

Quality of Life of Hearing Impaired Elderly: A Need of Psycho-Education

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Abstract: One of the burning issues of today's Indian society is increased life span resulting in increment of elderly population, who are more vulnerable to abundant sensory disabilities. Hearing impairment is one of the serious issues among geriatrics which adversely affect their quality of life. While pondering over this issue, the present researcher decided to carry out a study to assess and compare the quality of life of impaired hearing elderly with self perceived normal hearing elderly. A purposive sample of 100 elderly out of which 50 were diagnosed as hearing impaired and 50 were taken as self perceived normal hearing capability, aged 60 years and above, both male and female belonging to rural as well as urban areas was drawn from home bound and private ENT clinics of Rohtak City, Haryana. Quality of life of impaired hearing elderly were compared with those normal hearing. Descriptive statistics and inferential statistics (t-test) were used and difference was observed between overall quality of life (along with all domains) of hearing impaired elderly and elderly with normal hearing. Results highlighted the very poor overall quality of life of impaired hearing elderly, whereas self perceived normal hearing geriatrics were found to be enjoying better quality of life. The psycho- education for improving the quality of life of hearing impaired elderly is discussed in the paper.

Key Words: Quality of Life, Elderly, Impaired hearing, Self perceived normal hearing, Psycho-Education.

I. INTRODUCTION

Life is a journey, where old age may not be treated as an end point of this journey, rather preparing for another new journey, which is a never ending process unless moksha is there. With this perspective in mind, one should live each and every moment of one's life irrespective of the stage of one's life, which he/she is leading. Deterioration in physical, mental, emotional and social health with age is inevitable. Though one can't cure the sensory disabilities, experiencing with age, yet can surely control it with adopting certain coping strategies. Impaired hearing is one of the most prevalent sensory disabilities among geriatrics. Presbycusis (i.e. sensorineural loss due to anatomical and physiological age related changes in auditory system) is the most common cause of hearing deficiency among elderly aged 60 years and above (Pirozzo, Papinzak, and Glosziou, 2003; Gates and Mills, 2005).

There are numerous studies emphasizing on deterioration in quality of life of elderly primarily due to impaired hearing (Malrow, Aguilar, Endicott, Velez, Tuley and Charlip, 1990; Jerger, 1995; Thoits & Hewitt, 2001; Kramer, 2007; Lia Ferraro, 2006; Karpa, 2010; Pronk, Deeg, Smits, Tilburg, Kuik, Festen, & Kramer, 2011; Geovanna, Crispim, Ferreira, Silva and Ribeiro, 2013).

Midha and Malik (2015) investigated poor psychosocial health status, impaired activities of daily living (Dayna and Dalton, 2003; Irigaray, 2007; Lasisi and Gureje, 2013), irritation, distance to family and social activities (Yuch & Shekelle, 2007),inadequate communication (Morgan, Hickson & Worrall, 2002; Hichson, 2008), leading to a state of learned helplessness (Mann, 1983), in dealing with serious psychosocial symptoms, such as ulcers, stress, depression and isolation (Kalela, 2006). Recently Cacchoine (2014) examined the morality risks associated with impaired hearing. Impaired hearing adversely affects the emotional and social domains but also overall quality of life of elderly.

All above empirical evidences suggest that hearing impairment among elderly is a matter of great concern for psychologists. So the present study was conducted to explore and compare the quality of life of hearing impaired elderly with those of self perceived normal hearing.

1.1 OBJECTIVES

The following objectives were formulated for the current research.

- 1.1.1 To identify the level of self perceived hearing capacity of elderly.
- 1.1.2 To assess and compare the quality of life of self perceived normal hearing vs hearing impaired elderly.

1.2 METHOD

1.2.1 Design: A two group design was used in current research work.

1.2.2 Sample: A purposive sample of 100 elderly both male and female, aged 60 and above, in which 50 were hearing impaired and another 50 were those who reported normal hearing. The sample was drawn from home bound and ENT private clinics of Rohtak city, Haryana.

1.2.3 Tools: The following tools were used in the present research work.

1.2.3.1 Hearing Handicap Inventory for Elderly HHIE (Ventry and Weinstein, 1982): For screening the hearing loss and its impact on quality of life of elderly the Hindi version by Midha and Malik (2015) HHIE was used. It has 25 items and this self assessment tool is designed to assess and to find out the effects of hearing impairment on emotional and social adjustment of people. This inventory is comprised of two subscales: (a) 13 items subscale to be responded in “yes”, “some time”, or “no”, explores the emotional consequences of hearing impairment; (b) 12 items subscale, explores both social and situational effects. A response of “yes” is given four scores, “some time” two scores and “no” zero score. The overall scores in this scale range from zero to hundred (0-100). The scores range from 0-16 indicates “no handicap”, 17-42 indicates “mild to moderate handicap” and above 43 indicates significant handicap. It has significant audiometric correlates. The reliability of it is determined by assessing its internal consistency, chronbach’s alpha range from 0.88 (social and situational subscale) to 0.95 for the entire inventory. It has strong support for construct validity.

