

Manga Booklet about Hearing and Feelings

Are You Familiar with Hearing Impairment?

Produced with advice from **Dr. Naoki Ohnuma**

PhD in medicine (Hearing Impairment Science)

Former President, Tsukuba University of Technology

Former Visiting Professor, Research Center for Advanced Science and Technology, the University of Tokyo



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Preface

Hearing impairment is difficult to visibly recognise.

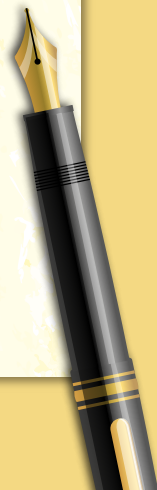
There are significant individual differences in the degree of hearing, and the method of communication that is easily conveyed (and desired by people with hearing loss) varies from person to person.

People with hearing loss have many feelings. Even if they would like you to repeat what you have said, they may feel hesitant to ask you to do so. Some of them feel reluctant to accept their hearing impairment.

It is important to try to understand both the “hearing” and “feelings” of hearing-impaired people so that they can access medical support smoothly without any extra effort. This booklet will help you learn about problems and difficulties that hearing-impaired patients frequently encounter in healthcare settings.

Naoki Ohnuma

PhD in medicine (Hearing Impairment Science)
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How Should You Call for a Hearing-Impaired Patient in Your Clinic?

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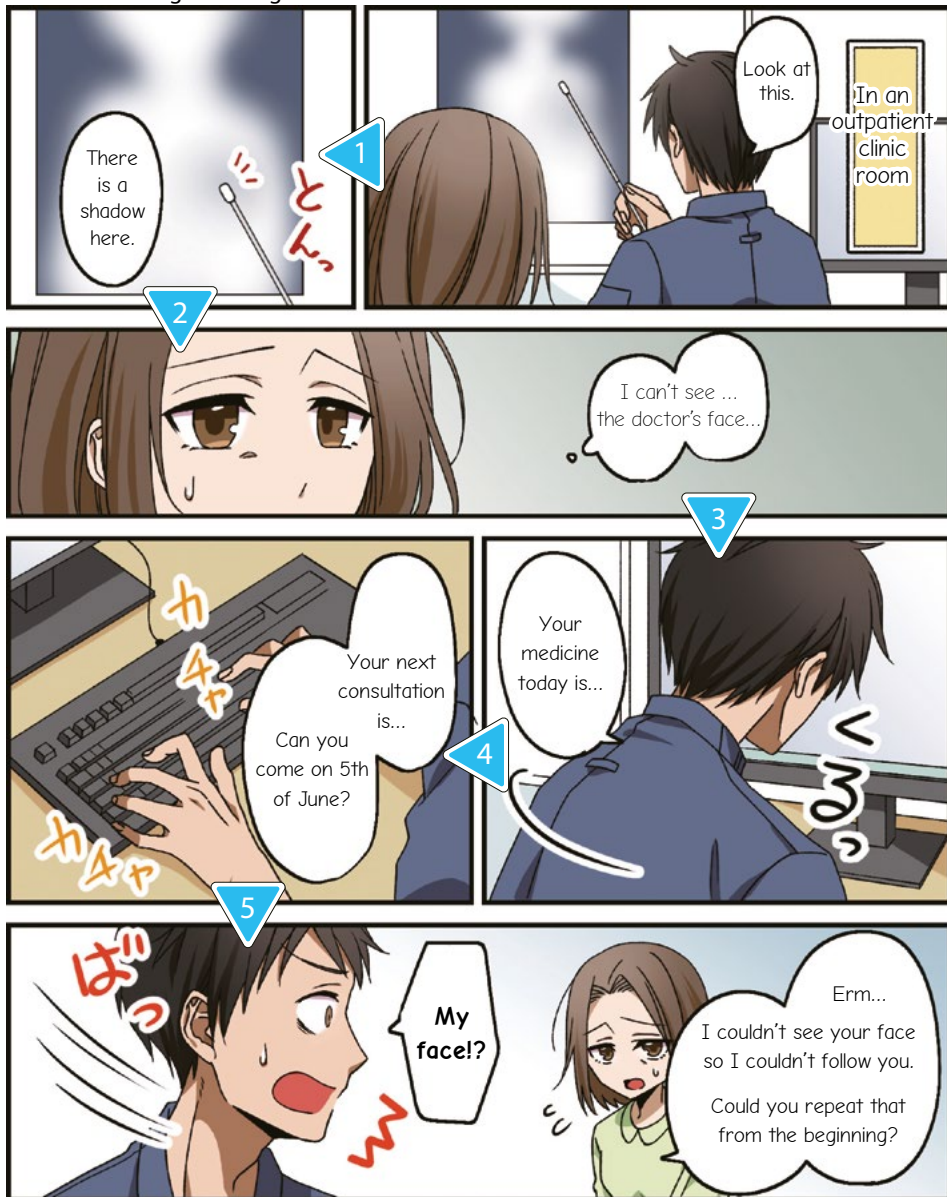


