

OBSERVATION OF THE BENEFITS OF EAR MASSAGE THERAPY SKILLS IN EAST JAVA

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ABSTRACT

The high number of patients who come for ear therapy with massage skills, the P3T Center intends to carry out an observational screening of ear therapy. This screening aims to find out how the diagnostic method and application of ear therapy with massage skills and the benefits of ear therapy to overcome the problem of hearing loss (hearing impairment). This screening design uses an observational method in which the researcher makes observations and interviews with respondents. Data collection techniques were carried out by looking at the results of the examination of respondents' hearing tests and the results of interviews with respondents. Patient therapy results in 18 people (60%) no progress or the same as the original condition. this shows that therapy can be said to be ineffective in curing ear disorders. The results of the audiometry examination of the right and left ear stated that none of the patients was normal. Even though there are patients who claim to be able to hear loud sounds in the questionnaire, it is not supported by audiometry results. So it can be concluded that ear therapy with massage skills has no impact on patients suffering from hearing loss.

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INTRODUCTION

Deaf is someone who has a barrier in hearing function and lasts only temporarily and permanently.¹ Congenital deafness can be caused by genetic mutations, parent ancestry, or exposure to disease while still in the womb.² While hearing impairment that occurs after birth can be caused by loud sounds in the long term/long, age (aging), injury, and certain diseases such as infections.³ The Southeast Asian region is a region with a high number of cases of hearing loss and deafness, so WHO has launched the "Sound Hearing 2030" program.⁴ There are 2 ways to use assistive

devices, including cochlear implants implanted in the ear through surgery, as well as hearing aids that can be mounted and removed as desired.⁵

The high number of patients who come for ear treatment with massage skills for deaf cases both deaf from birth, as well as hearing impairment due to illness (and or aging), then the Center of P3T intends to do observational screening about the ear therapy. In order to be able to elevate the nation's local wisdom by exploring how to diagnose and handle ear therapy from massage skill.

MATERIALS AND METHODS

This screening used an observational screening design by conducting observations and interviews with respondents registered as ear therapy patients with massage skills and conducting hearing tests on respondents. The screening time is carried out for 4 months starting from June to September 2019.

Audiometry tests were conducted in 2 different places, the first at SLB AB Kemala Bhayangkara 2 Gresik and at the Hastind Hearing Aid Center in Surabaya. Sampling is done randomly and the required sample (according to the minimum number of samples) is 30 people.

Samples obtained amounted to 13 people from Gresik and 17 people from Surabaya. The inclusion criteria of this study are respondents who have hearing loss as evidenced by the results of audiometry and are willing to be respondents until the end. The data that has been collected is then analyzed.

The instrument used in this study is audiometry. Data collection techniques carried out by looking at the results of the examination of respondents' hearing tests and the results of interviews with respondents. Descriptive test is used to display the results of the patient's characteristic data and the results of the patient's examination.

RESULTS

The total number of patients who were willing to be interviewed and conducted audiometric tests was 32 patients, but there were 2 patients who did not want to provide complete data. The total number of inclusion patients was 30 people and the exclusion of 2 people, along with the screening results that had been done. Respondent characteristics data consisting of age and gender range characters are shown below.

Table 1. Respondent characteristic data

Variable	Number (n = 30)
Age (years)	
12 – 25	13 (43.3%)
Gender	
Female	13 (43.3%)
Male	17 (56.7%)

The age range of patients varies from the age of the child to the adult age. The most age-old treatment was teenagers as many as 13 people (43.3%) aged 12-25 years. The most patients were male with 17 people (56.7%), while women were 13 people (43.3%).

Data on the characteristics of the respondent's examination and therapy results are the results of audiometry examination, duration of therapy and the results of the therapy shown in the table below.

