

Executive Summary

Research Project: **Study of after hearing aid provision service and using for people with hearing loss under the universal health coverage**

Hearing impairment or hearing loss is one of the most prevalent health problems affecting the sensory system worldwide. In 2011, more than 360 million people worldwide, or 5% of the world's population, suffered from disabling hearing loss as estimated by the World Health Organization (WHO). In Thailand, the number of people with hearing loss who are registered under the Universal Coverage Scheme (UCS) in 2015 was estimated to be 190,000 people, or approximately 17% of the total number of people with disabilities in the country.

People can be directly affected by hearing loss in several ways such as a decrease in an individual's ability to communicate with others, educational opportunity, and feelings of isolation, stigmatization, loneliness, and frustration. Moreover, this can also affect families who have members with hearing loss, particularly in the increase in expenditure on hearing aids as well as the economic impact resulting from unemployment or decreased income.

Hearing rehabilitation by using hearing aids can improve the ability of hearing and quality of life for people with hearing loss. In Thailand, people with hearing loss who are registered under the Universal Coverage Scheme can receive hearing aids without being charged from accredited hospitals under the conditions of the National Health Security Office (NHSO).

The Health Intervention and Technology Assessment Program (HITAP) conducted a study on services after the provision of hearing aids and policy recommendations for developing services after providing hearing aids. Data were collected through document reviews and focus group discussions with stakeholders. Moreover, questionnaire surveys were issued in five provinces (Payao, Khon Kaen, Chonburi, Samut Prakarn, and Songkhla) to describe the situation regarding hearing aid usage; in total, data were collected from 364 people with hearing loss who received hearing aids under the universal health coverage scheme. The results can be seen as follows:

1. Most of the subjects who received hearing aids were the elderly (68%). The average household income and this subject group's average income were 13,754 and 2,027 THB per month, respectively.
2. Most provinces, except Bangkok, have only one hospital – a provincial hospital – that has hearing aid provision services. Moreover, the results showed that 63% of the subjects stated that the existing number of hospitals with hearing aid provision services was insufficient.
3. After the subjects received the hearing aids, 23% of them did not follow-up on their appointments with the health care provider to discuss the results on the use of hearing aids. For subjects that attended the initial follow-up, it was found that they were most likely to

- miss their second and third follow-ups. The most common reason for missing the later follow-ups was that the health care service provider did not schedule the subsequent appointments.
4. One-third of the subjects did not know the warranty period of hearing aids, while 43% did not know the lifespan of the hearing aids.
 5. Almost all the subjects (95%) had high expectations prior to using the hearing aids. However, after using them, only 54% experienced an improvement in quality of life while 8% were not satisfied with their hearing aids.
 6. For the 200 subjects who were interviewed, 29% stopped using their hearing aids and of that amount, 50% used their hearing aid for less than 1 year. One-fourth of the subjects used their hearing aids for 2-3 years and only 5% used them until the third year. The most common reason for discontinuing use was the disturbing effect of background noise and the devices becoming broken. Economic loss from discontinuing usage until the third year was estimated to be approximately 19 million THB.
 7. For subjects who are still using the hearing aids, most of them (70.7%) use the hearing aids daily with an average usage duration of 9 hours, whereas users who occasionally use hearing aids approximately 3-4 days a week (43.8%) average about 4 hours of use per day.
 8. Slightly more than a third (34.2%) of subjects who still use hearing aids encountered issues with their equipment; the most common problem (75%) was hearing aid feedback during usage.
 9. For subjects who used zinc-air batteries for their hearing aids, around 1-2 batteries were used per month, resulting in a cost of 65-96 THB per month. However, 43% of the subjects stated that the cost of batteries was a burden as they were only able to spend approximately 32 THB per battery or 60% of the current price of zinc-air battery (reference price: 50 THB/battery).
 10. Subjects who used AA batteries used an average of 1 battery per month with an average cost of 18-30 THB per month. However, 24% of the subjects also stated that battery cost was a burden and they were only able to spend approximately 16 THB per battery.
 11. Representatives from organizations for people with disabilities and health care providers support a system where batteries are provided free of charge. However, a validation or control system to avoid double reimbursements and profit exploitation should be considered.

12. Representatives from organizations for people with disabilities and health care provider agreed that the NHSO should expand the warranty period of the hearing aids from 1 year to 2 or 3 years because they are more likely to have problems after the first year.

Recommendations for improving service after the provision of hearing aids.

1. The NHSO in collaboration with audiologist associations should provide training or guideline documents to health officers working in primary health care services such as health-promoting hospitals or primary care. The knowledge provided such as the benefits of hearing aids, and basic maintenance of hearing aids such as volume control and changing the batteries, can be disseminated to avoid incorrect usage.
2. The NHSO should expand the warranty period of the hearing aids from 1 year to 2 or 3 years, or it should expand the period to be the same as of the duration of usage prior to receiving a new hearing aid (3 years). If the expansion is approved, the increase in budget for this change will be approximately 8-16 million THB per year.
3. The NHSO should consider the suitability regarding the policy for providing batteries free-of-charge. Two options can be considered below:

Option 1: Providing free batteries for hearing aid users. If it is assumed that only new users are supported for a period of 3 years the budget is estimated to be 79 million THB.

Option 2: Reducing the price of zinc-air batteries to be less than 30 THB per battery or implementing co-payment between the user and provider. If it is assumed that only new users are supported for a period of 3 years, the budget required is estimated to be 32-40 million THB.

Additional recommendations for hearing aid provision service

1. Health care service facilities that provide hearing aid services should increase the type of hearing aids in order to meet the requirement of the users.
2. The NHSO should add the reimbursement of ear molds for children aged less than 9 years old due to their rapid growth during that stage. Consequently, ear molds are changed several times and parents need to pay for the new ear molds.
3. Health care service facilities should utilize the Thailand Telecommunication Relay Service (TTRS) in order to communicate with patients who are unable to use orally communicate.

For more information: <http://www.hitap.net/documents/168880>