Points to Note

People with hearing impairment or difficulties use their sight to obtain additional information. Footsteps and other sound information are difficult for them to recognise, which makes them feel startled if they are patted on the shoulder from behind. It is necessary to adapt your behaviour to hearing-impaired people, such as making contact from a position where you are in their line of sight. Also, it is important to ensure that all the relevant healthcare professionals, including receptionists, are ready to adapt your behaviour to them.

Where Are You Looking When You Are Talking?

Please read manga from right to left.



Points to Note

Those with hearing impairment or difficulties try to interpret what is being said by watching the lips of the person talking to them. If you talk with your face away from them and they cannot see your lips, you can sometimes fail to make yourself understood. When talking to a hearing-impaired patient, you should face the patient so that they can see your lips.

Masks can be a Barrier to Hearing

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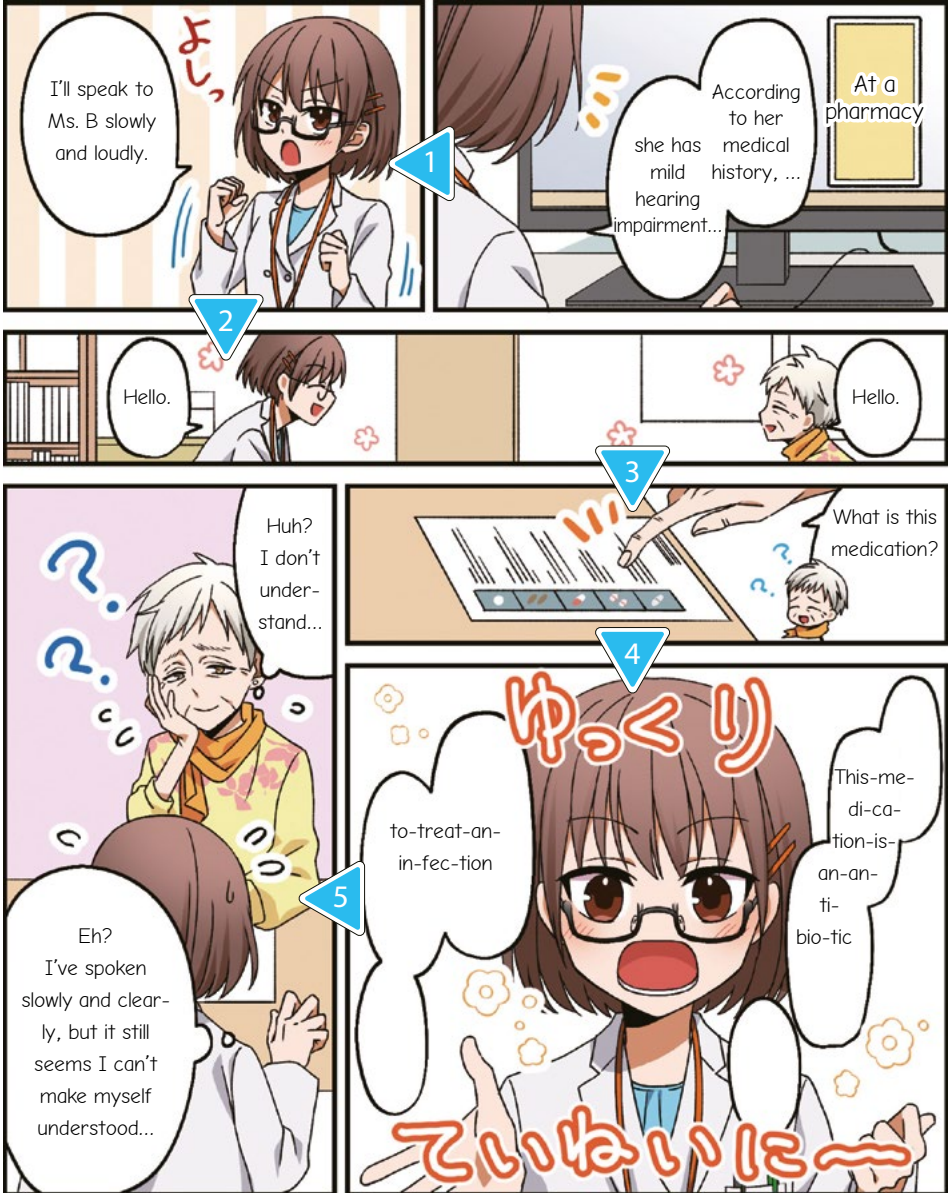


