

Abstract

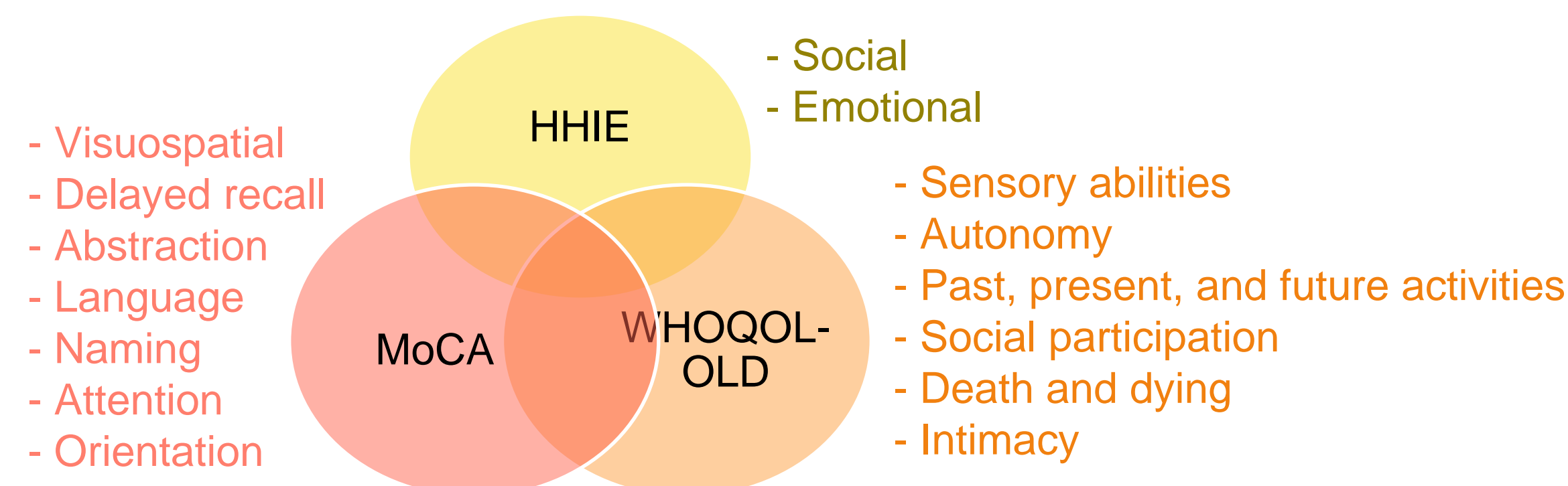
Global population aging when urging with the increasing prevalence of hearing loss by age, the impact of hearing loss on elder's cognitive performance and quality of life has been calling for critical concerns. Moderate to severe hearing loss elders were equally recruited at thirty cases for each group from Songklanagarind Hospital, Thailand. Beside participant's characteristics, perception of hearing disability was self-rated using the Hearing Handicap Inventory for the Elderly (HHIE). The WHOQOL-OLD and Montreal Cognitive Performance Assessment (MoCA) were used to assess quality of life and cognitive performance, respectively. It was found that the overall HHIE scores of both groups were not statistically significant different. The overall quality of life scores had also no statistically significant difference, but the sensory ability was more explicitly disturbed in non-users. With statistically significant difference at $p=0.033$, the MoCA delayed recall score was worse in non-user group. In conclusion, untreated moderate to severe hearing loss could possibly have cumulative effect on elders' cognitive performance. The way society has been thought, felt, and acted towards policy and practices on hearing loss of the elderly should be reconsidered.

Objectifs

This study aimed to compare the hearing ability, elderly's perception on its hearing ability, cognitive performance, and the potential effect on quality of life between two groups of hearing loss elderly who use and did not use a hearing aid.

Méthodes et Matériels

A cross-sectional study was designed to compare elderly's quality of life, hearing ability and its handicap, and cognitive performance between thirty hearing aid users and thirty non-users.



Résultats

- Non-users had more suffering in hearing ability. It was pointed in other studies that physical health concerns could influence the quality of life.^{1,2}
- Users perceived greater awareness on auditory deficiency restricting activity and participation than non-users even they had similar level of hearing loss.
- The mean total MoCA score of users group specifically indicated the possibility of having cognitive impairment. Whereas a group of non-users indicated the possibility of significant cognitive impairment.
- The delayed recall was a very early sign of cognitive interference. Untreated hearing loss was related with cognitive decline in aspect of delayed recall, whereas it illustrated lower cognitive decline in hearing aid users.³⁻⁵ Aging was associated with hearing loss which related to declining in cognitive functions. It included effects on episodic memory loss which might be observed in diminishing ability to retrieve verbal and nonverbal information.⁶

Domain	Mean (SD)		P-value
	HA User (n=30)	Non-HA User (n=30)	
WHOQOL-OLD			
Sensory Abilities	15.83 (3.30)	13.33 (4.04)	0.011*
Autonomy	16.27 (3.08)	16.30 (2.88)	0.966
Activities	16.87 (2.15)	16.57 (2.85)	0.647
Social Participation	15.90 (3.34)	15.83 (3.45)	0.940
Death and Dying	17.33 (3.49)	18.23 (2.54)	0.258
Intimacy	15.17 (3.10)	15.63 (2.95)	0.553
Overall	97.37 (12.27)	95.90 (12.59)	0.649
HHIE			
Emotional	22.87 (13.36)	18.07 (10.23)	0.124
Social	21.87 (15.21)	19.47 (13.14)	0.516
Overall	44.73 (27.21)	37.53 (20.60)	0.253
MoCA			
Visuospatial	3.43 (1.28)	3.03 (1.71)	0.309
Naming	2.47 (0.86)	2.50 (0.90)	0.884
Attention	4.93 (1.23)	4.70 (1.42)	0.499
Language	1.20 (1.10)	0.70 (0.92)	0.060
Abstraction	1.50 (0.63)	1.20 (0.76)	0.102
Delayed Recall	3.17 (1.60)	2.30 (1.47)	0.033*
Orientation	5.77 (0.82)	5.83 (0.53)	0.709
Overall	22.47 (4.67)	20.27 (5.36)	0.096

Conclusion

- Moderate to severe hearing loss disturbed elders' sensory ability dimension of their quality of life but did not show the difference of overall score between user and non-user group.
- Elders who perceived hearing disability restricting activity particularly on emotional aspect commonly decided to use a hearing aid.
- In order to provide early, proper and acceptable hearing help among hearing impaired elderly, there was not only the audiometric information, but self-perceived assessment was also needed to be concerned.

Références

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