

Education Activity of Daily Living in Preventing Neck and Arm Pain in Housewives

Hendrik Hendrik¹, Arpandjam'an², Supartina Hakim³

¹Department of Physiotherapy, Health Polytechnic of Makassar, Indonesia,
padanghendrik10@gmail.com

²Department of Physiotherapy, Health Polytechnic of Makassar, Indonesia,
arpandjaman@gmail.com

³Department of Physiotherapy Health Polytechnic of Makassar, Makassar Indonesia,
supartinahakim@poltekkes-mks.ac.id

Corresponding: Hendrik Hendrik, padanghendrik10@gmail.com

ABSTRACT

Introduction: Everyone, especially housewives, has daily activities that must be completed, such as waking up and so on. Therefore, daily activities or activities need to be managed properly and correctly so as not to cause health problems, especially neck and arm pain. **Objective:** This community service project aims to improve the knowledge and ability of partners in carrying out daily tasks at work to reduce arm and neck pain. **Method:** The technique used is partner counseling and mentoring. The partners or participants involved were 40 housewives domiciled in Berua and Tamalanrea Districts, Makassar City who did not work as civil servants or private employees. **Results:** The results of the study before being given counseling and mentoring showed that 33 people (82.5%) had insufficient knowledge and skills, 5 people (12.5%) had sufficient knowledge and 2 people (5%) had good knowledge, and after receiving counseling and mentoring none had insufficient knowledge and skills, 9 people (22.5%) had sufficient knowledge and 31 people (77.5%) had good knowledge. **Conclusion:** counseling accompanied by activity support can increase mothers' understanding of how to prevent neck and arm pain.

Keywords: Activity of daily living, assistance, education, neck, and arm pain

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INTRODUCTION

Every job presents challenges to the individual who performs it; these challenges can be physical, mental, or social. Every person's daily activities are those that they engage in from the moment they get up until they go back to sleep. The technique is partner counseling and mentorship (Tariq et al. 2020). Human life activities increase the risk of injury due to movement and load. Disorders of the musculoskeletal system such as pain in the neck and arms can be caused by activities with excessive head extension movements and high arm movements over the head (Jatmika, Fachrin, and Sididi 2022).

Most people around the world have neck and arm pain. Both men and women suffer from it, however, more women live in cities than in rural areas, and more women live in high-income countries than in low-income countries (Natashia and Makkiyah 2023). Concerning all ages, ethnicities, and socioeconomic levels. However, it is generally between 35 and 49 years. Approximately 0.4–86.8% of the population (average 23.1%) have experienced neck and arm pain at least once in their lifetime. Since neck and arm pain are the most common disabling conditions in people under the age of 49, many people stop working or stop working because of their complaints. Patients usually recover quickly without loss of function, but relapse is a normal process (Amal I. Elsidig 2022; Olesen 2018). Neck pain is the fourth leading cause of lost work days, followed by low back pain, depression, and arthralgia. Neck pain will affect half of all people in their lifetime, with an average of 37.2%. Neck pain is more common in women and is more common in middle age (Abolfotouh et al. 2024). Common activities that housewives do include washing, lifting things, cleaning the house, and even climbing, which can cause pain in the neck and arms.

The results of the analysis of the level of knowledge of housewives in the Berua and Tamalanrea sub-districts regarding knowledge of taking preventive measures for neck and arm pain showed that 79 percent (16 people) of housewives took preventive measures, had poor knowledge, and 21% (4 people) had good knowledge. This shows that most housewives in the Berua sub-district do not know how to stop their body's biomechanical movements while working to prevent neck and arm pain. More than twelve million people visit doctors every year for neck and arm problems. Compared to other physical disorders in

people under 45, neck and arm pain causes about 8 out of 10 people to experience neck and arm pain at some point in their lives, resulting in many missed work days. In addition, neck and arm pain causes about 70% of adults to experience periods of inactivity throughout their lives (Beatrice Alberta, Sebastian, and Valeska Laksono 2021).

Thus, it is necessary to carry out community service through counseling and assistance so that people, especially housewives, can understand everything that can cause neck and arm disorders. With the above activities, it will provide additional knowledge to avoid neck and arm pain. Since neck and arm pain is one of the causes of lost work days and generally occurs in people of middle age or productive age, and the number of cases is increasing, this community service activity needs to be carried out to prevent or reduce the incidence of neck and arm pain in the community. This community service activity aims to improve the knowledge and skills of partners in carrying out daily activities in the workplace to help reduce neck and arm pain.