Points to Note

If you wear a mask when speaking to a hearing-impaired person, they cannot see your lips and find it difficult to understand you. In addition, speech coming through a mask sounds unclear especially with regard to consonant sounds. While taking infection control measures, you should communicate by writing or use other means to ensure that people with hearing impairment can understand you properly.

Don't Talk Too Slowly or Overly Enunciate

Please read manga from right to left.



Points to Note

If you pause too frequently or speak too slowly, those with hearing difficulties might actually find it more difficult to understand you. Try to speak at a moderate volume and speed, with intonation. Appropriate pausing: "This medication is an antibiotic - to treat an infection."



Other Cases

Where Hearing-Impaired People Find it Difficult to Follow What is Being Said

More Than One Person Speaking at the Same Time

In this case, a hearing-impaired person needs to look at the lips of different speakers at the same time. This makes them feel confused about whose lips they should look at, making it difficult for them to understand the conversation. So the speaker could raise their hand before starting to speak.



When it is Too Dark or Too Bright

If you are speaking in a very dark or very bright environment, such as when standing by a window with light shining in from behind, a hearing-impaired person may not be able to see your lips, making it difficult for them to understand you.



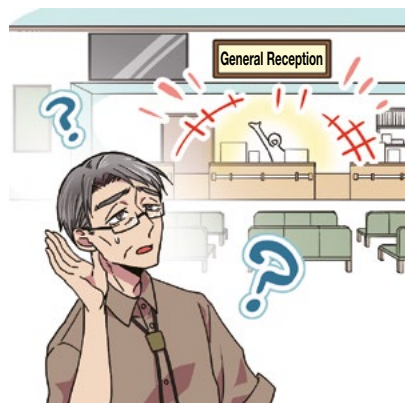
In a Noisy Environment

The ear has the processing ability to catch only necessary sounds (selecting and receiving the relevant voice from among sounds and noise), but hearing-impaired people have difficulty selecting voices from noise and sound in loud environments.



In Large Areas or from a Distance

Hearing-impaired people have difficulty understanding conversation in a large space where sound is diffused, where there are echoes/reverberations, or from a distant place, preventing them from seeing the speaker's lips.





Techniques for Communicating with Hearing-Impaired People

Points to Note When Speaking

The speaker (healthcare professional) should draw the attention of the listener (hearing-impaired patient) by, for example, raising their hand slightly before beginning to speak. Hearing-impaired people may feel uncomfortable if the person is speaking too loudly, and may feel confused if they are speaking too slowly. Try to speak moderately loudly, moderately slowly, and with intonation.

