

Factors Influencing Hearing Aid Use and Satisfaction Level

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Abstract :

Approximately 430 million people worldwide, or 5% of the population, suffer from hearing impairment. Nevertheless, there is a low adoption rate for hearing aids; only a small percentage of persons seeking assistance for their hearing issues look for ways to avoid utilising them. Many of these people use their hearing at an advanced level. Research indicates that a portion of adults who receive hearing aids do not wear them frequently, avoid using them, or are dissatisfied with them. According to surveys carried out in European nations, between 1% and 40% of hearing aids that are prescribed are never or very never utilised. A person with hearing loss experiences life in many different ways.

Keywords: population, from hearing impairment, Research, European nations.

Introduction:

A person with hearing loss experiences life in many different ways. While some people consult hearing aid users, conduct internet searches, and read user reviews, others obtain information on their own without the assistance of hearing healthcare specialists through individual or group counselling. But a sizable percentage give up on the rehabilitation procedure and do nothing about their hearing

issue. Reviewing the data on the effects of various patient itineraries on the use of hearing aids and satisfaction was the goal of this study. Few data-driven research have examined the factors behind patients' discontinuation of hearing aid use.

Several factors typically influence a person's decision to use hearing aids.

There are studies that offer proof of its influence, but the literature offers information on optimal travels and rehabilitation pathways that are described in research papers or suggested in guidelines.

The process of using hearing aids begins with the user seeking help for their hearing problem.

This may be broken down into three stages: the stage before seeking help, the stage during the fitting procedure, and the stage after the fitting process.

The objective was to determine the variables influencing the patient's journey at several phases, including help seeking, adoption, usage, and satisfaction with the aids.

Publications from January 1980 to January 2022 inclusive are included in the review.

Methods

The study analyzed the impact of hearing aids on senior citizens and people over 55 years old. The outcome measures focused on help seeking, hearing aid adoption, use of hearing aids, and satisfaction levels. The study was conducted from January 1980 to January 2022, using empirical data. No qualitative studies were included, and studies affecting the overall quality of life were excluded. The study did not include technological features of hearing aids or measure satisfaction as benefit. The study did not include hearing aid benefits realized or hearing handicap in the case of the elderly. Hearing aid benefit generally associates a relative change in performance between aided and unaided listening conditions. Studies demonstrating the benefit of hearing aids show a relationship between the benefit derived and satisfaction level attained.

Results

The search in PubMed yielded 424 hits, with 18 studies meeting criteria. 406 articles were not further assessed. In Cinahl, 52 hits were found, with 3 studies meeting criteria. The reference list yielded 21 articles, resulting in 39 articles meeting criteria and being included.

Studies across Three Stages

The literature reviews the patient journey into three stages: pre-fitting, fitting of hearing aids, and post-fitting. 22 studies focused on the pre-fitting period, addressing factors such as

motivation, patient attitudes, expectations, personality, self-reported hearing impairment, dexterity issues, hearing sensitivity, duration of hearing loss, education, socio-economic status, social interaction, cost of hearing aids, clinic type, general health attitude problems, speech understanding, and pre-fitting counseling. Two studies addressed factors in the fitting stage, including fitting counseling, first-hand experience, dexterity issues, and satisfaction with the hearing aid professional. In total, 17 studies covered the fitting period up to approximately one year, focusing on factors such as time, lifetime hearing aid experience, personality factors, self-reported hearing problems, attitude towards hearing impairment, hearing sensitivity, cosmetic looks after using hearing aids, post-fitting counseling, and the hearing aid professional. Two studies covered the three stages mentioned above.

Attitude toward Hearing Aids

Eight studies investigated the impact of attitudes towards hearing aids during the fitting process. However, these studies did not consider differences between those seeking help and those not seeking help. There were concerns about the perception of hearing aids, particularly the dark side of their use. Studies found that people who sought consultation but ended up without hearing aids had less favorable attitudes towards hearing aids compared to those who acquired them. Hickson et al. (1986, 1999) found that attitudes towards hearing aid use were associated with occasional or nonuse of hearing aids. Wilson and Stephens (2003) found that frequent use of hearing aids led to higher satisfaction levels among those with a positive attitude toward hearing aid rehabilitation. Gatehouse (1994) found significant positive correlations between attitude toward hearing aid use and satisfaction. Brooks and Hallam (1998) found that stigma toward hearing aids was not preconceived or predictive of later use. They suggested that pre-fitting and counseling to patients might influence these findings.

Own Attitudes toward Hearing Loss

Expectations

Seven studies have examined the impact of an individual's attitude towards their own hearing loss on four outcome variables. Hearing aid seekers generally reported fewer coping strategies compared to non-hearing people. Garstecki and Erler (1998) found that males were more likely to use hearing aids, as they considered their hearing loss less stigmatizing. Helvik et al. (2008) found that male adaptive behaviors were related to decreased hearing aid uptake.