METHOD

The community service program was implemented in the Berua and Tamalanrea sub-districts of Makassar City from February to April 2024. The methods used in this activity were counseling, field practice, and activity evaluation (Bahtiar, Fajarfika, and Hidayati 2024). The target of the community service activities are housewives who are neither civil servants nor private employees, totaling 40 people, who are obtained on the condition that they are not employees, aged 30-55 years, who do not have musculoskeletal disorders in the neck and arms. The data used is to measure the level of knowledge of housewives with interview techniques and the skills of mothers in activities are observed and mentored to carry out activities. Evaluation is carried out before and after being given counseling and mentoring twice a week for 6 weeks. The knowledge indicator used is how much knowledge the partner has in answering 10 questions before and after being given counseling and training. Meanwhile, for skills, the attitude or position of the partner's body parts is observed during activities that are compared with ergonomic positions, then a checklist is carried out to see whether or not it is by the guide sheet, and then the suitability value is calculated. These two components are combined to convert into insufficient,

sufficient, and good knowledge.



Figure 1. Providing Material Using the Lecture Method

To determine the success of community service activities, data analysis was carried out on the results of measurements before and after counseling and mentoring were given. This type of training and counseling was chosen because partners can see and feel directly how they can overcome their problems. The diffusion model (oneway monologic communication) describes training and consulting as participation through mentoring (Tuftte 2009). As a result, external change agents are needed. These agents should not view the housewife or partner as a passive party; instead, they should communicate persuasively to enable the knowledge, attitudes, and behaviors of the partner (individual) to change in a short period.

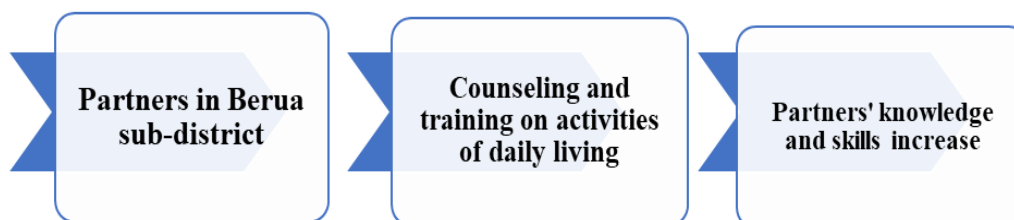


Figure 2. Community Service Implementation Method

RESULTS AND DISCUSSION

The following are the results of various community service activities:

a. Partner Characteristics

Table 1. Characteristics of Housewives in Berua and Tamalanrea sub-districts, Makassar City

Variable	Frequency	Percentage
Age (Years)		
30 – 35	2	5
36 – 40	5	12.5
41 – 45	10	25
46 – 50	13	32.5
51 – 55	10	25
Count	40	100
Education		
Senior high school	5	12.5
Diploma-3	5	12.5
Strata-1	25	62.5
Strata-2 Strata-3	5	12.5
Count	40	100

According to the results of the descriptive analysis, shown in Table 1 above, the age of the partners ranges between 30 and 55 years. The highest age is between 41 and 55 years, which is 33 people, or 82.5%, and the smallest age is between 30 and 40 years, which is 7 people, or 17.5%. For the education variable, the age characteristics of partners are generally in productive age. The highest level of education is S1, which is 25 people or 62.5%, and the education levels of senior high school, Diploma-3, and Strata 2 - Strata 3 are the smallest, which is 15 people or 37.5%. Thus, it can be concluded that the age characteristics of partners are generally in productive age with the highest level of education being Strata 1.

Neck and arm pain is greatly influenced by age, as well as daily activities, because muscle function decreases with age, especially the back muscles which receive heavy loads (Beatrice Alberta et al. 2021).

Musculoskeletal disorders such as neck and arm pain have a serious impact on people at any age. However, this problem is getting worse in adults, especially at the age of 41 to 45 years and even more than 45 years, because at this age there are physical and mental changes (Natashia and Makkiyah 2023). Physical capacity, including muscle and spinal flexibility, is directly influenced by age (Jovial Noli, Jufri

Sumampouw, and Tamardy Ratag 2021) In addition to age factors, gender factors also greatly influence the occurrence of neck and arm pain because the partners involved in this community service activity are of the same sex. Women experience neck and arm pain more often than men, and daily life factors and hormones also play a role (Gärtner et al. 2020; Mardiyana et al. 2022) Relaxin hormone increases due to pregnancy and contraceptive use, which weakens the ligaments that function as joint binders. In addition to the above, female menopause causes a decrease in bone density, which can cause lower back pain. In addition, both sexes have different muscle capabilities (Alcazar et al. 2020)

