

Primary ear and hearing care in Fiji: paying attention to what happens after training



Oh Chunghyeon
ENT consultant, KOICA
Global doctor, Colonial
War Memorial Hospital,
Suva, Fiji

A GENERAL PRACTITIONER IN FIJI ON THE BENEFITS OF PEHC* TRAINING

"Before the training, I used to ignore ear and hearing symptoms even when patients complained, because I didn't have confidence in my capacity for ear and hearing examination and treatment. So, in the case of a child with an ear discharge, my options were to give them chloramphenicol ear drops (the only antibiotic ear drop available in the health centre) or to refer them without an otoscopic exam to the ENT clinic, which is 4 hours from my health centre. The training made me competent in the diagnosis of ear disease and treatment at primary health care level. Now I can provide the proper remedy depending on my diagnosis. Also, I can now refer patients with the name of the disease and the reason for referral, instead of only describing their ear symptom. After the training, I received requests from my colleagues to examine ear drums and give my opinion. I am happy to help them and also recommend that they participate in the PEHC training course."

*PEHC= Primary Ear and Hearing Care

Fiji is composed of 330 small islands and two main islands and has a population of about 900,000. There is only one ENT clinic available, located in the Colonial War Memorial Hospital in Suva, and marine transport can be inconvenient and expensive. Because of this lack of accessibility, almost all ear and hearing problems are covered at primary health care (PHC) level by general practitioners (GPs) and nurse practitioners (NPs) who did not have the opportunity to study ear and hearing care as part of their medical or nursing curriculum.

Since 2017, to improve the quality of primary ear and hearing care (PEHC) in health centres, the Fiji Ministry of Health and Medical Services have been providing PEHC training to GPs and NPs based on the World Health Organization's PEHC training resources.¹ During the two-day training, participants are taught how to use otoscopes and how to use ear wicks and carry out ear syringing. They also learn the basics of ear disease, how to do a voice test without audiometer,² and when they should urgently refer patients to the ENT clinic. Training is also offered to other groups of PHC workers, such as public health nurses and school health teams, who are in charge of public awareness and screening. Six hundred and seventy-two (672) participants have been certified and the PEHC training course has been run 23 times between 2017 and 2022.

A training course is only the first step towards capacity building in PEHC amongst front line health workers and this article reflects on what happens after PEHC trainees return to work in PHC centres. It focuses solely on GPs and NPs, who are the ones in charge of diagnosis and prescription of medicines in PHC centres, and referral to the next level if and when needed.

Have trainees changed their practice as a result of training?

We gave trainees a questionnaire to fill in between six and 19 months after training, in order to investigate



Course participants practising ear syringing with plastic syringes. FIJI

whether they had used in their workplace the skills they had been taught during the course. We asked 32 GPs and NPs to answer our questions, and 16 answered all three (see Figure 1).

Figure 1 shows that GPs and NPs used essential PEHC skills more often after the course. In addition, 12 out of the 16 respondents said that their confidence in their otoscope findings improved after training, as well as their confidence in performing ear syringing and hearing tests. For example, one NP said: "I used to prescribe antibiotic ear drops to patients with an ear discharge but, after training, I now explain not only the name of the ear drops but also how to put them in and why we should follow instructions. It is just a simple thing, but it make a great difference to treatment result" (see also testimonial on this page).

Can trainees access expert advice and make referrals?

It is important for trainees returning to their usual workplace not to be isolated once the training course is over. They should be able to access advice and supervision, as well as a referral pathway for patients needing further ear and hearing care.

FIGURE 1 BEFORE AND AFTER PEHC* TRAINING IN FIJI: QUESTIONS ANSWERED BY GENERAL PRACTITIONERS AND NURSE PRACTITIONERS

Have you ever:	During the year preceding PEHC training	After PEHC training**
Used an otoscope or phone light for an ear exam	4 out of 16 respondents	10 out of 16 respondents
Used ear syringing to remove ear wax or a foreign body	7 out of 16 respondents	14 out of 16 respondents
Used a voice test, distraction test or tuning fork test for a hearing evaluation	2 out of 16 respondents	10 out of 16 respondents

*PEHC= Primary Ear and Hearing Care **Between 6 and 19 months following training in PEHC.

