

The health and education related quality of life of children with Hearing Impairment: A Review

^aPramod Kumar Kulhade, ^bAkhilesh Kumar

^aCoordinator, B.Ed. & D.Ed. (HI), READS (Jaipur), India

^bAssistant Professor, VM Open University (Kota), India

Abstract

Quality of life is an important aspect of every individual. If it is concerned with children with disabilities, it becomes more critical. In the present study an effort has been made to review studies related to quality of life of Children with Hearing Impairment in contemporary literature. A systematic review has been conducted on quality of life of children with Hearing Impairment. The review revealed that Children with hearing impairment having additional associated impairment usually shows comparatively poor quality of their speech clarity & communication skill resulting in socio- emotional aspects of quality of life. The clients who were treated surgically and given a hearing aid reported a significant improvement in their health-related quality of life after treatment. In addition, some research studies reported that children with hearing impairment who have fitted cochlear implant in early age of life shows better in academic achievement indicating better education related quality of life. Children with hearing impairment who have hearing impaired parents shows better results in achievement in school instead of those having parents with normal hearing.

KEYWORDS: Quality of life, Hearing Impairment, Cochlear Implant

Disability exists since the existence of mankind: either visible or invisible. Hearing Impairment is among one of the invisible disabilities. It may occur at any time from conception to old age. There are many varying causes of hearing impairment: either genetic or environmental. It can develop due to various pathological conditions due to certain genetic conditions or several times may be due to environmental conditions. It may be of several types based upon the criteria of classification like the degree of hearing loss, type of hearing loss, age of onset etc. Whether referred to as a disability, disorder, or impairment, hearing loss is one of the most common chronic health conditions affecting all age groups, ethnicities, and genders. Hearing loss represents the third most prevalent health complaint in older adults following arthritis and stroke (Fausti, Wilmington, Helt, & Martin, 2005). In addition, Hearing impairment generally impairs emotional, social, communication and educational functioning of an individual (Adibi, Chen, Azmir, Solahan, Ismail, Anuvar & Abdullah, 2013). Regardless of its degree or age of onset or whatever the causes contributing hearing loss, hearing impairment affects overall aspects of life of the affected individual or in other words affects the quality of life of affected individual.

Quality of life can be defined as individual's perceived physical and mental well-being and there are many factors which may contribute to a person's quality of life (Adibi, Chen, Azmir, Solahan, Ismail, Anuvar & Abdullah, 2013). Quality of Life (QOL) has been defined by World Health Organization as an individual's perception of their

position in life in the context of the culture and value systems in which they live, and in relationship to their goals, expectations, standards and concerns (Dobhal, Juneja, Jain, Sairam & Thiyagrajan, 2014; WHO, 1995).

World Health Organization (WHO) Quality of Life group on health describes that quality of life is concerned with the individual's perception of their position in life in the context of the cultural and value systems in which they live, and in relation to personal goals, expectation, standards and concerns above mere absence of the disease.

Studies on Health-Related Quality of Life (HRQOL)

Rajendran & Roy (2010) conducted a study comparing health related quality of life of primary school deaf children with and without motor impairment and found that children with both hearing impairment and motor impairment are associated with significantly increased suboptimal levels of functioning and significantly lower Health Related Quality of Life (HRQOL). Children with hearing impairment alone, without any motor impairment did not show any statistically significant difference in physical and social health scores when compared with their normal hearing peer group. However, there was a statistically significant difference in other domains as well as the total score of HRQOL when hearing impaired children with motor impairment were compared with children with hearing impairment without any motor impairment and children with normal hearing. The findings of the study did not indicate any significant reduction in physical health in the hearing-impaired group.

Hintermair (2011) carried out a study on Health-Related Quality of Life and classroom participation of deaf and hard-of-hearing students in general schools. A total 212 Deaf and Hard-of-Hearing (DHH) students at mainstream schools were investigated through a survey using the 'Inventory of Life Quality of Children and Youth' and a 'Classroom Participation Questionnaire'. The result revealed that the domains of school and social activities with peers were more important for the Health-Related Quality of Life (HRQOL) of the DHH students than for those having no hearing impairment. The results also revealed differences in the HRQOL levels of the two samples, with the DHH sample having higher scores for school experiences, physical and mental health, and overall HRQOL. A positive relationship was also observed between quality of life and perceived classroom participation in certain domains like students who perceived classroom participation as satisfying scored higher on quality of life in school, social contact with peers, and mental health.

