

# Childhood Hearing Impairment: How Do Parents Feel About It?

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## ABSTRACT

### BACKGROUND

*Hearing impairment or deafness is a major disabling condition worldwide. Etiology of the hearing loss range from congenital to acquired, and includes common and preventable childhood infections like otitis media and meningoencephalitis. Morbidity and burden of hearing impairment on the children and their parents is enormous. This is because affected children have developmental delay in many domains including speech, cognition as well as behavioural and other aspects of psychosocial development. Early identification and effective treatment of hearing loss improves language, other forms of communication, and cognitive skills. This study was carried out to evaluate and ascertain the perception and attitude of parents of children with hearing impairment.*

### MATERIAL AND METHOD

*This was a questionnaire based study of parents' perception and attitude about children with hearing impairment in the Port-Harcourt metropolis from 1<sup>st</sup> June 2011 to 31<sup>st</sup> May 2012.*

### RESULTS

*Thirty seven parents of children with hearing impairment were studied. The parents demonstrated different attitudes towards the children. Majority, 34(94.59%) of them felt sad, others expressed anger. Twenty seven (72.97%) felt hearing loss was due to punishment from the "gods" for an evil deed by a family member. The attitude and feelings of parents included sadness, self blame and anger. Parents also*

*believe that immediate cause is spiritual.*

### CONCLUSION

*The public should be enlightened about common preventable causes so as to correct all negative attitudes about hearing loss/impairment.*

**Keyword:** *Hearing impairment; children; parents; perception and attitude.*

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### INTRODUCTION

Hearing impairment is the most frequent sensory deficit in human populations, affecting more than 250 million people in the world<sup>1</sup>. Significant hearing loss occurs in one to two per 1000 newborns and in two per 1000 young children.<sup>2</sup> However, nearly all children develop transient hearing loss related to middle ear infections during the period from birth to 11 years of age.<sup>3</sup> This makes hearing loss a very important inhibitor of different aspects of child development. It may be made worse by some medical conditions like chromosomal abnormalities such as Down syndrome; hypothyroidism, diabetes mellitus, hyperlipidemia and other genetic/ inheritable abnormalities.<sup>4,5</sup>

Congenital hearing loss is when the hearing impairment occurred from birth. It could occur with or without mutism. Acquired hearing loss is a situation when the child who was hearing previously is unable to hear again, most

affected children in this case might have developed fluent speech.<sup>5</sup> This could be devastating to the parents. Although hearing loss is one of the greatest of all disabilities, affected persons are often neglected. They suffer from a 'hidden or silent handicap,' as they frequently appear to be normal.

Congenital and childhood onset hearing loss are included as sequelae to various diseases and the causes are included in the Global Burden of Disease Study<sup>1</sup>. Examples of these causes include otitis media, meningitis, rubella, congenital anomalies and non-syndromic inherited hearing loss.

The burden and handicap of childhood hearing impairment is enormous, quality of life is negatively affected as the disability directly or indirectly affects all aspects of the child development.<sup>1</sup> The consequences include inability to interpret speech sounds which often results in inability to communicate verbally, delay in language acquisition, delay in cognitive development, economic and educational disadvantage, social isolation and stigmatization. The affected children are often neglected; they also suffer physical and sexual abuse. This disability is also commonly overlooked by health workers, communities and government.<sup>6</sup> Hearing impairment may also make it more difficult for people to escape poverty by hindering progress in school or in the workplace and by isolating them socially. For countries, the cost of special education and lost employment due to hearing impairment can burden the economy.

The evaluation of hearing impairment in children is not negotiable as speech and language delays secondary to hearing loss are often preventable.<sup>6</sup> Early identification of hearing impairment, whether it is permanent (usually sensorineural) or temporary (usually conductive), is the key to a child's success with communication.<sup>2,3, 7,8</sup> Newborn hearing screening is done in developed countries, Knowledge of the etiology of the hearing loss, particularly if genetic, can affect family planning and assist in the development of the

optimal habilitation plan for the patient.

Some of the problems of Nigerian children with profound hearing impairment are late presentation to health facility and delay in making accurate diagnosis. This is in part due to certain cultural misconception and superstition.<sup>9,10</sup>

The concept of attitude is very complex, it is said to be very diverse.<sup>11</sup> An attitude may be viewed as a positive or negative emotional reaction to a person or object accompanied by specific beliefs that tend to cause its holder to behave in specific ways towards its object.

This definition is useful in that it explicitly states that an attitude can be both positive and negative and that it is an emotional reaction. A positive attitude towards somebody may influence the person in a positive way and often builds up self-esteem. But a negative attitude lowers self esteem. This study was carried out to ascertain the perception and attitude of parents who have children with hearing impairment in Port Harcourt metropolis.

## **MATERIALS AND METHOD**

This was a questionnaire based study of parents of children who were seen in the University of Port-Harcourt Teaching Hospital, Nigeria, over a six months period from 1<sup>st</sup> June 2011 to 31<sup>st</sup> May 2012 who gave consent to participate in the study. The teaching hospital is the only tertiary hospital located in the metropolis of Port Harcourt, the capital of Rivers State, one of the Niger Delta states in Nigeria. It is a 500 bedded hospital and serves as a referral centre for hospitals within the state and neighboring states.