Ear and hearing care networking at primary level

At the end of the course, PEHC trainees are invited to join a mobile messenger application chatroom. This PHC networking provides the opportunity to share their experience and to learn from their colleagues. Whenever they have any clinical ear and hearing cases that they think may need referring to a secondary or tertiary hospital, they can discuss these cases in the ear and hearing care chatroom (information remains confidential). They can ask for advice or for a second opinion on how to care for patients presenting with ear disease or a hearing problem.

Teleconsultations

When they are back at the PHC centre, trainees can request an EHC teleconsultation (doctor to doctor) with an ENT surgeon by Facebook, VIBER, email or phonecall and we set up a video consultation.

This aligns what trainees and trainers have learnt with local PHC settings and referral pathways. It also contributes towards quality control and legitimises trainees' new knowledge in the eyes of their colleagues.

Are trainees having an impact on ear and hearing health?

Before we started PEHC training, the ENT clinic in the referral hospital was burdened with long waiting lists because GPs and NPs in primary health centres were referring simple ear diseases such as ear wax impaction, ear foreign body or uncomplicated ear discharge. In addition, patients with severe complicated ear infections or sudden hearing loss were referred too late.

After we started PEHC training, we noticed several effects in the referral hospital. First of all, there was a reduction in referrals from primary health centres of patients with simple ear diseases. This was the main reason behind the improvement in waiting times for an ENT specialist review, which went down from three months in 2017 to one month in 2019. We also noticed a reduction in the mortality and number of cases with permanent sequelae due to ear disease complications: from three cases in 2017 to none in 2019. This was mainly thanks to the timely referral of ear infection complications, such as acute mastoiditis.

However, even though GPs and NPs accurately diagnosed ear diseases and recommended that patients visit the referral hospital for grommet tube insertion, tympanoplasty or hearing aids, the referral pathway does not work as well as it could: the number of patients actually visiting the health centre or hospital is quite low, because the referral hospital is too far and travel and accommodation costs are too high for patients (even if all health costs are free in Fiji). In addition there is a lack of awareness about ear disease and hearing problems amongst the population.

How can we better support trainees after training?

Overall, the PEHC training course in Fiji has been effective in building capacity amongst front line health workers. However, if we want to maximise its intended impact, we need to offer them optimal



OH CHUNGHYEON

support to put their new skills into practice in the workplace. Below is some of the feedback we received.

Request for applicable PEHC guidelines after the course

When we started EHC teleconsultations for GPs and NPs, we were quickly overwhelmed by requests. Many of these were just for reminders of how to manage patients. Trainees could remember the name and nature of ear disease and hearing problems, but not how to make a differential diagnosis and manage problems. To address this situation, we made and distributed Fiji PEHC guidelines with the contents of the training course. These guidelines were distributed in print as well as in a mobile application version. After this, the number of requests for PEHC 'after service' diminished. During video calls, we can often see the PEHC flowchart displayed on the wall of the primary health centre. According to medical officers, the flowchart is useful for reminding them of the content of the PEHC course, particularly when examining a patient.

Shortage of equipment and medicines at PHC level

After PEHC training, ear syringing and ear mopping were used well, but ear examination with an otoscope is only partially available due to the lack of otoscopes in health centres. This is one of the main obstacles to providing quality PEHC.

In addition, although the PEHC training course recommended ciprofloxacin ear drops as a treatment for chronic suppurative otitis media, these ear drops are not available to trainees once they are back in health centres and are not affordable on the market. So, whenever trainees face this problem, we now recommend an alternative.

Public awareness materials for ear and hearing hygiene

Two of the most common questions from ear patients are: 'How should I clean my ear?' and 'Can I use cotton buds or coconut oil for ear cleaning?'. After PEHC training, the proportion of GPs and NPs offering explanations on ear hygiene increased and they asked us for ear and hearing communication materials to increase public awareness. Small leaflets or a poster on the wall will have a great effect on the follow up of ear and hearing hygiene advice.

Learning to do a tuning fork test to assess hearing. Fiji



OH CHUNGHYEON

Two course participants practise doing a voice test. Fiji

References

- ¹ World Health Organization. Primary Ear and Hearing Care Training Resources: <https://bit.ly/3kZ3gff>
- ² See Community Ear & Hearing Health Volume 12 Issue 16 (2015).