1.2.3.2 Audiometer: Alps Audiometer, New Dehli India was used for PTA recording.

II. PROCEDURE

First of all, permission from ENT doctor and elderly was sought. Then rapport was established with all the participants of the research work. While dealing with impaired elderly, first of all their range of impaired hearing was assessed by audiometerist by having a Pure Tone Average (PTA) recording. After then the proforma of HHIE was given to them along with its relevant instructions. In this way, home bound normal elderly also filled the proforma. Scoring was done as per norms and put to statistical analysis by using SPSS 16.

III. RESULTS AND DISCUSSION

In order to meet the first objective, first of all the level of self perceived hearing capacity was assessed with the help of HHIE for the entire sample and distribution of scores and level of hearing impairment in older population is shown in Table 1.

Table 1: Percentage of elderly in different levels of self perceived normal hearing and hearing impairment.

Range of Scores	% of Elderly	Interpretation
0 – 16	37	No Handicap
17 – 42	25	Mild to Moderate Handicap
43 and above	38	Significant Handicap

Table 1 indicates that as per HHIE only 37% elderly were found to be enjoying normal hearing while 1/4th participants of the total sample were found to be having mild to moderate level of impaired hearing, whereas 38% were found to be having severe impaired hearing.

It is interesting to note here that in the present study 50 % elderly were those who reported to have so called normal hearing but 26% were found having mild to moderate impairment as per HHIE and 50 % were those who were diagnosed as impaired hearing by the audiometrist; however out of the sample of 100, 63 % were found impaired hearing as is recorded by the score obtained through HHIE.

Further the correlation between PTA scores and HHIE scores have been analyzed and is shown in Table 2.

Table 2: Correlation between PTA and HHIE scores among impaired hearing elderly (N=50).

Variables	Mean & SD	r
PTA	53.700 (18711)	.996**
HHIE	59.120 (19.235)	

**p<.001

It is evident from Table 2 that there existed almost perfect positive significant correlation between PTA scores and HHIE scores of elderly. This correlation explored the suitability of the questionnaire as an alternative to performing PTA to assess hearing level and impairments among elderly (Ventry and Weinstein, 1983; Fino, et al., 1989; Jupiter and Distasco, 1998; Sogebi & Mabifah, 2015; Midha & Malik, 2015).

Table 3: Descriptive statistics of self perceived normal hearing and hearing impaired elderly.

Subscale	Hearing Status	
	Normal (Group1)	Impaired (Group2)
	Mean and (SD)	Mean and (SD)
Emotional	6.52(3.327)	28.26(10.788)
Social	6.24(3.067)	30.96(9.674)
Total	12.76(5.282)	59.12(19.235)

Note: Less the scores better QOL.

The mean scores of hearing impaired elderly are higher than self perceived normal hearing as shown in Table 3. The results revealed that the quality of life in terms of emotional and social is adversely affected by the loss of hearing (Elgstrom, 2003; Midha & Malik, 2015). The elderly with impaired hearing have poorer emotional as well as social life than those of with normal hearing (Lotfi, Mehrkian , Moossavi and Faghih-Zadeh, 2009) as is clearly apparent in Figure1, 2 & 3.

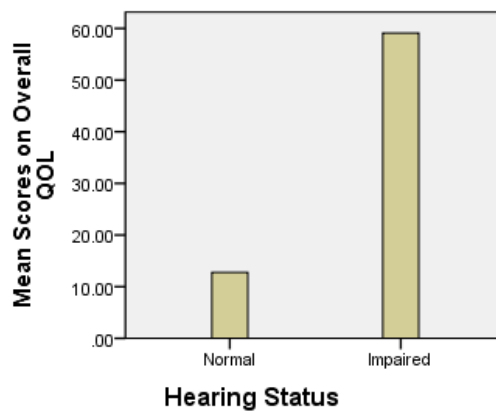


Fig. 1: Overall QOL of normal and impaired hearing elderly.

From Fig. 1, it is clearly apparent that the overall QOL of self perceived normal hearing old people was no doubt much better than those of impaired hearing. In other words it may be stated that this sensory disability is a major cause of poor overall quality of life among elderly.

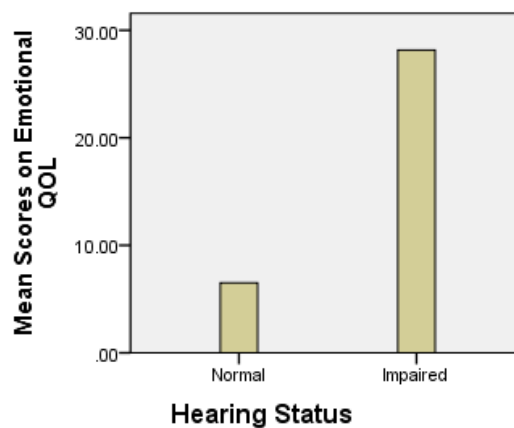


Fig. 2: Emotional QOL of normal and impaired hearing elderly.

