

*Full Length Research Paper*

# Primary application of the personality diagnostic questionnaire-4 (PDQ-4) in persons with special needs: A case study of the personality of a deaf person

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The disruption of deafness, as a disturbance of consciousness (sensory impairment), affects human development and may produce psychological and emotional problems. There are some common features of the personality of people with hearing disabilities, which are considered to be intrinsic to the nature of their possible psychiatric problems. From the very minority monitored, the deaf psychiatric patients exhibit a wide range of psychopathology problems such as developmental disorders, schizophrenia, bipolar disease, depression, personality disorders, post-traumatic stress disorder (PTSD) and behavioral disturbances. Self harm and sexual offending behaviors may also be present. The study presents an interesting case study of a deaf psychiatric patient assessed with the help of the personality diagnostic questionnaire-4 (PDQ-4), translated in the Greek language. The therapeutic benefit derived from the use of the psychometric instrument and how this application assisted in bypassing the communication barrier is discussed.

**Key words:** Deafness and mental health, interpreters, personality diagnostic questionnaire-4 (PDQ-4), personality traits, psychiatric disorder.

## INTRODUCTION

The disruption of deafness, as a disturbance of consciousness (sensory impairment), affects the human development and may produce psychological and emotional problems. There are some common features of the personality of people with hearing disabilities, which are considered to be intrinsic to the nature of their problem. These elements are of impulsive, egocentric, concrete, withdrawn, over-or under-emotional, paranoid, avoidant and negative (passive-aggressive) nature (Du Feu and Fergusson, 2003; Fossati et al., 2004).

The problem of evaluation of the mental status in a deaf person has been addressed before (Evans and Elliott, 1987; Gulati, 2003; Kitson and Thacker, 2000; Pollard, 1998). Generally, overpathologizing is dangerous because of the educational or experiential factors

involved (Pollard, 1998). Expert diagnosis and consultation is needed to recognize psychopathology in deaf people. Interpreters are not specified as experts in this case (Pollard, 1998).

Review of the literature about deafness and psychiatric illness concerns many factors, starting on the severity of deafness or the age of psychopathology onset (Cooper, 1976). We present a review of studies regarding correlations between deaf people and mental illnesses.

The prevalence of early onset deafness is 1/1500 in the general population and 1/1000 in the psychiatric population (Appleford, 2003; Black and Glickman, 2006; Mueller, 2006). Ninety percent of the deaf patients come from normally hearing parents. The deafness causes are almost equally split to genetic and non-genetic. People who develop late onset deafness account for 1 out of 7 in the general population (Denmark, 1985, 1994; Thomas et al., 2006; UCSF, 2004; Vernon and Leigh, 2007).

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traumatic stress disorder and behavioral disturbances. Self harm and sexual offending behaviors may also be present (Evans and Elliott, 1987; Gulati, 2003; Kitson and Thacker, 2000; Pollard, 1998; Stansfield, 1981).

More specifically, deaf people experience Axis I mental health disorders at virtually the same rate as the general population (Altshuler, 1978; Critchfield, 2002; Robinson, 1978; Vernon, 1980). For Axis II disorders, and for behavior problems among children, the prevalence rates in the deaf population are significantly higher than society-at-large (Gentile and McCarthy, 1973; Graham and Rutter, 1968; Schlesinger and Meadow, 1972; Williams, 1970). However, mental health systems have done a poor job of responding to the needs of deaf people, assuming that interventions, methods and services which work well for the general population are equally effective with deaf clients.

The risk of developing mental health problems is almost the same pertaining to the non-deaf population. However, those of greater risk are the persons with other concurrent neurological disorders, the growing-up in a non-deaf family, and diagnosis and treatment delay. Most deaf people are not comfortable walking into an agency which they fear will be unfriendly and not accepting of their differences. If the entire burden of communication access is left in their hands, the likelihood that actual mental health service will occur is minimized. Furthermore, other risk factors for the development of psychiatric problems in this special population are heritability, specific learning disabilities, developmental delays, other communication difficulties (receptive, expressive or both), concurrent organic illnesses, low self-esteem and academic-pedagogic failure.

The average reading level of high school graduates is below 4<sup>th</sup> grade (Holt et al., 1997) and when, as is usual for deaf people, they demonstrate normal performance IQ scores, these reading results become even more confusing. The implications of these failures are often not apparent to mental health practitioners. Mental health professionals need to be aware of the significant educational deficits experienced by the majority of deaf clients.