Position When Talking, Facial Expressions, and Gestures

When speaking, turn your face to the listener so they can see your lips. Even if the listener is accompanied by someone, you should speak with your eyes toward the hearing-impaired patient (so that the patient will not feel isolated).

If you speak using gestures and facial expressions, you can make yourself understood more easily.

Showing Ingenuity When Wearing a Mask

Wear a transparent mask or a face shield, or communicate by writing.

Conversation Environment

Ensure that it is not too dark or too bright, and reduce noise, echoing sounds, etc. in the communication environment so that the listener can understand you more easily.

Points to Note When Communicating by Writing

If your sentence is too long, the listener might feel confused. Write briefly, clearly indicating the essentials of your message.

Use of Support Equipment

The use of hearing support equipment, such as a conversational speech recognition app or a speaker for clarifying speech (see page 18), will help you achieve smoother communication.

Confirmation of the Listener's Understanding

You should always confirm whether the patient has understood you by asking, for example, "Do you have any questions? Is there anything that you didn't catch?" Do not finish the conversation after simply saying what you want to say.



What Is Hearing Loss/ Hearing Impairment?

Hearing loss varies in type and feature depending on the impairment location, the timing of onset of the symptom, and the level of hearing loss. If you don't pay attention to these differences, you will not be able to respond appropriately. You should aim to become more familiar with hearing loss.

Types by Impairment Location

Conductive hearing loss

This type of hearing loss occurs if there is impairment somewhere between the entrance of the ear, eardrum, and middle ear. This impairment makes sounds quieter, as if the listener is hearing sounds while wearing earplugs. This hearing loss may be curable with medical treatment.

Sensorineural hearing loss

This type of hearing loss occurs if there is impairment somewhere between the cochlea in the inner ear and the auditory nerve. The impairment makes sounds not only quieter, but also distorted and unclear. This hearing loss is hard to cure. Age-related hearing loss is a type of sensorineural hearing loss, but in some cases, it is combined with conductive hearing loss.

Mixed hearing loss

This is a combination of conductive hearing loss and sensorineural hearing loss.

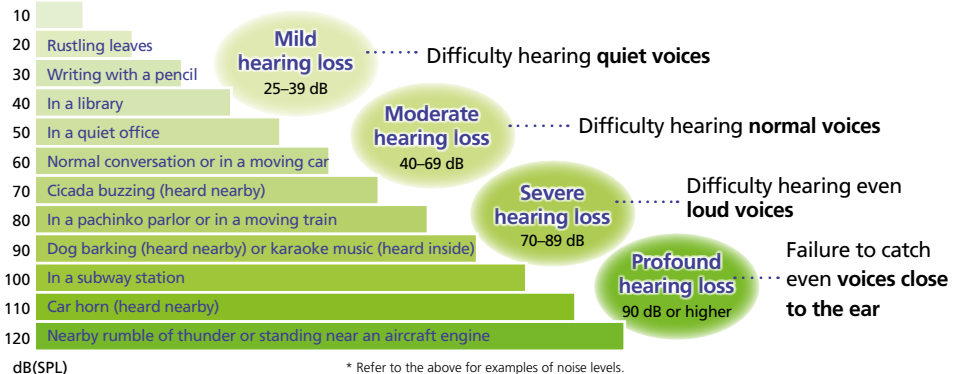
Differences in Timing of Hearing Impairment

In the case of babies born with hearing loss (**congenital hearing loss**) and children who began to suffer from hearing loss during infancy (**childhood hearing loss**), it is difficult to learn by listening and speaking (often called "**prelinguistic hearing loss**"). People who incurred hearing loss after acquiring their spoken language, or those with **acquired hearing loss**, usually do not have many problems with speaking. Hearing loss caused by the decline of the auditory function with age is called "**age-related hearing loss.**" The probability of developing this type of hearing loss increases considerably, especially among senior citizens aged 65 and over. Some senior citizens may be reluctant to accept that they have hearing loss.