Table 2. Characteristics of Audiometry test results

Degree of Hearing loss	Number	Percentage
Audiometry results left ear		
Moderate	3	11.5%
Moderate to severe	2	7.7%
Severe	7	26.9%
Profound	14	53.8%
Audiometry results right ear		
Moderate	3	11.1%
Moderate to severe	2	7.4%
Severe	7	25.9%
Profound	15	55.6%

The results of the audiometry examination of the right ear stated that the very heavy ear category was 15 people (55.6%), the weight category was 7 people (25.9%), the moderate-heavy category was 2 people (7.4%), the moderate category was 3 (11.1%) people and 3 people did not experience right ear disorders. The results of the audiometry examination of the right ear stated that none of the patients were normal. Even though there are patients who claim to be able to hear loud sounds in the questionnaire, it is not supported by audiometry results. So it can be concluded that ear therapy has no impact on patients suffering from right ear disorders. The

results of the audiometry examination of the left ear stated that the very heavy category was 14 people (53.8%), the weight category was 7 people (26.9%), the moderate-heavy category was 2 people (7.7%), the moderate category was 3 people (11.5%) and 4 people did not have a left ear disorder. The results of the audiometry examination of the left ear stated that none of the patients were normal. Even though there are patients who claim to be able to hear loud sounds in the questionnaire, it is not supported by audiometry results. So it can be concluded that ear therapy has no impact on patients suffering from left ear disorders.

Table 3. Distribution of Duration therapy and therapy result

Duration and Results	Number	Percentage
Duration of therapy		
1-2 therapy	5	16.7%
3-4 therapy	5	16.7%
5-6 therapy	7	23.3%
>6 therapy	13	43.3%
Therapy Results		
Can hear sounds but very soft	8	26.7%
can hear sound but softly	0	0%
can hear loud sound	4	13.3%
no progress or same as the original condition	18	60%

Whereas the duration of therapy for most patients was > 6 times of therapy, namely 13 patients (43.3%), 5-6 times as many as 7 patients (23.3%), and patients who treated 3-4 times and 1-2 times each therapy - 5 patients (16.7%) each. The results of therapy for patients 4 people can hear loud

sounds (13.3%), 8 people can hear but very slowly (26.7%) and 18 people (60%) have no progress / same as the original condition. More than 50% of patients said there was no progress / the same as the original condition, this shows that therapy can be said to be ineffective to cure ear disorders.

DISCUSSION

The age of most who treated was 12-25 years old and male sex. The most audiometry results of the left and right ear are very severe hearing loss category. In America more than 35 million people aged 18 years and over experience hearing loss and get worse with age. At the age of less than 41 years many hearing loss occurs due to the development and advancement in technology such as tend to listen to music using a headset. At a productive age, hearing loss occurs due to frequent exposure to noise. This may also cause a lot of hearing loss in the male sex.⁶ Gender can also affect the incidence of hearing loss, men have a 3 times greater risk than women to experience hearing loss due to noise.⁷⁻⁸

The most duration of therapy was <6 times the therapy but it was obtained the results of therapy with audiometry examination again showed no progress or the same as the original condition. This shows that ear massage therapy is not effective to cure ear disorders. Ear massage therapy is a relatively new development in medical care enabling deaf people to once again receive a sound sensation (unlike hearing aids) which makes the sound louder. Ear massage is possible to stimulate the auditory nerve, hair cells and there by producing sound sensations in different ways.⁹ The results of ear massage therapy regenerate hair cells in the cochlea and renew hearing in cases of hearing loss of sensory nerves. but massage therapy is not an absolute treatment for hearing loss. To be able to hear again still have to use hearing aids.⁹ This supports that massage therapy cannot treat hearing loss.¹⁰ However, this study also conducted interviews, where the results of the questionnaire filling interviews found there are patients who claim to be able to hear

loud sounds, but that is not supported by audiometry results. This may be due to ear massage provides relaxation to the patient.

The results of the audiometry examination of the right and left ear stated that none of the patients was normal. Even though there are patients who claim to be able to hear loud sounds in the questionnaire, it is not supported by audiometry results so that it can be concluded that ear therapy with massage skills has no impact on patients suffering from ear disorders.

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