

Caring for the deaf child in the sub-Saharan Africa

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Abstract

Deafness in children in the sub-Saharan countries is yet to attract the desired attention. This social handicap is on the increase in these regions due to poor sanitation, inadequate immunization and under nutrition. The priorities of deafness in childhood are; early detection, identification of causes of deafness and early training by specialist in education. The sub-Saharan countries suffer from the problems of shortage of personnel needed for identification and management, where such personnel are only present in the urban centres. Conversely, majority of the deaf children live with their parents in the rural areas and are from poor economic background. Preventive measures are unpopular in the developing countries. Various government agencies prefer short-term measures for political reasons and therefore popular programmes are curtailed prematurely by successive governments. However various preventive measures such as control of otologic infections, strengthening the school health services, educational programmes to reduce consanguineous marriage, immunization and provision of ante-natal care will reduce a large number of preventable deafness. However the provision of basic infrastructures like good roads, water supply, boosting agriculture and encouraging productivity will generally improve the living condition in the rural areas.

Key words: Deafness, children, sub-Saharan Africa

Introduction

Deafness is a "hidden handicap" or the unseen disability¹. The National deaf children's society of Britain stated that one child in one thousand is born deaf. At any one time, there are approximately 3,000 deaf children in special schools, some 3,500 partially deaf children in special schools and special classier of ordinary school; and over 6,00 school children in ordinary school use a hearing aid². By the united Nation statistics, it is

estimated that there are 350 million children in the developing countries of the world whose facilities are below the minimum standard, of these already disadvantaged children, 5000,000 are profoundly deaf.¹ In the developing countries, the deaf children are further affected by the lower standards of sanitation, poor nutrition and inadequate immunization.^{3- 5} Throughout the world the priorities for deafness in childhood are;

a) Early detection

- b) Identification of causes of deafness
- c) Early training by the specialist in education

The plight of the profoundly deaf in the third world has never attracted the attention it deserves.⁶ The sub-Saharan countries suffer from the problem of shortage of personnel needed for identification and management. These problems are made worse where various public and private sectors place less emphasis on the education and care of the disable.

Definition and causes of deafness

The world Health Organization (WHO) applies the term deafness to persons whose hearing impairments is so severe that they cannot benefit from amplification.³ Customarily, those persons who are deaf according to this definition are either totally without hearing or have profound hearing impairment (90db). Deafness could also be defined as the inability to use hearing as a primary channel for receiving speech, even with amplification whereas hearing loss is hearing impairment of various degrees that could be unilateral or bilateral.⁷

Various causes of deafness in the sub-Saharan region could be classified as congenital or acquired. The congenital causes are rare which include Treacher – Collins, Pierre – Robin and Usher's syndromes. These are associated with some cranio-facial abnormalities. Hereditary and familial causes of deafness tend to be more pronounced in communities where consanguineous marriages are practiced. This allows early expression of the disorders in the siblings. In a survey to identify the prevalence and aetiology of hearing impairment among Saudi infants and children, it was found that heredofamilial causes of deafness accounted for 66.1% of the cases.⁸ Maternal infections, ingestion of herbs and other toxic substances by mothers

during pregnancy may have effects on the developing cochlear. Ototoxicity is a rising cause of deafness in the Sub-Sahara region. This is so because many people subject themselves to drugs without prescription as well as the use of some toxic herbs. There are about 6 million totally deaf people in China according to official survey conducted in 1990 and the use of ototoxic drugs is a major cause of deafness.⁹

Among the acquired causes, infections appeared to be the most common; they include measles, mumps, herpeszoster oticus, meningitis and chronic suppurative otitis media. In the northern regions of West Africa "Meningitis belt", seasonal epidemics of meningitis leave an annual legacy of deafness. This accounts for 8% to 24% of all cases of sudden deafness among school children in Nigeria.³ Febrile illness especially viral infections and malaria have been shown to be an important cause of profound childhood deafness in Nigeria.¹⁰ Some perinatal disorders like hypoxia, hye bilirubinaemia, prematurity and low birth weight may all lead to deafness.

