

Elective Mutism of Childhood: Selective Non-Communication

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This paper reviews the current state of knowledge concerning elective mutism, a relatively uncommon but most interesting and curious child psychiatric presentation. Clinical features, aetiology, differential diagnosis and current treatment approaches are discussed. A case of genetically impaired siblings, both presenting this condition, is then presented.

(Egypt.J. Psychiat.,1995, 18: 51- 59).

Introduction

Elective mutism is a relatively uncommon child psychiatric presentation, but one of considerable uniqueness and curiosity. The number of published studies on this condition, although limited, appear to be increasing. The majority of these publications describe a single case with only eight known case reviews containing greater than ten cases. It may be that the condition is more common than is recognized due to under-reporting by schools, in which setting elective mutism is usually first noticed. In the home setting the child who is not speaking is viewed as young, shy and will talk before long. In addition, it is a "quiet" condition by its very nature and does not cause disturbance to the classroom environment or home, unlike disruptive behaviour disorders.

Elective mutism was first described as *Aphasia Voluntaria* in 1877 by (Kussmaul 1977). In 1934 Tramer described the clinical entity thoroughly and used the term *Elective Mutism* to designate it (Tramer, 1934).

Elective mutism manifests itself by a continuous and persistent refusal to

speak in school and other social settings. The child is able to speak, comprehends spoken language and indeed does speak to selective individuals and in selective spoken language and indeed does speak to selective individuals and in selective social situations. Such children demonstrate no evidence of intellectual, neurologic, or physical disorder to account for this refusal to speak. The overall clinical pattern is such that it is not difficult for an experienced physician to differentiate elective mutism from the variety of other neurologic and developmental disorders where verbal communication may be impaired. The refusal to speak is clearly "elective" and "selective". Even to those whom the child refuses to speak, he will often communicate by gestures, pantomime, drawings or even whispers.

As this is not a common condition, precise prevalence and incidence rates are not confidently known and it is certainly not a common presentation in child psychiatric clinics. The Diagnostic and Statistical Manual of the American Psychiatric Association describes no time duration criteria for the condition, adding to the difficulty of precise diagnosis (APA, 1987). Most experienced clinicians feel that a duration of six months would be reasonable for diagnosis. Prevalence rates of 0.3 to 0.8 per 1,000 have

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been reported (Brown & Lioyd, 1975). However, when speaking to teachers of elementary school age children, they frequently report greater familiarity with this condition than one would expect from such a low prevalence rate. They often deal with the issue by benign neglect or hopeful anticipation that the young child will soon speak.

The condition first manifests itself during the early school years and it is probable that many transient cases pass away. Quite frequently one sees children with elective mutism who have not been speaking for years without a diagnosis having been made or a therapeutic programme instituted.

Elective mutism appears to be somewhat more common in females than males as reported in the literature, and this observation is certainly in keeping with this author's experience (Hayden, 1980). On occasions, families present more than one child with elective mutism. This does not appear to reflect a genetic process but rather a "twinning" effect relating to some psychological factors (Laybourne, 1979). The siblings are very psychologically enmeshed and dependent, supporting and reinforcing this behaviour in one another. After one sibling begins he tends to encourage similar behaviour in the other, reinforcing it when it occurs and eventually controlling the other sibling. It provides a means for being both socially isolated and having selective company in the isolation.

Elective mutism tends to be rare in first-born children as well as only children (Krohn, et al., 1992).

Clinical Features

Elective mutism manifests itself initially in school. Learning can continue for a time in spite of non-verbal participation but behaviour characterized by passivity and withdrawal over time lim-

its the learning process. The child then demonstrates increasing shyness, school failure, social withdrawal, diminished rate of social development (immaturity), limited peer relationships and, possibly, school refusal. In addition, one frequently observes clinging behaviour and separation difficulty from parents and the development of multiple fears. The child's functioning becomes impaired in a very substantial manner.

The silence may include all interpersonal contacts, but most often a small circle of intimate, selective persons is excepted, generally family members with whom verbal communication is normal. The major refusal focuses on teachers, classmates and those outside the family. There may, however, be some selective peers outside of school with whom communication persists, most often those living nearby or cousins.