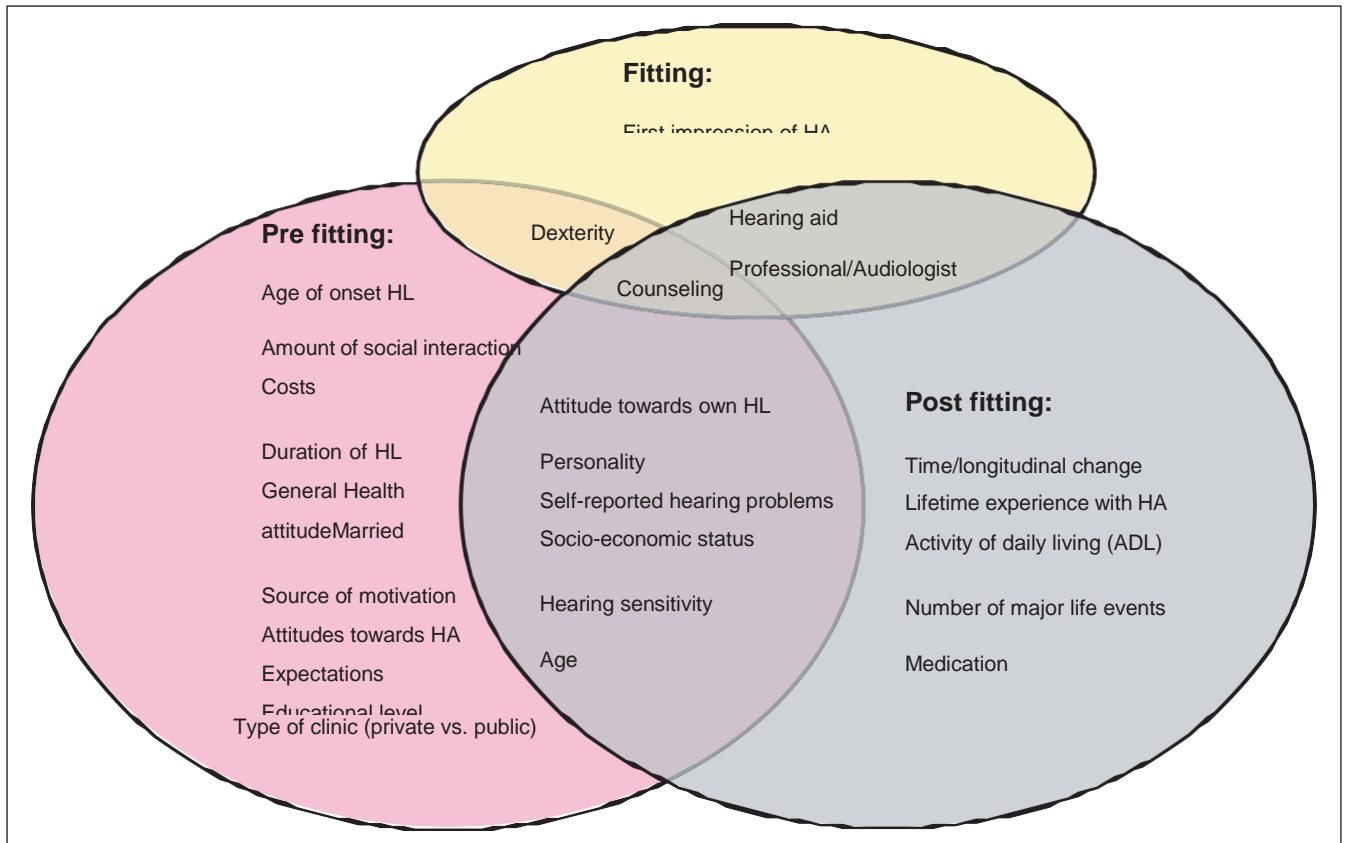
Humes et al. (2003) compared three groups of successful and unsuccessful hearing aid candidates: no adherents, those who rejected their hearing aid, and those who accepted and used their hearing aid. The Communication Profile for the Hearing Impaired (CPHI) showed that the no adherent group had poorer problem awareness and greater denial of communication problems. Brooks (1989) found that a higher degree of acceptance of hearing problems prior to fitting was related to a higher amount of hours of hearing aid use per day four months post-fitting.

Personality

The study by Cox et al. (2005) examined the personality traits and personal control of older adults who sought hearing aids. The research found that while hearing aid seekers were not significantly different from the general adult population, their personality traits and sense of personal control were not significantly different from the general population.

Age

This review highlights the influence of age and gender on various variables, but only a few studies considered these as primary research variables or independent predictors in a regression model. Some studies considered age and gender as potential confounders or controlled for them by matching groups. Humphrey et al. (1981) found no association between ages and help seeking likelihood, while Duijvestijn et al. (2003) found no age differences between those who consulted their GP for hearing problems and those who did not. Helvik et al. (2008) and Gussekloo et al. (2003) also found no relation between age and uptake of hearing aids, despite controlling for confounders like hearing sensitivity.



Source:-Factors Influencing Help Seeking, Hearing Aid Uptake, Hearing Aid Use,<https://journals.sagepub.com/doi/pdf/10.1177/1084713810385712>

Conclusion

The literature review provides insights into factors influencing hearing aid adoption, which are multi-layered and have a deep interrelationship. Use and satisfaction are positively correlated, but further research is needed to identify if these factors are interrelated or negative. The study aims to include most impacting factors and highlights the role of Audiologists, Doctors, and Society as major reasons. The review also emphasizes the development of technology, particularly AI, which is bringing new dimensions to the healthcare industry. Modern hearing aids would be more acceptable, easing stigma, uneasiness, and conditioning, making them more acceptable. Further research is needed to fully understand the findings.

Further research is needed to understand the factors influencing hearing help-seeking and hearing aid uptake, particularly in areas with limited evidence. Factors such as stigma, self-reported health, hearing aid cost, and counseling style need to be investigated further. The

study's synthesis methods, such as direction of effect and vote-counting, did not provide information on the magnitude of the effects. Higher quality studies, such as randomized controlled trials, are needed for both hearing help-seeking and hearing aid uptake. A systematic review and synthesis of qualitative studies could provide insights into these factors. This understanding can inform public health and clinical initiatives to promote hearing help-seeking and hearing aid uptake. Further investigations are needed to explore specific factors with limited or conflicting results.

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