Various Levels of Hearing Loss

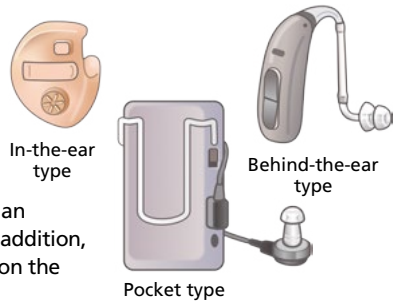
The level of hearing loss (average hearing level) is indicated in decibels (dB).



* Refer to the above for examples of noise levels.

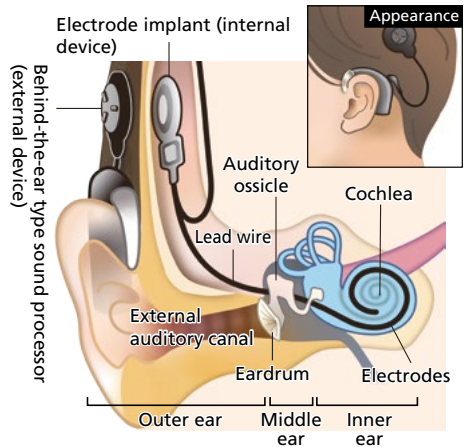
Hearing Aids

Hearing aids, to help the hearing impaired person hear or catch conversations, come in various types. These include in-ear, behind-the-ear and pocket types. If a person retains some hearing ability, these aids will work regardless of whether the person suffers from conductive hearing loss, sensorineural hearing loss, or mixed hearing loss. Since hearing problems vary between individuals according to their hearing features and life styles, it is important to select an appropriate hearing aid type based on the user's hearing. In addition, it may be necessary to adjust the selected model depending on the situation of use and change in hearing.



Cochlear Implants

Compensating for an impaired inner ear (cochlea), a cochlear implant, a medical auditory support device, converts sound into electronic signals and stimulates the auditory nerve through electrodes. (Electrode) implant surgery is performed on the inner ear. As it is only effective for sensorineural hearing loss caused by damage to the hair cells of the cochlea, the equipment is intended for use by those with severe or profound hearing loss who cannot hear sufficiently well even when using a hearing aid, and by those who cannot use a hearing aid. In many cases, cochlear implant surgery enables the patient to recognise a voice from one meter away as sound.



Remember That There Are Great Differences between Individuals

Hearing-impaired people vary in terms of hearing level and appropriate communication means. Their hearing level differs depending on whether they use a hearing aid or a cochlear implant. Some can communicate through verbal language (speech/lip reading) or sign language, while others cannot. You should adapt your behaviour by communicating with each hearing-impaired individual by the appropriate means that they prefer.



[Reference Material]

Books for Learning More about People with Hearing Problems, produced with advice from Naoki Ohnuma, compiled and authored by the Editorial Committee for Books for Living Together with Those with Impairment, with cooperation from the Accessible Design Foundation of Japan, published by Godo-Shuppan in 2022

Hesitant to Say "Could You Say That Again?"

Please read manga from right to left.



Points to Note

Those with hearing difficulties may feel hesitant about asking the speaker to repeat what they said, even though this is what they want. They especially feel so when talking with a healthcare professional who looks busy. You should carefully observe the patient, and if they look like they have not entirely understood what you said or look hesitant about anything, you should confirm whether there is anything they want to ask you.

