

Providing Acupressure Education and Training for Treating Headache to Society in Peken Hamlet, Renon Urban Village

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ABSTRACT

One of the most frequent health issues that people deal with on a daily basis is headache. As they interfere with daily tasks and reduce productivity, headaches require significant treatment. Because of this, community service implementers are willing to provide counseling and acupressure training to the residents of Peken Hamlet, Renon Urban Village, in order to help them deal with their headaches. This service was performed on July 30, 2022, from 9:00 am to 12:00 pm WITA in the Peken Hamlet meeting room. Participants were initially split up into six small groups, each with five participants, and each group was supervised by a tutor. Before and after the activity, each group's members were requested to complete the pre-test form and post-test form. This community service was attended by 30 participants where the average age was 45.47 years with the majority of participants were female with percentage 19 people (63.3%) and the education background of the most of participants was university level (43.3%). The results of a Paired t-test showed that there had been a statistically significant improvement in the participants' understanding of acupressure with a p-value of 0.05. The average knowledge score on acupressure for headaches increased from pre-program (5.17±1.59) to post program (9.50±0.97). After the activity, participants' knowledge of acupressure for treating headaches is thought to have increased. The society will get a lot of benefits through this exercise. Those who frequently suffer from headaches can practice this simple acupressure technique at home because it has no adverse effects.

Keywords: Acupressure, headache, health education

INTRODUCTION

Renon Urban Village is located in South Denpasar Sub-district. It has a population of 11,462 people with a population density of 3,519 people/km². There are five hamlets in there and one of them is Peken Hamlet. The first level health facility that houses the Renon Urban Village is the Public Health Center II of South Denpasar. Based on the Strategic Plan of Public Health Center II of South Denpasar Year 2016-2021, it was reported that headache is included in the top 10 diseases in Renon. Headache is one of the most common health problems experienced by people daily. Headache is in the top rank of neurological problems with a percentage of 42% of the total complaints of neurological patients.¹ Headaches are divided into primary headaches and secondary headaches. Primary headaches include tension, migraine, and cluster headaches.² Meanwhile, secondary headaches are conditions caused by other causes, such as

head and neck trauma, cranial and cervical vascular disorders, non-vascular intracranial disorders, drug use or withdrawal, infections, homeostatic disorders, or psychiatric disorders.³ This headache can be caused by disorders of the skull, neck, eyes, ears, nose, sinuses, teeth, mouth, or other facial and cranial structures. It is important to differentiate these two groups so that the more serious causative conditions can be identified and appropriate treatment is given immediately.⁴

Headaches need to be given serious attention because they interfere with individual activities resulting in decreased productivity.^{5,6} Unfortunately, the practice of managing headaches in the community is still not good. Based on the results of the study, it was found that most people choose to take anti-pain medications when they have headaches and the most sources of drugs are people who buy from stalls.⁷ Another study also found that correct self-help treatment (according to the

rules) is still low because people generally buy drugs at retail so they cannot read the information listed on the drug packaging. It is very important to pay attention to painkillers to relieve headaches. Besides having a therapeutic effect, they also have side effects such as sensitivity reactions (urticaria, rash), kidney and liver toxicity, gastrointestinal ulcers, and others if used inappropriately.⁷

For this reason, community service implementers are willing to do community service in the form of counseling and acupressure training for treating headaches for the people of Peken Hamlet, Renon Urban Village. There are a lot of techniques to treat headaches besides the pharmacology method. In recent decades new treatment method has been found such as non-invasive neuromodulatory techniques like transcranial magnetic stimulation (TMS) and supraorbital nerve stimulation (SNS).⁸

However, those techniques cannot be done independently by society at home. Acupressure is the best method that can be applied at home because easy to be implemented and has no cost at all. That is why acupressure was chosen to be a method that we would like to introduce to the society of Peken Hamlet. Acupressure is a technique of stimulating points in the body using massage or pressure.⁹ The principle used is the same as acupuncture therapy because the points used are the same as acupuncture points.

Acupressure is useful for reducing pain, tension, fatigue, and other ailments.¹⁰ This acupressure counseling and training aim to empower the people of Peken Hamlet to perform acupressure therapy to treat headaches; provide the understanding and increase knowledge of the people of Peken Hamlet about acupressure to treat headaches; provide acupressure training to treat headaches for the people of Peken Hamlet; introduce and socialize the use of acupressure as a therapy that can be done independently at home to treat headaches.

METHOD

Preparation

In the preparation phase, the community service team did coordination with the Head of Renon Urban Village to get permission to do the activity. After obtaining permission from the Head of the Village, the team coordinates with the head of Peken Hamlet to ask for permission to conduct the activity in his area.