The condition tends to run a chronic course over many years, often a lifetime.

The onset tends to be between three and eight years of age, but the incidence peaks at the onset of school. Late onset elective mutism, such as during adolescence, is most unusual but has been reported and is invariably part of a more global serious psychiatric disorder such as schizophrenia (Kaplan and Escoll, 1973).

Children affected by elective mutism demonstrate a wide range of intellect. The validity of formal psychological testing, relying as it does in large measure on verbal interchange, is severely compromised. However, performance tests may be of some value provided the child is cooperative.

It is of considerable interest and significance that there is often a very considerable delay between the appearance of the condition and referral for treatment. This pattern has led clinicians to speculate that it reflects parental encourage-

ment of the behavior, or possibly even reinforcement for deeper psychologic reasons. Consultation is usually sought when the shyness and mutism becomes superimposed with considerable fear of persons outside the immediate family as well as the development of more complex behaviour characterized by rejection, hostility and control over the external environment.

Aetiology / Psychodynamic Considerations

Elective mutism is best viewed as a psychologic defence developed and utilized in dealing with a number of developmental issues varying from child to child and probably reflecting the cumulative impact of more than one issue.

The following general dynamic concepts appear pertinent:

a. Developmental Arrest

One may speculate that such children have inadequately worked through essential developmental tasks of infancy and as such are vulnerable to a type of regression which provides them with a barrier against needing to deal with stressful aspects of their external environment. The possibility of an emotional trauma, such as starting school, impacting on a vulnerable child may trigger the reaction. In keeping with the notion of developmental arrest there is that of regressive stubbornness. Developmental psychology generally holds that negativism and oppositionalism is a normative stage at 18 months to three years of age when a child recognizes his emergent power to say "no" to a variety of socialization pressures brought to bear by parents.

b. A Learned Response

The child may react to a stressful situation by non-communication, observes its protective effect, perpetuates and reinforces the behaviour and, in time, it becomes a fixed habit pattern. Even should

the child wish to speak afterwards there may be anxiety involved in "letting go".

It is of interest that not uncommonly there are family environments in which silence is used as a "weapon", an expression of anger, such as one parent against the other, which the child observes and utilizes in her own fashion.

c. Phylogenetic Response

It has been observed that in non-human mammals, when there is a perceived threat, the young members retreat behind the mother and become silent. This phylogenetic response occurs in children as well, but in a time limited manner. What characterizes the electively mute child is the persistence of the response beyond the age one would expect.

d. Other Dynamic Considerations

Emotional trauma some cases have been reported in which the onset corresponds to a physical trauma to the mouth occurring during the development of speech. This may be causal or coincidental. This has not been observed in this clinician's experience. Frequently, however, parents report that the behaviour started following a harsh admonishment by a teacher apparently perceived as psychologic trauma by the young vulnerable student.

Separation anxiety most cases appear to have begun with a separation of child from parents due to the hospitalization of a parent or the child. By far the most frequent separation precipitating onset corresponds to the beginning of school with all of the social and psychological ramifications of this event.

Maternal overproduction leading to excessive dependency of child on mother and anxiety toward others outside the family may be carried to a pathologic degree. A family history of shyness or high levels of anxiety in the environ-

ment can also play a role in determining this condition.

Such overproduction and huddling together has been reported in immigrant families new to a country where another language must be learned and, understandably, may result in shyness, defensiveness, and banding together leading to a pervasive anxiety in all the family members. Should this correspond to the time a vulnerable young child is about to start school, elective mutism may occur.

An exceedingly overcontrolling parent may lead to the emergence of stubbornness in the child as a defence which, when carried too far, may become elective mutism effecting a defense against control as well as a punishing weapon retaliating against others.

In reviewing the psychodynamic possibilities, one may conceptualize them falling along a spectrum. At one end is learned behaviour serving neurotic needs such as controlling of parents, manipulating others and expressing anger. At the other end of the spectrum is perceived or actual traumas enhancing a regressive, protective closeness to the parent and avoidance of selective outsiders. Although these behaviors may resolve conflicts in the child for a time, regression, fixation, and hindrance of maturity inevitably develops.

