, K. (2001). Linguistic incompetence to stand trial: A unique condition in some deaf defendants. *Journal of Interpretation*, 99-120.
- Vernon, M., & Miller, K. (2005). Obstacles faced by deaf people in the criminal justice system. *American Annals of the Deaf*, 150(3).
- Vernon, M., & Raifman, L. J. (1997). Recognizing and handling problems of incompetent deaf defendants charged with serious offenses. *International Journal of Law and Psychiatry*, 20(3), 373-387.
- White paper on addressing the trauma treatment needs of children who are deaf or hard of hearing and the hearing children of deaf parents*. (2006.). Los Angeles, California and Durham, North Carolina: National Child Traumatic Stress Network.