Studies related to Education Related Quality of Life

Stacey, Fortnum, Barton & Summerfield (2006) conducted a study on Hearing-Impaired Children in the United Kingdom. The study was focused on auditory performance, communication skills, educational achievements, quality of life and cochlear implantation and found that when rigorous statistical control is exercised in comparing cochlear implanted and non-implanted children, pediatric cochlear implantation was reported more effective for improvements in spoken communication skills and also shown improvements in some aspects of educational achievements and quality of life, provided that children receive implants before 5 years of age.

Kushalnagar, Topolski, Schick, Edwards, Skalcky and Patrick (2011) studied mode of communication, perceived level of understanding, and perceived quality of life in youth with Deaf or Hard of Hearing. The study suggested important implications for improving perceived quality of life of youths with deafness and hard of hearing and the depressive symptoms among them if they have a difficult communication with their parents. Results emphasized that quality of communication among family members is essential even when youth with hearing loss are in their adolescent years. In keeping with reports of the benefits of positive perception on parent's level of understanding and associated reduction in youth's depressive symptoms as well as an increase in perceived quality of life, the study suggested that effort should be made to identify youth at risk for communication problems at home.

Schich, Skalicky, Edwards, Kushalnagar, Topolski and Patrick (2012) in their study on 'School Placement and Perceived Quality of Life in Youth' having Deafness or Hard of Hearing found that in the education of students with Hearing Impairment, there is much debate about how placement affects educational outcomes and quality of life. This study examined the relationship between quality of life and educational placement of Youths with DHH. Results showed that there were few differences in quality of life related to school placement (with age, gender, depression symptoms, and hearing level as covariates). Data revealed that DHH students may not differ much in terms of quality of life across school placements, but that there may be differences in subsets of DHH youth.

Ciorba, Bianchini, Pelucchi and Pastore (2012) conducted a study on impact of hearing loss on the quality of life of elderly adults and found that Presbycusis is a complex disease, with a controversial physio-pathology, which is influenced by genetic, environmental, and medical factors. Presbycusis is an increasingly important public health problem that can lead to reduced quality of life, isolation, dependence, and frustration. The study suggested a requirement to improve methods of identifying individuals with presbycusis and their deteriorating Quality of Life, thus improving services by providing hearing aids, assistive listening devices, and auditory rehabilitation. Identifying individuals with hearing loss, supplying appropriate hearing aids or other listening devices and teaching coping strategies may have a positive impact on the quality of life of older people.

Freeman (2013) in his study on the relationship between optimism, adaptation to disability and quality of life among college students with disabilities found that there is no within group significant differences in optimism, adaptation to disability and the quality of life of college students with low perceived severity of disability and high perceived severity of disability. However, this study indicated significant between-group differences in optimism, adaptation to disability, and quality of life of college students with low and high perceived severity of disability. This research supports the tenets behind Bishop's Disability Centrality model and demonstrates the relationship and similarities between adaptation to disability and quality of life.

Patel, Moitra, Modi, Contractor & Kantharia (2014) conducted a study on impact of hearing loss on daily life style and schooling among children between 5- and 15-years age-group. In their study they found that most common negative impact was children were not admitted to school and were lagging behind in their academic performance and

progress. Poor awareness among parents about existence of special schools of children with DHH was also observed. Parental attitude too young to go to school was another stigma associated with students.

Conclusively, the review of research studies carried out on two dimensions of quality-of-life: health dimension and education dimension of students/youths/ old age persons with Deaf and Hard of Hearing which revealed a poor quality of life they are experiencing due to the deafness and hard of hearing. Further reviews indicated a relationship between quality of life and perceived classroom participation in certain domains. Reviews suggested a positive impact on quality of life in case of early cochlear implant than providing hearing aid in a later age. The reviews also indicated that although very less number of research studies have been conducted and the area is yet to be explored, an increased interest of researchers is observed towards quality-of-life of persons with deafness and hard of hearing in recent years.

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