An understanding of the dynamics should lead to a more effective treatment. Shy, inhibited children should respond better to a supportive, reassuring, persuasive, expressive approach including environmental manipulation. Manipulative children would respond better to a behavioural operant conditioning method. All these different treatment approaches, albeit logical, do not meaningfully interrupt the elective mutism process and, in practice, both approaches are necessary in both types of cases. Elective mutism, once established and regardless of causal

factors, is persistent and resistant to all therapeutic approaches, particularly those based on psycho-dynamic as opposed to behavioural approaches.

Twinning Effect

There have been cases reported in which more than one child in a family is affected. It would appear that the child who first manifests elective mutism encourages a sibling to whom he is close not to speak to anyone, only to each other or selected persons. The original electively mute sibling may resort to threats and fears to gain compliance. In time they become exceedingly enmeshed and an unstated pact is sealed.

Differential Diagnosis

Mental Subnormality

Elective mutes demonstrate adequate intelligence with individuals to whom they speak. Over time, however, academic learning declines as well as IQ scores which depend on such learning.

Congenital Deafness

Elective mutes clearly hear well and communicate with those selectively designated. When participating in audiologic exams they respond to sounds in non-verbal ways such as by raising a finger.

Pervasive Developmental Disorder (Childhood Autism)

A more globally disordered pattern of unrelatedness, a typical repertoire of activities, atypical, repetitive behaviors and a qualitative speaking impairment is demonstrated in such individuals.

Childhood Schizophrenia

These children are usually older and demonstrate bizarre psychotic behaviour including delusions and hallucinations.

Hysterical Aphonia

A stress-related response, rare in young children. The non-speaking extends to all individuals; it is not selective.

Excessive Shyness

This is the most significant differential diagnosis and often ushers in elective mutism. If the problem remains within the realm of shyness such children will talk, albeit hesitatingly, to all with whom a comfortable, secure, relationship is developed.

In none of the above conditions is the non-speaking elective and selective. In addition, the clinical features of these conditions are usually distinctive and qualitatively different from elective mutism. Reluctant speech, that is transient nonspeaking on the part of a child entering school for the first time, lasts a limited number of weeks or months and has a much better prognosis.

Although one can say elective mutism is a form of speech pathology, it is not so in the usual sense, as these children can speak and comprehend speech. It is of interest, however, that referrals are often first made to speech pathologists or to physicians because of parental concern about organic speech pathology.

Treatment

Elective mutism is highly resistant to treatment. Individual, psychodynamic psychotherapy based on the establishment of a relationship and encouragement of expression of feelings is quite difficult because the child is non-verbal. Play therapy techniques have been attempted and although the child may willingly partake in dynamically meaningful play, the mutism is not altered. Parental counselling, in the hope of indirectly helping the child, similarly has not proven effective.

Behavioural therapy based on operant conditioning (reward and punishment) although limited in application, has proven to be the most successful particularly when coupled with supportive psychodynamic work with the child, parental guid-

ance and contact with the school. Family therapy may help get the message across to the child that she is expected to speak and the parents want her to do so. Children may develop a misunderstanding over time believing they are expected not to speak by their parents.

The positive components of behavioural modification have been "shaping" behaviour from non-communication to speaking. It assumes that the child's need to control by this symptom is the problem to overcome at any reasonable cost. The most significant and best documented behaviour modification treatment study is that undertaken at the Hawthorne Center in Michigan, USA. The child and family come to the center where a thorough bio-psycho-social evaluation takes place and a clear explanation of the prescribed interventions is made to the child and family. The rationale for the behavioural modification treatment is clearly explained in terms of the extreme resistance of the condition, the relative helplessness of the parents to get the child to speak and then for the child to hear that the treatment team knows just how difficult it is for him to talk, how difficult it must be for him to maintain control and describing the price he is paying for it, that there are some advantages to talking rather than not talking.

The programme consists of the child and family coming to the outpatient clinic every day, the day starting with a family therapy meeting, followed by dynamically room, albeit comfortable, without any stimulation or distraction. The child remains in the room until ready to try and speak at least one word to parents and / or staff. Should he do this, he may then leave the room and go home with his family. If not, the child remains in the restriction room for the remainder of the day. Should he not speak during several days, he is trans-

ferred to the inpatient unit, thereby being separated more significantly from the family. The same treatment programme is followed each day when the family comes to the clinic. Should the child make progress he returns to the outpatient programme.