Other family risk factors include emotional abuse or neglect, parental conflicts, unclear or inconsistent discipline, hostile or rejecting relationships and the failure to adapt to the child's changing developmental needs. This happens because deaf children and then adults, who function as an "inferiorized" minority (Higgins, 1980), tend to belong to a different minority group than their non-deaf parents. Thus, the opportunity for social learning and adjustment is severely impaired, correspondingly afflicting the developmental elements, compared to healthy subjects.

Approximately 92% of deaf children are born to parents who can hear (Vernon, 1980), and communication difficulties between parent and child are apparent throughout the developmental periods. It is estimated that only 15% of parents ever develop the sign language

communication skills necessary to carry on meaningful conversations with their children, beyond simple commands and queries. Communication with siblings and extended family members is rare.

Many studies emphasize the following problematic areas for the deaf psychiatrically disturbed: the misdiagnosis, the lack of specialized centers, lack of skilled staff (assessment and treatment), the absence of knowledge and education of the deaf language (languages and communication barriers) (Denmark, 1994; Department of Health, 2002; Grant, 2000; Monteiro, 1989; Ridgeway, 1997) and the absence of specific interpreters (Stansfield, 1981).

The misdiagnosis (Pollard, 2005) characteristic of deaf persons with mental health problems is related to either communication difficulties (language issues) or the lack of knowledge of this special population and their needs. Thus, the avoidance of psychological or psychiatric assistance reflects the shortage and incapacity of proper mental health services. In particular, misdiagnosing of deaf people is associated with poor interpretation of symptoms and language barriers to the actual phenomenology. Mental health experts have a hard time understanding the patients, and this may result in distrust or failure in the therapeutic relationship.

The lack of ability of the deaf people to think abstractly or to generalize concepts (Haskins, 2000) and the delayed presentation of symptoms (Checinski, 1994) might accumulate disturbances and contribute to psychopathology under-treatment. The necessity of an in-depth study of the personality of the deaf, among other instruments, may encompass the clinical application of the personality diagnostic questionnaire. The personality diagnostic questionnaire (PDQ-4) (Hyler et al., 1990) is an internationally administered psychometric instrument (American Psychiatric Association, 1994), which may contribute significantly to the diagnosis of personality disorders according to the diagnostic and statistical manual of mental disorder-iv (DSM-IV) Axis II. It is not affected by intervening cultural variables, and thus can be administered in a wide spectrum of civilizations, even though it was created in the West (Yang et al., 2000). Overall, its validity and reliability have been deemed very satisfactory (Fossati et al., 1998; Hyler et al., 1990).

The instrument was recently translated in the Greek language (Siousioura et al., 2006; Siousioura and Tasoulas, 2007; Tasoulas and Siousioura, 2005). The presented case study examines issues involved in personality traits, psychopathology and psychotherapy using PDQ-4 in a deaf patient.

## CASE STUDY

The deaf patient was admitted at the Day Care Unit of the Psychiatric Department of "Evangelismos" General Hospital for depression, anxiety and psychosomatic

**Table 1.** Patient interview.

Patient information	Response
Age	40 years
Deafness	By birth
Starting age	0-2 years
Family history (of deafness)	5 siblings with normal hearing and 1 sibling deaf (patient).
School	Special school for deaf people
Health	Vision (treated by an oculist)
Mental health	A history of frequent incidents of (not formally diagnosed) depression.
Current problem	Depression and psychosomatic symptoms
Reason for referral	Psychotherapy/psychological therapy
Referral source	Psychiatrist
Social circumstances	
Family status	Divorced
Who he lives with	Alone
Parental family attitude towards the patient	All members of his family are indifferent; only his father cared for him, (deceased)
Social surroundings attitude towards the patient	Before he was treated as "disabled" and "inferior". Now he is accepted

psychosomatic symptoms.

During the initial psychiatric interview (Table 1), the patient was diagnosed with depression; anti-depressive treatment and psychological support was suggested by the department's clinical psychologist. The patient did not voluntarily require psychological support. The requirement was established indirectly, by the psychiatrist of the hospital.

## METHODOLOGY

- i. PDQ-4 was initially administered as a diagnostic tool, before the initiation of psychotherapeutic procedures, using an interpreter, specialized in the special population of deaf people.
- ii. There were eight (8) systematic psychotherapeutic sessions in total (Andolfi, 1994; Boscolo and Bertrando, 2008).

## RESULTS AND DISCUSSION

### Psychometric results for PDQ-4

PDQ-4 consists of 99 items which describe symptoms of DSM-IV personality disorders. The patient marks the items which are true for him/her. For each personality disorder, the individual produces a score (Table 2) which may be smaller, equal to or greater than the threshold. Scores which are equal to or greater than the threshold mean that the patient meets the criteria of the specific personality disorder diagnosis.