"My Ears Are Still OK"

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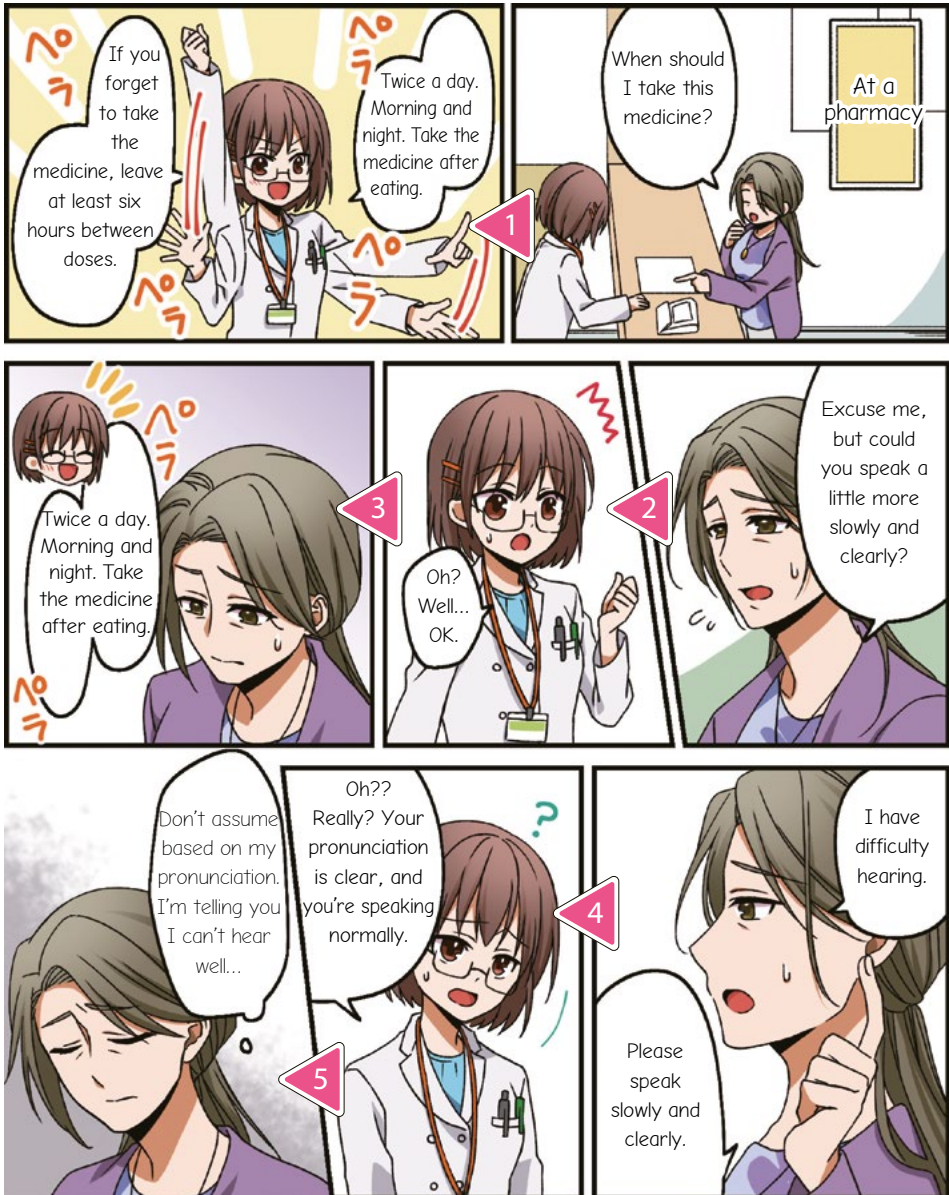


Points to Note

The auditory function declines with age. However, some hearing-impaired people believe that they can still hear sufficiently well and feel reluctant to accept their hearing impairment. You should consider how to give advice without making the patient feel uncomfortable, and how to word your comments appropriately.

