

EVALUATING QUALITY OF LIFE (QOL) IN YOUNG ADULTS USING SIGN LANGUAGE

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Abstract: The term 'Hearing Impairment' generally refers to an individual with very little or no functional hearing and one who uses sign language for their communicational purpose (WHO, 2018). It affects QoL of a person to some extent with spatial variance to the environment. The aim of the study is to evaluate the Quality of Life (QoL) in young adults using sign language. Twenty-two sign language users with hearing impairment, aged 18-30 years were taken for this study. The individuals with other co-morbidities including intellectual impairment, learning disabilities or other types of physical disabilities were excluded from this study. WHO BREF questionnaire (Harper, 1996) was administered and the results were analyzed statistically. Among the young adults using sign language, QoL was moderately affected in psychological and environmental areas. Though the society has been developed, it lacks in accepting sign language users as normal. The ignorance in the society affects their mental health significantly. Every individual should have virtuous QoL to lead a healthy and peaceful life. Although deafness is a disability, they should be physically and mentally more stable to survive in the society.

Index Terms- Quality of Life (QoL), deafness, hard of hearing, sign language.

I INTRODUCTION

Hearing loss is an imperceptible chronic health condition with significant implications on the individual's Quality of Life (QoL). Over 5% of the world's population or 466 million people has disabling hearing loss. It is predicted that by 2050 over 900 million people i.e. one in every ten people will have disabling hearing loss. Most of the people with disabling hearing loss lives in a low and middle-income countries (WHO, 2003). There are over 360 million persons in the world with disabling hearing loss (5.3% of the world's population). The prevalence of disabling hearing loss is 2.4% in South Asia. It is greatest in children of South Asia, Asia Pacific and Sub-Saharan Africa (WHO, 2012).

Hearing loss is substantially underestimated and under treated (Ologe, 2006). It is often a life-long disability that can even cause a profound damage to the development of speech, language, and cognitive skills in people depending on the individual's severity and affected speech frequencies (Jamison,2006). Hence, it modifies the development in school academics and ensuing ability to obtain and possess employment. Since it deters the acquisition of language besides speech and cognitive skills in an individual, this disability poses a foremost difficulty during the childhood (Ogden,2002). The term 'deafness' generally refers to an individual with very little or no functional hearing and one who uses sign language for their communicational purpose. It is a major disability which affects all aspects of life and has varying effects on different individuals (Kochkin,2007). These variations lead to adverse effects on certain factors such as environment, educational level and socioeconomic status of an individual. There are different types of school systems which are more suitable for the better cognitive development of a Deaf and Hard of Hearing (DHH) individual. They are trained in special classrooms where they use special equipment and techniques by special people (Osakwe,2010). In these schools, communication is done through sign language, both formally and informally. It enhances the self-esteem, self-confidence and social competence among themselves. These schools provide quite more opportunities for DHH individuals to take up leadership positions than in mainstream schools (Murphy-Swiler,2014). Sign languages are natural languages which use different means of expression for communication in everyday life. In fact, it is the only means of communication for DHH and it provides replacement for speech (Gupta,2014). There are about 70 million DHH who use sign language as their first language or mother tongue. Each country has two or more sign languages, although different sign languages can share the same linguistic roots in the same way as spoken languages do. Wherever communities of deaf people exist, sign languages develop. Signing is not only used by the deaf, it is also used by people who can hear, but cannot physically speak.

QoL is a wide multidimensional concept that deals with subjective evaluations of both positive and negative aspects of life (WHOQOL,1998). It incorporates an individual's well-being and profiles about their health status, social participation and satisfaction with their functional daily living. The concept of QoL is important to understand in DHH individual because of the importance of communication and social participation in daily life (Patrick,2011). Most of the DHH individuals have parents with typical hearing levels and about 80% of these parents are unable to excellently communicate and engage in deep communication with their own DHH offspring (Ridgeway,1993). Therefore, a DHH individual brought into a family with typical hearing may be unable to participate effectively in family conversations with subsequent significant adverse impact on the child (Jones,2006). It affects the individual's feelings of excommunication during gatherings because of communication difficulties and failure of family members with typical hearing to understand the isolation of the DHH individual.

Adolescence is a life stage in which rapid and major developmental changes takes place. The QoL concept is important in young adults because they need to realize communicating using sign language is not a big deal in today's world. Communication and social participation are crucial in day-to-day life of an individual. Hence, it is mandatory to measure how young adults who

are DHH feel about their own QoL. The results can provide children, parents, and clinicians with significant information that can help to guide individual and social choices to optimize subjective well-being of an individual.

II NEED OF THE STUDY

Over the past few decades, the literature provides strong evidences on the reduced QoL in deaf and hard of hearing individuals. Every individual should have virtuous QoL to lead a healthy and peaceful life. Although deafness is a disability, they should be physically and mentally more stable to survive in the society. In working places, social get together and the like, they should have adequate emotional intelligence to interact confidently without any hesitation. To excel in their professions, they should be enthusiastic and energetic in their performance. Since they are communicating using sign language, they should not feel morally low than others. Rather than considering their status as burden, they should need to overcome their issues and face the world positively. By assessing the QoL of young adults using sign language, their physical health, psychological health, social relationships, and environment of an individual can be predicted. Hence, the developmental trend over years can be noted.

III OBJECTIVES OF THE STUDY

The objectives of the study are to assess four major domains which deals with the QoL namely (a) physical health, (b) psychological health, (c) social relationships, and (d) environment among the sign language users.

IV AIM OF THE STUDY

The main aim of the study is to evaluate the QoL in sign language using young adults.