The total score is calculated by adding the separate scores for each personality disorder and represents a general indication of psychopathology. A total score of 27 or above means low levels of psychopathology according

to DSM-IV diagnostic Axis II. A total score of 37 or above means moderate levels of psychopathology according to DSM-IV Diagnostic Axis II. A total score of 47 or above means high levels of psychopathology according to DSM-IV diagnostic Axis II (Hyerl et al., 1990; Siousioura et al., 2006; Siousioura and Tasoulas, 2007; Tasoulas and Siousioura, 2005).

From the diagnostic point of view, there are mixed psychopathological elements of character. In particular, there is a vast range of psychopathology, according to the DSM-IV criteria of personality disorders, with the paranoid, dramatic, avoiding, and negative and dependant personality elements prevailing.

It is important to emphasize that the total score of 53 is an indicator of the broadness, not the severity or acuteness of the characterological psychopathology. The dispersion of problematic issues across several personality disorders shows range, not intensity. The clinician will then use the PDQ profile to discover the degree to which a "marked" personality issue contributes to actual turmoil in life. In general, Greek psychiatric outpatients exhibit total PDQ scores in the 30 to 40 range (Siousioura and Tasoulas, 2007). Therefore, a total score of 53 is credited as a remarkable distribution of characterological issues, compared to a sample of outpatients.

## QUALITATIVE RESULTS OF THE PDQ-4 SUBSCALES

### Paranoid

- i. They do not hear, therefore they easily come to a "paranoid" readiness, "against" the hearing people.

**Table 2.** PDQ-4 scale of deafness for the patient.

Scale of clinical significance	Individual score	Threshold
Paranoid	4	6
Dramatic	5	6
Avoidant	4	5
Negative (passive-aggressive)	4	6
Dependent	5	7
Total score	53*	

\*particularly burdened clinical profile.

### Dramatic

- i. They do not have new incentives;
- ii. They can only see;
- iii. Therefore, they develop a mechanism of over-substitution defense, expressed either to feel equal with the hearing people or to cover the gaps, deriving from the small number of incentives.

### Avoidant

- i. They do not accept responsibility, they pass it over to the hearing, for example, to the interpreters, to other hearing people; they make a lot of mistakes, their development regresses to smaller ages, because they frequently feel helpless from the "racist" attitude towards the hearing people.

### Negative (passive-aggressive)

- i. They show emotional fluctuation, due to the lack of incentives, loneliness, and insecurity;
  - ii. They react in anger, due to communication difficulties ("I want others to understand me, but they cannot always...!")
- Dependent

- i. They understand life partially (deficiently), and thus, they understand only partially their own selves;
- ii. They feel helpless, alone, insecure, and phobic, and they live intensely with the essence of "needing others".

### Conclusion

The present case study addressed some of the most important implications in the assessment and treatment of deaf persons' psychopathology. Before the diagnosis of psychopathology of the patient, considerable attention must be given to the psychological and social consequences of deafness, the possible contribution of

sensory deprivation phenomena, and the interference of hearing loss in attention, perception and communication (Steinberg et al., 1998).

PDQ-4 was put to optimal use, from both the point of diagnosis and psychotherapy, as it brought out the special personality features that characterize the individual. These features were progressively developed to become elements of character, given that deafness frequently appears in the initial stages of a person's life. Thus, a model of internal experience and behavior is formed; this model evolves into a particular/relevant type of personality. This kind of personality is justified by the need of these persons to become accepted, to feel secure, and supported by the people around them, and their fellow-sufferers.

Specialized health services in assessment, education, and supervision constitute a prerequisite for the thorough evaluation of this special population (Appleford, 2003; Haskins, 2000; Health Advisory Service, 1998; Padden and Humphries, 1988).

Concluding, a few characteristic phrases are appended from the psychotherapy process. These phrases are indicative of the situation of deafness through this particular patient's way of expression:

"I want others to understand me, but they cannot always...!"

"All the people that can hear owe to us..."

"Why did this have to happen to me?"

"I need others to help me, because I am afraid; what if I do not hear and do not respond in time..."

"Our motto is: think, see, walk"

"On one side I feel calm, without hearing incentives, on the other side I feel like I'm dead!"

"Others used to treat deaf people as "disabled". Now, television has made things better"

"At work I think I am somehow improved"

"I miss the phone, the radio"

"I feel 70% good, I love the sight incentive and 30% lonely, like dead!"

"Gossip, masks, treason (not trusting), sex, money, revenge against the hearing, and searching for touch/body, prevail in our community.

## Limitations

The results and conclusions of the present case study are only indicative and may not be generalized in the population. Further studies involving larger samples are needed to examine issues involved in personality traits, psychopathology and psychotherapy of deaf patients.

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