Don't Make an Assumption Based on the Person's Pronunciation

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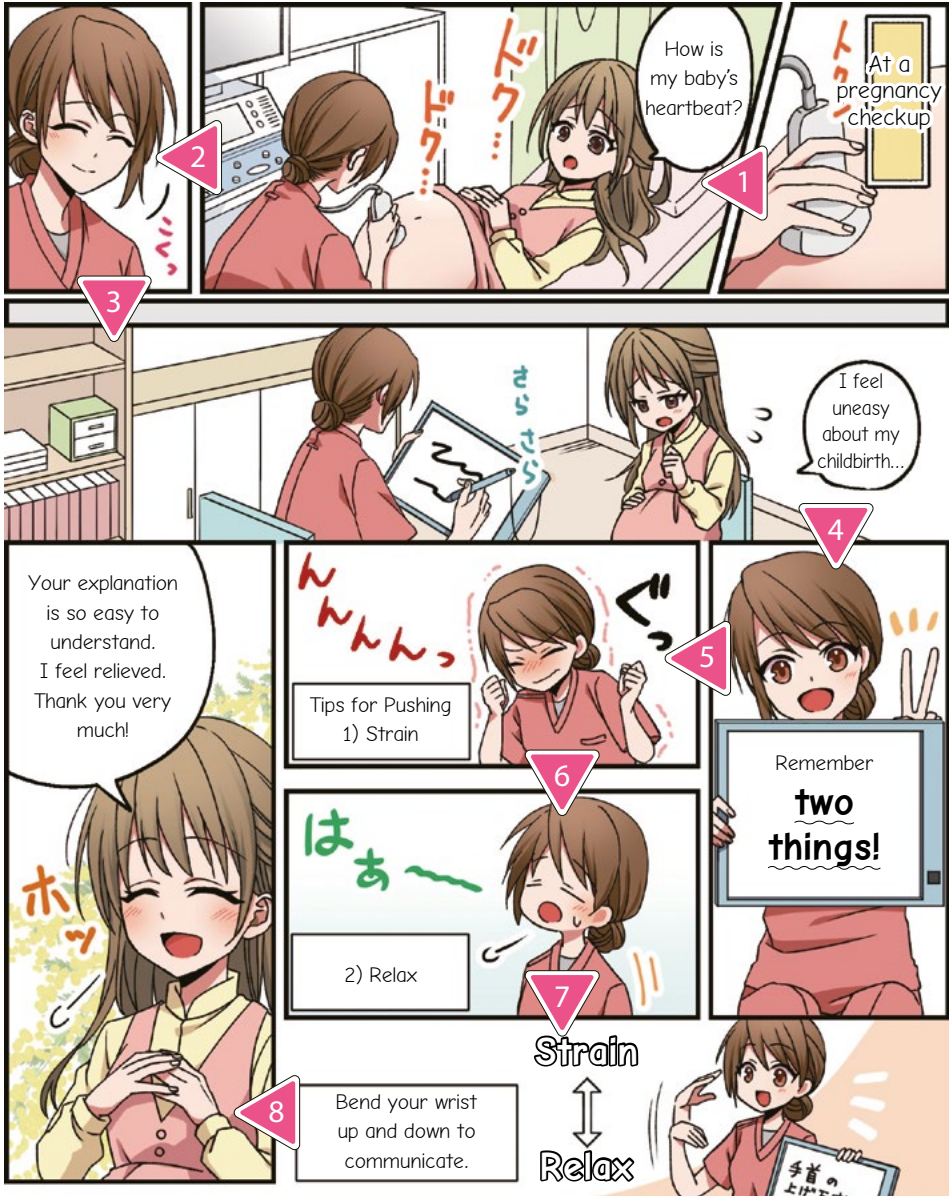


Points to Note

People who developed hearing loss after learning their native language usually do not have many problems with speaking, displaying no differences in pronunciation from those with normal hearing. This makes it difficult for people around them to recognise their hearing impairment and understand their problems on first encounter, which can make the patient feel distressed or uncomfortable.

Reassuring Patients through Appropriate Communication

Please read manga from right to left.



Points to Note

Facial expressions and gestures are important means of communication. When conveying an important or complicated message, you should clarify the essentials of the message and use gestures and facial expressions. This can often reassure the person with hearing difficulty. For detailed explanations that cannot be conveyed through gestures, you should communicate by writing.



Feeling Hurt by the Phrase “We’re Not Talking about Anything Special”

Hearing-impaired people may feel hurt to be told the above phrase when they cannot follow a conversation between several people. When talking with hearing-impaired people, try to use facial expressions and look into their eyes, while clarifying the essentials of the conversation from time to time and asking about their views, so they can participate in the conversation more easily.