This method of operand conditioning including the more psychologically dynamic ingredients of family therapy and play therapy has, in the experience of the Hawthorne Center staff, led to the child speaking some words within the first day, and increasingly after that.

Once progress is substantial, the next expectation is for the child to speak in school. A school conference is usually arranged to coordinate efforts and report progress.

The therapeutic setting and structure described led to an excellent final outcome in 17 out of the 20 cases treated (85%) with normal speech functioning. The children were usually speaking at school, the more challenging criteria, within the second month. Of the three cases which did not produce excellent results, some improvement was noted in each. One child spoke quietly and the other two spoke in a limited, reluctant manner. No cases had very poor outcomes.

One may expect the child to talk in an effort to return home and then regress into elective mutism once the treatment programme is completed. This has not proven to be the case.

One may object to the restriction aspect of the operand conditioning on the basis of it being unethical and coercive to the child. It certainly is coercive but, in my judgement, ethically justified in view of the heavy price the child pays for this symptom and consideration of the love and affection given the child during the development and execution of the treatment programme. The cured child's

life can then open to considerable growth fostering experiences and activities. The treatment represents power used in a responsible fashion.

Case Report

Mona, age 6, second of four children of Jordanian background, was born and raised in the United Arab Emirates. She was referred to the Pediatric Psychiatry Clinic by general pediatrics because of lack of speaking and lack of relating to school peers and teachers. She goes to school readily each day, but once there sits without visible emotion and does not speak. This behavioural pattern developed gradually prior to school but increased markedly when she started kindergarten one year ago and has resulted in her being asked to discontinue. Her parents are quite reliable informants and state that Mona speaks very well and intelligently at home with the family but virtually not at all to anyone else or anywhere else.

Mona relates comfortably to her parents and siblings with whom she talks readily and interacts emotionally. Audio tapes made at home and brought to the clinic confirm this. Should neighbors or relatives come to the home, she will play with the younger children but not talk with them.

Mona attends a "special class" of eight students for intellectually and emotionally handicapped children. In this academic setting as well she produces no work and resists homework assignments even under strict supervision. Her placement in the special class was based on her lack of speech and participation rather than on any formal intellectual testing.

Mona was born following a full term pregnancy, premature by weight, 1.5 Kg, and remained in the special care baby unit for more than a month. During this time it was noted that her pelvis

was dislocated and a cast was applied. Otherwise she appeared normal at birth, but before long genetic-dysmorphic features appeared, subsequently diagnosed as Ehlers-Danlos-like syndrome at three years of age¹³. This syndrome is a genetically heterogeneous disorder of connective tissue whose severity varies according to which of the ten sub-types the patient has and the degree of completeness of expression within the sub-type. The clinical features of hyperelasticity of skin and hypermobility of joints lead to a markedly atypical deviant physiognomy readily observed by adults and children.

Mona suffered febrile convulsions starting at eight months of age and continuing through her second year of life. It was treated with phenobarbital and then arrested. During this time of seizures the EEGs were normal and there were no abnormal neurologic signs. She is presently on no medication. She walked at two years of age and talked at three years of age. In addition to her connective tissue symptomatology her overall stature had been noted as quite small causing concern about failure to thrive until the specific diagnosis of Ehlers-Danlos-like syndrome was verified by skin biopsy.

When Mona was four, deformations of her feet and hands, multiple bone deformities, her long, narrow face and long, narrow arms and fingers, hyperextensibility of her joints, all further confirmed the original diagnosis by the medical geneticist. The genetic evaluation described a small child for her age with a long narrow face and maxilla, small eyes, prominent depressed nasal tip, prominent ears, very slim, soft skin with a velvety appearance, hyperextensible joints of the hand and elbow, and a flexion deformity of her fifth finger.

