00364

HEARING AIDS

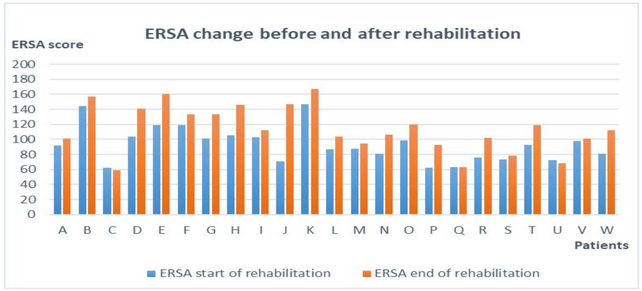
Multidisciplinary hearing rehabilitation and quality of life ?

Y.Bouallouche, L.Nerocan, C.Mousset, P.Safar

Abstract

In France, **60% of people with hearing aids** report severe to total limitations in activities and cannot follow a conversation with multiple people [1]. Quality of life indicators for patients with hearing impairments are therefore very unfavorable compared to the general population. However, **only 40% of hearing aids wearers report satisfaction with their device** [3]. **Sainte Marie Paris Hospital** offers a multidisciplinary rehabilitation program for adults with hearing impairments. 23 adults with hearing aids who had benefited from a multidisciplinary outpatient rehabilitation program were included in this retrospective study to evaluate the evolution of their quality of life following this pathway.

Quality of life was measured using a self-assessment questionnaire (ERSA), the Adult Hearing Handicap Inventory (AHHI) [4], pre and post rehabilitation. **This program significantly improved the scores measured by the ERSA** up to a total of 29 sessions, particularly for patients who maintained a professional activity.



Objectifs

The primary objective is to measure the evolution of quality of life following a rehabilitation program for adults with hearing aids who have presented difficulties with comprehension and limitations in participation in occupational activities.

The secondary objectives are to identify the parameters that influence quality of life and to specify which patients benefited most from the rehabilitation.

Méthodes et Matériels

The study, conducted between December 2018 and June 2021, is based on a retrospective monocentric cohort of individuals with hearing aids, including 15 women and 8 men, aged between 34 and 81 years. The median age was 64 years. All 23 French-speaking subjects presented acquired hearing loss (mild, moderate, or severe) and used hearing aids. None had any cognitive impairment.

Each subject benefited from a multidisciplinary rehabilitation program over a period of 6 months, which included speech therapy, occupational therapy, and psychomotor therapy sessions. Quality of life was evaluated using a self-assessment questionnaire pre and post rehabilitation program for adults with hearing loss (ERSA). This data was routinely collected as part of the care provided to patients with hearing impairments.

Résultats

The results of the study highlighted a significant improvement in the overall quality of life of patients following a multidisciplinary rehabilitation. The table below summarizes the results of the statistical data collected in the EQUAPRAP study.

Difference between ERSA before/after of rehabilitation

	p	Mean	Médian	Standar deviation
Patients with professional activity	0,00001	25,5	21,219	18,5
Patients without professional activity	0,00001	15,45	13,41	21
Quality of life item	0,0001	5,13	5,45	4
Personal of life item	0,00001	6,82	6,52	6
Social life item	0,002	4,95	6,87	5
Professional life item	0,005	6,58	6,55	6
Patients - 64 years [35 to 64]	0,0001	19,917	20,47	15,5
Patients +64 years [64 to 89]	0,0001	21,917	15,7	26
Number of sessions [15 to 29]	0,018	12,917	10,93	11
Number of sessions [29 to 36]	0,46	27,5	21,04	28
Degree of deafness (mild to moderate 2)	0,008	13	12,89	13
Degree of deafness (moderate 2 to profound)	0,0004	25	20,04	27,75

Conclusion

A 6-week multidisciplinary auditory rehabilitation program conducted with a cohort of hearing aid adults aged 34 to 81 significantly improved quality of life scores as measured by ERSA. This retrospective study highlighted benefits seemed to be observed up to a total of 29 sessions. Overall, all evaluated subdomains, regardless of age, degree of hearing loss, or professional status, showed a significant improvement in quality of life. Notably, there was a more significant increase in ERSA scores in the group with a "moderate 2 to severe" hearing loss.

While these encouraging results require further confirmation at a distance from the rehabilitation program to ensure benefits for larger populations, a control group would be needed to limit biases.

Références

1-Brodie A, Smith B, Ray J. The impact of rehabilitation on quality of life after hearing loss: a systematic review. Eur Arch Otorhinolaryngol. 1 oct 2018;275(10):2435-40.

2-Maidment DW, Barker AB, Xia J, Ferguson MA. Effectiveness of alternative listening devices to conventional hearing aids for adults with hearing loss: a systematic review protocol: Table 1. BMJ Open. oct 2016;6(10):e011683

3-Ernst Emilie. Quelle est la place de l'orthophonie dans la rééducation auditive?. La Revue du Praticien. | Publié le. 17 mai 2009. | 59(5):640-1.

4- Ambert-Dahan E, Laouénan C, Lebredonchel M, Borel S, Carillo C, Bouccara D, et al. Évaluation du retentissement de la surdité chez l'adulte : validation d'un questionnaire de qualité de vie. Ann Fr Oto-Rhino-Laryngol Pathol Cervico-Faciale. févr 2018;135(1):29-35.

19-22 September 2024
Paris, France
CNIT Paris La Défense