Implementation

This community service was held on July 30, 2022 from 09.00 to 12.00 WITA at the

meeting hall of Peken Hamlet. This program consists of two main activities: acupressure education for half an hour and acupressure training for one hour. There are six tutors involved in giving education and training. All of the tutors are lecturers at the Institute of Technology and Health Bali who are experts in acupuncture and acupressure.

At the first, participants were divided into six small groups where every group consisting of five people and each group was guided by one tutor. Before the activity starts, all the participants in every group were asked to fill out the pre-test form and after that, we continued to the next activity.

The first activity was socialization about acupressure for treating headaches for half an hour. The socialization was done by using the brochures as a medium for sharing information. After that, the next agenda was acupressure training for one hour. During the training, the tutor demonstrates how to locate acupressure points correctly using a model. Six students of ITEKES Bali were asked to be models for this activity.

Four acupressure points were demonstrated and after the demonstration finished, the tutor asked the participants one by one to try to find the acupressure point in themselves. The tutor guides the participants when they found difficulties or confuse about the point location. When all the participants got the chance to practice how to find the acupressure points location then the tutor taught them the technique to stimulate the acupressure point by demonstrating to the model first and after that let the participants practice on themselves one by one under the guidance of the tutor. To make the participants understand the material easily, the team also prepared a brochure of acupressure for treating headaches as a media of education during the activity.

Evaluation

To assess the knowledge of the participants before and after the activity, a questionnaire was used to measure the knowledge the participants after community service. The questionnaire that was used consisted of 10 items. These 10 items were about acupressure technique, acupressure benefit, and acupressure point location to relieve headaches. The questionnaire was given pre and post-activity to measure the change in knowledge among the participants. The results of the activities are compiled in activity reports.

RESULT AND DISCUSSION

Participants of Acupressure Education and Training

This community service was attended by 30 participants. The information about this activity was disseminated with coordination to the Head of Peken Hamlet. The participants that attended this activity were those who had a frequent headache in the past month. The demographic data of participants is presented in (Table 1). The average age was 45.47 years the majority of participants were female with a percentage of 19 people (63.3%) and the educational background of the most of participants was university level (43.3%). It shows that most of the participants were well educated and were in middle age.

Acupressure Education and Training Through Tutorial

The materials of health education and training consist of the definition of headache and acupressure, benefits of acupressure, acupressure point location to treat the headache, and pressing technique of acupressure point. These materials were presented in the form of a brochure (Figure 1). The tutorial method was done to educate and train participants about the acupressure technique for headaches. The participants (N=30) were divided into six small groups and each group had one tutor who introduce acupressure and explained the benefit of acupressure for treating headaches as well as training them on how to locate acupressure points for headaches and the pressing technique of those points. All of the tutors were lecturers at the Institute of Technology and Health Bali, Department of Acupuncture and Herbal Medicine. This community service was conducted on July 30, 2022 from 09.00 to 12.00 WITA at the meeting hall of Peken Hamlet.

Four acupressure points were introduced to participants for relieving headaches. First, was Hegu (LI 4) located on the back of the hand, the highest protrusion when the thumb and forefinger are brought together. The second was Baihui (GV 20) located at the top of the head. The third was Fengchi (GB 20) located at the back of the head, 1 finger above the hairline at the back of the left and right sides. Forth was Taiyang (EX-HN5) located in the curve of the temple bone parallel to the outer corner of the eye.¹¹

The Outcomes of Acupressure Education and Training for Treating Headache

To measure the participant's grasp of the knowledge that had been delivered by the tutor, participants were requested to complete post-

test forms after the program's implementation to measure the change in knowledge. The result of the test is shown in Table 2. There was an increase in the number of participants who answered the statement correctly before to after the program. The increase was found in 9 out of 10 statements. The items related to acupressure technique and acupressure benefit showed an increase in the number of participants who gave correct answers. While in the items related to acupressure point location 3 out of 4 items showed an increase in the number of participants with the correct answers. The item with the highest increase of people correctly answering is the item related to the acupressure benefit.

Furthermore, to determine whether the increase in knowledge is significant or not then a statistical analysis was conducted to get the answer. A Paired t-test was used and revealed that there was a statistically significant increase in the average score of acupressure knowledge among the participants. The mean score on knowledge of acupressure for headache increased from pre-program (5.17 ± 1.59) to post-program (9.50 ± 0.97) with p-value < 0.05 (Table 3).