The study subjects were thirty seven parents of children with history of hearing impairment who had been referred from the school for the deaf for assessment of hearing before enrolment in school. Information collected included parents age, sex and questions related to the perception and attitude of the parents. Data was analyzed using SPSS

version 17 software and presented in frequency distribution tables.

## RESULT

The thirty seven parents studied were 23(62.16%) females and 14(37.84%) males; M: F ratio of 0.6:1. The age and sex distribution of the parents of children with hearing impairment is shown in Table I. The age range of the participants was 24 to 53 years with a mean age of 33±5.2 years. One family had two children with hearing impairment. Majority, 34(94.59%) of the parents expressed sadness about their children's hearing disability. Twenty seven (72.97%) feel that the hearing loss may be due to punishment from the "gods" for an evil deed, yet others 29 (78.37%) expressed that they had pity on their children. Table II shows the attitude of the parents who had children with hearing impairment. Most of the parents had positive and negative attitudes. Two (5.40%) of them were indifferent about the disability.

**Table I. Demographic Data of Parents**

Parents	Number	Percentage
Age		
20-29	18	48.65
30-49	11	29.73
>49	8	21.62
Sex		
Male	14	37.84
Female	23	62.16
Educational Level		
Primary	13	35.14
Secondary	16	43.24
Tertiary	8	21.62
Occupation		
Skilled	12	32.43
NonSkilled	25	67.57

**Table II: Attitude of the parents towards children with hearing impairment**

Attitude	Number	Percentage(%)
Positive Attitudes		
Love	33	89.19
Care	29	78.37
Concern	29	78.37
Compassion	21	56.76
Negative attitudes		
Sadness	35	94.59
Self blame	31	83.78
Anger	28	75.68
Punishment from God	27	72.97
Shamefaced	26	70.27
Will of God	19	51.35
Indifferent	2	5.40

## DISCUSSION

Hearing impairment can have heavy social and economic burden on individuals, families, communities and countries.<sup>12</sup> The study showed that parents expressed different attitudes and feelings towards having a hearing impaired child in the family. This was not surprising as hearing impaired children had delay in different domains of development and as such they are seen as abnormal children. These delays involved language and communication, cognitive skills and poor academic progress and other forms of social development noted by the parent. These findings are in keeping with other studies.<sup>13</sup> Hearing impaired children and are often stigmatized and socially isolated. It is therefore not strange to have feelings of sadness, self blame and other behavioral attitude expressed by parents with children having this severe handicapping condition in this study. Similar findings have been reported by other authors.<sup>14</sup>

Majority 25(67.57%) of the parents whose children were affected are from low socioeconomic status with unskilled occupation. The poor suffer more from hearing impairment because they cannot afford the preventive and routine care needed to avoid hearing loss due to infections and other causes;<sup>15</sup> they also cannot afford to buy hearing aids to make the disability manageable. Also ignorance may contribute to the delayed presentation for treatment in health facilities. Hearing impairment also makes it more difficult for them to escape poverty by hindering progress in school or in the workplace and by isolating them socially. For some communities, the cost of special education and loss of employment due to hearing impairment can further cause a huge burden on the economy.<sup>14,17</sup>

It is often difficult for parents to cope with children with chronic illness such as this. One of the families in the study group had two children with hearing impairment. The cause of this was not readily identified. However, it has been reported by authors that hereditary

and familiar hearing loss may be difficult to ascertain and is almost certainly genetically determined due commonly to consanguineous marriage.<sup>18,19</sup>

### RECOMMENDATION AND CONCLUSION

Early detection and treatment are vital, but prevention of diseases that cause deafness should be emphasized as that is cheaper than treatment. The importance of immunization cannot be over stressed; immunization campaigns against measles, meningitis and mumps which are common infective causes of hearing loss should be intensified to further reduce the incidence. Immunization programme against meningococcal meningitis in the Gambia has reduced the incidence of deafness.<sup>15</sup> Effective antenatal and prenatal care will prevent the disability as a result of early diagnosis. The danger of ototoxic drugs and local herbs taken during pregnancy should be emphasized as part of preventive measures.<sup>20</sup> Referring jaundiced babies early for diagnosis and possible treatment; reducing exposure (both occupational and recreational) to loud noises by using personal protective devices and putting engineering noise control measure are other means of reducing this ugly handicapping condition. Secondary prevention for those who are not totally deaf can be done with the use of hearing aids. Gene therapy for the unborn and other modalities of therapy are available.<sup>21</sup> Cochlear implant is expensive and out of reach for many of the affected children in Nigeria. World Health Organisation can raise awareness about causes and costs of hearing impairment and the opportunities for prevention; and encourage countries to establish national prevention programme.<sup>12</sup>

Limitation of this study is the small sample size.

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