The same trend of poor QOL in terms of emotionality is being observed (Fig. 2) as it is evident in case of overall QOL (Fig. 1) among impaired hearing elderly.

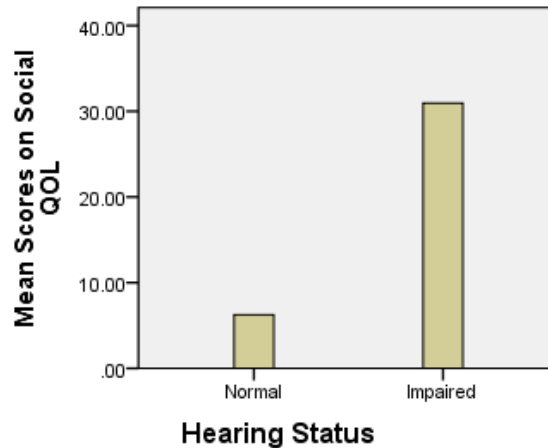


Fig. 3: Social QOL of normal and impaired hearing elderly.

Fig. 3 again depicts the poorer social QOL of impaired hearing elderly in comparison to those of normal hearing. In other words poor social QOL may be attributed to the inadequate communication leading to misunderstanding, hence results in withdrawal from society.

In order to find out the statistical significant difference between overall hearing related quality of life and its various domains (emotional as well as social) t-tests were used.

Table 4: Difference in overall QOL of normal hearing and impaired hearing elderly.

Groups	Mean	S _{ED}	df	t-value
Normal Hearing(1)	12.76	2.82	98	16.43**
Impaired Hearing(2)	59.12			

**p<.001

From Table 4 it is clearly evident that overall hearing related quality of life is severely negatively affected by impaired hearing among elderly. After findings the significant difference (t=16.43, p<.001) in overall quality of life between impaired hearing and self perceived normal hearing elderly, the further comparison was done on the domains of emotional and social/situational quality of life.

Table 5: Difference in emotional dimension of QOL of normal hearing and impaired hearing elderly.

Groups	Mean	S _{ED}	df	t-value
Normal Hearing(1)	6.52	1.59	98	13.55**
Impaired Hearing(2)	28.16			

**p<.001

It is clearly evident from Table 5 that due to hearing deficiency the emotional life of such elderly was severely affected as they showed emotional instability, irritability tenseness, frustration stress, embarrassment depression due to loneliness, as revealed by their responses to the items assessing emotional QOL. The current findings are in accord with the earlier findings of (Kricos, 1995; Davis, 1995; Ventry and Wienstein, 1982; Beattie, 1981; Midha and Malik, 2015). Disability sometimes takes its toll leading to death among elderly (Karpa, et al., 2010). Despite the emotional health, social quality of life is also severely hampered as is shown in Table 6.

Table 6: Difference in social dimension of QOL of normal hearing and impaired hearing elderly.

Groups	Mean	S _{ED}	df	t-value
Normal Hearing(1)	6.24	1.43	98	17.22**
Impaired Hearing(2)	30.96			

P<.001

From Table 6 it evidenced that the maximum negative effect on social life is being observed in case of group 2. Elderly with impaired hearing reported their restricted participation in family and outside affairs which

gradually led to withdrawal and isolation from social situation (Morgan, 2002; Dalton, 2003; Chia, 2007). The current findings supported the earlier findings of (Hickson and Worrall, 1997; Morgan, 2002; Dalton, 2003; Chia, 2007; Midha and Malik, 2015).

Thus on the basis of present findings it may be inferred that sensory disability (i.e. impaired hearing) no longer remained just disability but has its severe consequences in the life of elderly. So the present findings endorsed have suggestions that there is a dire need of educating old people and to make them aware that how this disability is interfering their day-to-day life activities? So this problem should not be ignored. The old people should be made clear that though at this span of life this disability seems to be somewhat difficult to overcome, yet it can be controlled through the use of hearing aids which will not only help them to overcome this problem of loss of hearing but will also enhance their quality of life by boosting their self confidence and self empowerment. In this way they should be encouraged to use hearing aid by telling them that denial of use of hearing aid (i.e. must not be stigmatized due to it) is not a solution of the problem rather its acceptance will lead to a better quality of life.

IV. CONCLUSION

Impaired hearing may be due to aging adversely affected elderly's overall quality of life and its various domains (such as emotional and social). However, through psycho-education elderly should be convinced to use hearing aid to make their life flourish at this stage of life.

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