Acupressure is a therapy that can reduce or cure headaches without using drugs.¹² It works by pressing acupressure points with pressure using fingers or a blunt object on the surface of the body.¹³ Acupressure is a multi-modal therapy, and various theories can help to explain how it works. Acupressure at a particular point transmits pleasure impulses to the brain at a pace four times faster than painful stimuli, according to Melzack and Wall's Gate Control Theory. Continuous impulses shut the neural "GATES," preventing pain signals from reaching the brain and enhancing or strengthening the body's pain threshold. Pressure generation through acupressure activates the small myelin neurons in the muscles and transmits stimulations to the higher nerve centers, such as the spinal cord, midbrain, hypothalamus, and pituitary axis, depending on the area of stimulation.¹⁴

The advantages of acupressure are lower risk, easy to do and learn, and also useful for pain relief and relaxation.^{15,16} Acupressure is a noninvasive treatment and is easy to be implemented at home for self-care practices, especially for relieving headaches. Giving health education and training to the community about this technique is a form of community empowerment so that they are directly involved in maintaining their health. The participants might apply the knowledge that they receive through this activity to themselves or their families.

Akupresur untuk Nyeri Kepala

Oleh :
Ns. Ida Ayu Anom Rastiti, S.Kep., M.C.M.

Teknik penekanan:
Tekan sebanyak 30 kali sampai titik akupresur terasa ngilu, lakukan 1-2 kali sehari.

Alat yang digunakan:
Jari tangan, telapak tangan, alat bantu lain yang berujung tumpul.

SUMBER:
Kementerian Kesehatan RI. (2021). Petunjuk Praktis Asuhan Mandiri Pemanfaatan Toga dan Akupresur. Buku Saku 3. Jakarta: Kementerian Kesehatan RI

Titik akupresur untuk mengatasi nyeri kepala

Fengchi (GB 20)
Lokasi di belakang kepala, 1 jari di atas batas rambut bagian belakang sisi kiri dan kanan.

Hegu (LI 4)
Lokasi di punggung tangan, tonjolan tertinggi ketika ibu jari dan telunjuk dirapatkan.

Taiyang (EX-HN5)
Lokasi di lekukan tulang pelipis, sejajar dengan sudut mata luar.

Baihui (GV 20)
Lokasi di puncak kepala.

Apa itu nyeri kepala?
Nyeri kepala adalah nyeri yang timbul di salah satu atau kedua sisi kepala atau menyebar dari satu bagian ke bagian lain pada kepala atau di satu titik kepala tertentu. Nyeri pada sakit kepala umumnya terasa tajam, berdenyut, seperti dipukul-pukul atau kepala terasa diikat dengan kencang.

Akupresur untuk mengatasi nyeri kepala
Akupresur adalah perawatan kesehatan melalui teknik penekanan pada titik akupresur di permukaan tubuh dengan menggunakan jari atau bagian tubuh lain atau alat bantu yang berujung tumpul.

Manfaat akupresur

- Meningkatkan stamina
- Melancarkan sirkulasi
- Mengurangi nyeri
- Mengurangi stress
- Menenangkan pikiran

Figure 1. Brochure of acupressure for treating headache in Peken Hamlet



Figure 2. Acupressure Education to Society of Peken Hamlet

Table 1. The Characteristics of participants (N=30)

Characteristic	n	%
Age (mean±SD)	45.47±11.10	-
Gender		
Male	11	36.7%
Female	19	63.3%
Level of Education		
Elementary school	5	16.7%
Junior high school	-	-
Senior high school	12	40%
University	13	43.3%

Table 2. The Evaluation of Knowledge Before and After Acupressure Education and Training (n=30)





Statements	The Number of Participants with Correct Answer	
	Before	After
Acupressure is a therapy without the use of drugs (true)	20	30
Acupressure uses hands or a blunt object to apply pressure to acupressure points (true)	16	30
Acupressure uses needles (false)	7	30
Acupressure has beneficial to reduce headaches (true)	16	30
Acupressure therapy is done by massaging or pressing using the fingers 30 pressing times (true)	5	30
Needles can be used for acupressure tools (false)	10	28
 The acupressure point on the side uses to treat headaches (false)	10	24
 The acupressure point on the side uses to treat headaches (true)	21	30
 The acupressure point on the side uses to treat headaches (false)	27	23
 The acupressure point on the side uses to treat headaches (true)	23	30

Table 3. The Differences in Knowledge Scores of Acupressure for Headache Before and After Education and Training (n=30)

	Mean±SD	p-value
Before	5.17±1.59	0.00*
After	9.50±0.97	

* : p-value < 0.05

CONCLUSION

Knowledge of participants related to acupressure for treating headaches is considered to increase after receiving education and training. This activity is very beneficial for society, especially for those who often experience a headache. The acupressure technique that is easy to be used and without side effects can be implemented by the participants at home before they choose to take medicine. However, because this community service is only conducted in one day, further programs need to be held to evaluate the understanding and the routine implementation of the acupressure technique to treat headaches among the participants.

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