The mental status of Mona demon-

strates the following. She does allow for separation from her parents to come into the consultation room, but visibly becomes anxious doing so. Her stature is small, her physiognomy is quite deviant, her relatedness is very limited so that she sits without active participation and speaks not at all. When pressed to speak she becomes visibly anxious. Yet she draws and uses play therapy materials, indicating a child with normal or low-normal intelligence. She demonstrates difficulty in holding a pencil and writing because of her hyperelasticity of joints, but this cannot explain the total lack of progress during her time in school. She demonstrates certain mannerisms of wringing her hands and repetitively placing her right hand on her left shoulder. It would be reasonable to assume that Mona has a distortion of internal body image based on her external appearance. Were she to talk to a physician she might express this and help us understand her reasons for not communicating. There is no indication to clinical observation of severe mental retardation or Pervasive Developmental Disorder (Childhood Autism).

Play activities would indicate a child with normal intelligence. Relatedness is quite limited but over time Mona will engage herself in some play activity with the therapist.

Her brother Ibrahim, age five, is also affected by Ehlers-Danlos syndrome, but to a lesser degree. He too had three febrile convulsions during his first year of life which did not continue. He was born following a normal pregnancy and delivery with normal birth weight.

During the last year or two Ibrahim has begun to develop signs of elective mutism in that he became less expressive to adults outside the home, is now refusing to speak at school, and did not speak at the clinic during Mona's evalua-

tion. Like his sister, he speaks normally at home but tends to be more conversant and confident with peers outside the home, but not with adults. It is quite clear to the parents and clinician that Mona is the dominant sibling and has communicated in some manner to Ibrahim to act as she does thereby successfully bringing about a "twinning effect".

It should also be noted that a baby boy, born within the last year has demonstrated significant early signs of Ehlers-Danlos syndrome. The eldest, an eight year old sister, is perfectly normal and emotionally quite strong.

In summary it can be said that Mona demonstrates elective mutism as part of a genetically impaired, prematurely born child with developmental difficulties which have likely induced in her feelings of insecurity and vulnerability and distortion of body image against which Mona has defended herself from the outside world by electively not speaking and becoming quite negativistic to efforts to make her do so. Psychotherapeutic attempts by the Pediatric Psychiatry Clinic have brought about no improvement to date. Sessions consist of parental counselling, play therapy with Mona, family conferences including Mona and, more recently, efforts at behaviour modification. The latter has been most difficult to structure within the family's small home, but are ongoing. They presently include sending Mona and Ibrahim to their respective rooms immediately after school, depriving them of television, and having them eat meals in their rooms. This will continue until they say good morning, good afternoon and introduce themselves to their teachers at school. When they do this the restrictions will be lifted some and other goals set. Limitations in the facility and staffing of the Pediatric Psychiatry Clinic at this point in its development prevents a more so-

phisticated and strenuous approach such as day hospitalization or child psychiatric hospitalization where greater degrees of structure and control could be established. Efforts, however, are continuing.

Conclusion

The clinical case presented supports the concept of Elective Mutism as being a curious, multiply determined child psychiatric presentation. Although cases may differ some in their presentation they share more clinical features in common. The condition is rigidly tenacious and resistant to most classical psychotherapeutic efforts.

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Mutisme électif de l'enfance: Une communication non selective

Cette article passe en revue l'état actuel des connaissances concernant le mutisme électif, une entité pédopsychiatrique relativement peu fréquente mais néanmoins intéressante et curieuse. Les aspects cliniques, l'étiologie, le diagnostic différentielle et les approches thérapeutiques actuelles sont discutés. Un cas d'une fratries présentant des anomalies génétiques ainsi que cette condition est ensuite présenté.

الخرس الإختياري في الطفولة (اختيار عدم التواصل)

تراجع هذه الدراسة المفهوم الحالي المتعلق "بالخرس الإختياري" في الأطفال، وهي حالة غير شائعة نسبياً، ولكنها من أهم الاضطرابات النفسية للأطفال، وتقدم الدراسة السمات الإكلينيكية والأسباب والتشخيصات التفريقية والعلاجات المتاحة، وتناقشها، كما تعرض حالة إكلينيكية لشقيقين لديهما خلل وراثي (زمله إيلرز دانلوس) تظهر لديهما أعراض الخرس الإختياري.