Detection of deafness

This depends on alert awareness on the part of the attending medical team; whether obstetrician, paediatrician or family physician and of the mother as they are all responsible for the care of these infants. In the rural areas the Traditional birth attendants (TBAS) and community health officers (CHOs) are the only health personnel that can possibly detect any defect.

Delay in diagnosis may occur for several reasons: the development of a child with impaired hearing parallels that of normal infant until the age of nine months.¹¹ Infant with profound hearing loss also coo and babble until that age, therefore parents are likely to ignore subtle evidence of hearing impairment. The lack of awareness and poverty by the

peasant rural dwellers and the wandering nomads further worsen the want for medical attention.

There are various assessment and test to detect deafness, but a high index of suspicion by parent is relevant during the process of child's development. The primary health center (PHC) should incorporate some otologic health education sessions during immunization and epidemics of some diseases like measles, meningitis etc so as to encourage early referral to a hospital.

Training and rehabilitation

Health care personnel and specialist in deaf education are lacking.¹² The few available ones are only located in the urban centers. Majority of the deaf population in children live with their parents in the rural areas and are from poor economic background. These children are left without motivation for normal growth and development.

Many global programmes for health and development have implications for the control of deafness in the developing countries.³ Such programmes should be examined to ensure that they take otologic health into account. The Alma Ata declaration listed the control of respiratory infections as one of the aims of the programme of "Primary Health for All". An objective of the water decade is to control the water-borne infections. The world food programme emphasises children malnutrition while maternal and child welfare programmes seek to reduce birth trauma and prematurity.³ Individual problems for the deaf are sometimes peculiar to the country. In Africa infants are carried on the back, although they are in contact with an older person all day, they receive little stimulation from play or from seeing the faces and mouth during speech.⁵ Hence voice stimulation is therefore generally lacking for deaf infants. Most of the children needing training and rehabilitation have

irreversible damage out of which some may benefit from amplification (hearing aids) so as to attend normal school.¹²

The school health services need to be strengthened to embark on regular screening programmes before school admission. This will further identify those that will benefit from the use of hearing aids so as to attend the normal schools as well as those that would attend the special schools for the deaf children. This will help reduce the menace of some deaf children involved in street begging in this region. The school for the deaf are few and distantly located, the need for government and private organization to set up more of such schools is further stressed so as to cope with the teeming population of deaf children.

Preventive measures and their problems

In the developing countries preventive measures are unpopular since it takes a longer time for their effect to be realized. Various government agents would want a short-term measure for political reason; therefore popular programmes are curtailed prematurely by successive governments.

However, preventive measures could be achieved through systematic control of otitis media, measles, meningitis, rubella and the like through primary health care. Educational programmes can be designed to reduce genetic and hereditary causes of deafness like discouragement of consanguineous marriage that is widely practiced among the nomadic population of sub-Saharan West Africa. In the rural areas the antenatal care are home based and deliveries are received by the traditional birth attendants (TBAs) since hospitals are far from reach. This has allowed such practices involving the use of herbs during pregnancy and unprescribed drugs, which could have some effects on the developing cochlear organs.

The antenatal clinic provides a good avenue for educating mothers on good nutrition, personal hygiene, immunization and keeping to prescribed drugs. It also ensures safe hospital delivery and detection of defect in utero or after delivery. Immunization programmes are popular but adequate coverage is difficult due to lack of access to certain communities and the wandering nomads.

Unfortunately, for various reasons deafness has not drawn enough attention. Deafness affects the rural population more often than the urban population¹³. Poor economic background, lack of health awareness and education play significant role in high incidence of hearing impairment. Therefore various efforts by government and non-governmental organization (NGO) such as poverty alleviation schemes, provision of good roads; water and boosting agriculture will reduce the untold hardship in the rural areas.

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