V METHOD OF THE STUDY

5.1 PARTICIPANTS

Twenty-two sign language users aged 18-30 years were taken for this study. The individuals who satisfy the following criteria were included for this study: (1) DHH, (2) use of sign language as the primary language and, (3) willingness towards participation in the study. The individuals with other co-morbidities including self-identified intellectual impairment, learning disabilities or other types of physical disabilities and those using any form of amplification devices like hearing aids or cochlear implant were excluded from this study.

5.2 MATERIALS

WHO BREF questionnaire (Harper, 1996) was administered to evaluate the QoL of the participants. It is a semi-structured questionnaire examining the socio-demographic characteristics, few information on hearing loss and the QoL of the individuals. It comprised of 26 items, which measures the following four broad domains: physical health, psychological health, social relationships and environment of an individual.

5.3 PROCEDURE

The study purpose was clearly elucidated to the sign language users with the assistance of a sign language instructor. Then, the instruction for filling the questionnaire was explained in detail to the instructor, who in turn instructed the sign-language users on how to fill the questionnaire appropriately. The responses of the individuals were noted individually.

5.4. ANALYSIS

The mean score of items within each domain is used to calculate the domain score. Mean scores are then multiplied by 4 to make domain scores comparable with the scores used in the WHOQOL-100. Then, the raw scores are converted to transformed scores. The first transformation method converts scores to range between 4-20, comparable with the WHOQOL-100. The second transformation method converts domain scores to a 0-100 scale. The results were compared based on their individual responses to the given questionnaire (WHO BREF) by Pearson correlation using SPSS version 25.

VI FINDINGS AND DISCUSSION

The documented individual responses were calculated based on the norms given in the questionnaire. Then, they were compared across various domains.

Table No: 1
Correlation across various domains

Correlations					
		Physical health	Psychological health	Social health & relationships	Environment
Physical health	Pearson Correlation	1	0.149	-0.374	0.052
	Sig. (2-tailed)		0.508	0.086	0.817
	N	22	22	22	22
Psychological health	Pearson Correlation	0.149	1	-0.336	0.627**
	Sig. (2-tailed)	0.508		0.126	0.002
	N	22	22	22	22
Social health & relationships	Pearson Correlation	-0.374	-0.336	1	-0.310
	Sig. (2-tailed)	0.086	0.126		0.160
	N	22	22	22	22
Environment	Pearson Correlation	0.052	0.627**	-0.310	1
	Sig. (2-tailed)	0.817	0.002	0.160	
	N	22	22	22	22

** . Correlation is significant at the 0.01 level (2-tailed)

Source: Primary data

The above table shows that there is a significant correlation among physical health and social health & relationships. Similarly, there is a significant difference between psychological health and environment.

Table No: 2
Scores of participants across various domains

Domains	Raw scores	Transformed scores 4-20	Transformed scores 0-100
A	15.18182	8	31
B	14.02597	9	25
C	7.939396	4	0
D	14.52273	8	25

Source: Primary data

Note: A=Physical health, B=Psychological health, C=Social relationships, D=Environment

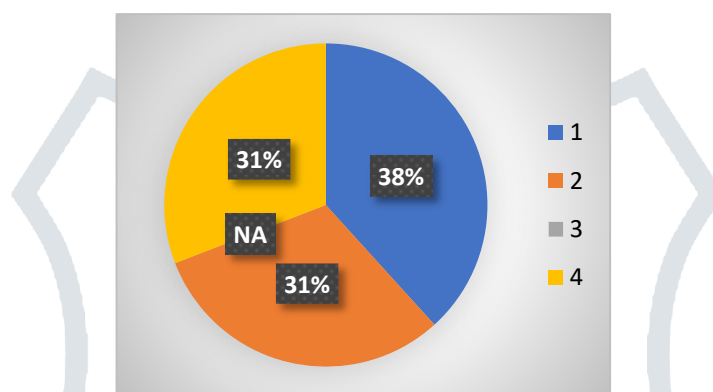


Figure No: 1

Scores of participants across various domains

Note: 1-Physical health; 2-Psychological health; 3-Social relationships; 4-Environment

The above chart depicts the scores of the participants across various domains. Generally, it is a well-known fact that deafness has a severe impact in an individual’s QoL (Ademokoya, 2008). It is evident that the first domain, physical health of the participants is the least affected domain when compared to other domains. This can be justified through the fact that, the subjects were affected only in terms of their speaking and hearing ability but their communication still remains intact with the use of sign language, which makes them feel physically fit. This mentality actually boosts up their spirit to work much harder to meet up their ambition in the life. It is noted that the second and fourth domain, viz., psychological health and environment was affected to the same extent and the scores obtained was lesser when compared to physical health domain. This could be attributed to the lack of emotional intelligence which corresponds to the ability to predict and manage their own emotions and the emotions of others. Since they are communicating using sign language, they may feel that they are not efficient enough to persuade their peers when compared to their verbal counterparts. Other factors such as concentration, ability to access and use information in day-to-day life, ability to participate in leisure activities, satisfaction with respect to capacity to work, transportation and conditions of living space were all noted to be affected. With the society being rapidly developing and modernized, we still lack in offering adequate support and comfort to these population. This makes them feel morally low and obstinate to survive in such an environmental condition. Thereby the psychological health and environment domain tend to be more affected when compared to the physical health domain (Patrick, 2011). As all the participants selected for the study were still unmarried, the items in the third domain viz., social relationship was irrelevant and hence not administered or discussed in the current study.

VII CONCLUSION

An evident difference in the scores obtained in psychological health and environment domains were noted. It is mainly because of an individual’s mentality. Though the society has been developed, it lacks in accepting sign language users as normal. The ignorance in the society affects their mental health significantly. Every individual should have virtuous QoL to lead a healthy and peaceful life. Although deafness is a disability, they should be physically and mentally more stable to survive in the society.

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