Misunderstanding That “A Hearing Aid Should Allow the User to Hear Normally”

Using a hearing aid does not mean that the user can hear everything. Due to this misunderstanding, they sometimes cannot receive the support they need and experience difficulties. It is necessary to adapt your behaviour to hearing-aid users so that they can hear more comfortably.



Sometimes People Don’t Want to Talk about it

Some hearing-impaired people do not want to be asked about how much they can hear, when they started having hearing difficulties, or other hearing-related questions. On the other hand, others are open and want their impairment to be known. When talking with a hearing-impaired person, you should adopt a wait-and-see approach and communicate sensitively, according to the individual.

Want to Communicate on a Sensitive Topic without a Sign-Language Interpreter

Sign-language interpreters are bound by confidentiality, but depending on the topic, hearing-impaired people may want to communicate directly with healthcare professionals. In some cases, you might want to communicate directly with them by writing or using gestures.



Conversational Speech Recognition App is Very Helpful

Since it enables the user to understand conversation via text, a conversational speech recognition app greatly facilitates smooth communication. This convenient tool can give them a sense of relief.



Troubled by Refusal of Admission for Guide Dogs

Commercial facilities, restaurants, hospitals, taxis, etc. are obliged to accept guide dogs, although this requirement is not sufficiently well known. If a hearing-impaired person appears troubled because their guide dog has been refused admission, perhaps having been wrongly assumed to be a pet, you should tell the relevant facility that the person has a legal right to enter together with their dog.

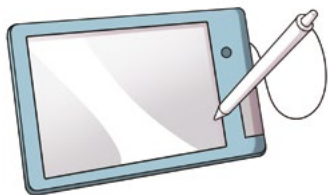


Useful at
healthcare
sites

Tools for Communication with Hearing-Impaired Patients

This page describes devices and systems helpful for communication with hearing-impaired people. To ensure that hearing-impaired patients can access medical institutions smoothly without hesitation, it is important to take advantage of hearing support means.

Writing Boards



Writing boards are useful for communication by writing, since you can write on them and wipe them clean again and again.

Conversational Speech Recognition Apps

Downloadable free of charge to smartphones or tablet terminals, a conversational speech recognition app converts speech to text and facilitates the exchange of information. You need to speak at a normal speed clearly. If using a microphone, you must not forget to place the microphone close to your mouth.

Point of care patient communication apps covering common healthcare topics are also useful tools for medical workers to share vital information with patients.



Can be used with
a smartphone

Highly Directional Speakers

A highly directional speaker has been designed to enhance directivity by adjusting the frequencies of speech sounds, especially consonant sounds, which are said to be difficult for those with sensorineural hearing loss to catch, and also by ensuring that the sounds travel straight. Such speakers are increasingly being introduced by medical institutions and local governments. Audio induction loops are another way to help hearing aid wearers to improve the quality of the sound they hear.

We need to adapt our communication to suit the needs of each hearing-impaired individual.

There are a wide variety of hearing impairments.



Request for Your Cooperation

We appreciate your feedback and will use it to improve this booklet. Please take a moment to complete a short survey and give us your feedback.

Link to the Survey:



<https://forms.office.com/Pages/ResponsePage.aspx?id=8ilwq5sTEuZOCGYdYa4jVMW5Z5CZs1BumwNSFLWDMBUOVIXSDhG TlpHRjNLQTMwWTJRTFRLzROSC4u>

We also appreciate it if you could mail us at globalinnovation@shionogi.eu and let us know what you think about this booklet.

SHIONOGI Communication Barrier-Free Project



We proceed with the project under the banner of eliminating communication barriers for patients with hearing or other impairment to access medication.

<https://www.shionogi.com/global/en/sustainability/society/social-contribution-activities/cbf.html>



This booklet is an English version of comics prepared with donations collected through crowd funding from people who feel empathy with and wish to support the solution of hearing-impaired people's problems in Japan.