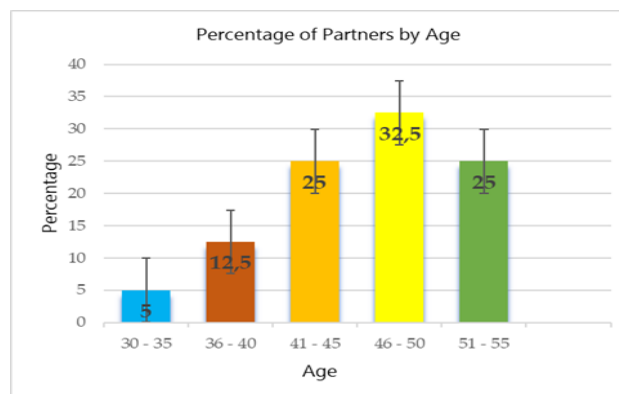


Figure 3. Percentage of Housewives in Berua and Tamalanrea sub-districts, Makassar City Based on Age

According to the results of the analysis of partner education factors, partners generally have a bachelor's degree (S-1). Education on how to perform daily activities with ergonomic postures indicates the level of knowledge the individual receives, and the higher the education the individual is expected to gain knowledge on how to prevent neck and arm pain (Basakci Calik et al. 2020). A higher level of education will be followed by increased knowledge, which will help a person have a good and correct attitude towards things, such as how to do daily activities so as not to cause pain, especially neck and arm pain. This is in line with research findings which show that a high level of education will influence how a person makes decisions or takes action, as well as how they carry out daily activities that are considered more appropriate (Zhang et al. 2022). However, other studies have shown that family,

work, and economic characteristics also contribute to pain (Zajacova et al. 2020). Education can also cause a person to take the wrong attitude or position when doing activities or working, which causes the body to expend a lot of energy, which makes it easier to get injured or get pain, especially in the neck (McDonald et al. 2019). Therefore, it can be concluded that education is one of the factors for success in transforming partners to be more ergonomic in performing daily activities to prevent neck and arm pain.

b. Level of knowledge of housewives before and after training in daily activities that do not cause lower back pain

The results of the analysis showed that the level of knowledge of partners about daily activities without lower back pain before training was lacking 33 people, or 82.5%, sufficient 5 people, or 12.5%, and sufficient 2 people, or 5%. After training and mentoring, partners obtained lacking knowledge none, sufficient knowledge 9 people, or 22.5%, and good knowledge 31 people, or 77.5%.

Table 2. Level of Knowledge of Housewives Before and After Counseling in Berua and Tamalanrea Sub-districts, Makassar City

Knowledge Variable	Knowledge Measurement			
	Before being given counseling		After being given counseling	
	Frequency	Percentage	Frequency	Percentage
Less	33	82.5	0	0
Enough	5	12.5	9	22.5
Good	2	5	31	77.5
Count	40	100	40	100

The results of the analysis showed that the level of knowledge of partners about daily activities without neck and arm pain before training was lacking 33 people, or 82.5%, sufficient 5 people, or 11.5%, and good 2 people, or 5%. After training and mentoring, the partners obtained less than no knowledge, 9 people, or 22.5%, had sufficient knowledge, and 31 people, or 77.5%, had good knowledge. Thus, counseling increases the partner's knowledge about being active without causing lower back pain. This can be because the process of

providing information, such as lectures, changes a person's attitude and behavior, which in turn produces awareness that will eventually behave by the knowledge (Alkalah 2016; Purwati 2023). The lecture can be adjusted to the circumstances of the partner or audience to make it interesting and get a clear impression of the topic being discussed, such as daily activities that do not cause arm and neck pain (Umanailo, Suminah, and Irianto 2019). Due to the effective use of technology, the lecture method in counseling will attract the audience (Afurobi et al. 2015; Bello, Ibi, and Bulama Bukar 2016). Counseling with the lecture method can be uninteresting if the speaker is more dominant. As a result, if this approach is focused on participants or partners, this method will attract the audience. This will improve the classroom environment, foster interest, and attract partners (Bello et al. 2016). The results of the counseling changed the way partners participated in activities. In cases where partners performed daily activities by paying attention to ergonomic body positions, they were able to prevent neck and arm pain. Thus, counseling helped partners change the way they performed daily activities so that they did not experience neck and arm pain.

CONCLUSION

The results of community service activities show that the knowledge and skills of partners or housewives as targets have increased. This shows that when they do daily activities they have been in accordance with the movements of the proven body system so that it can help reduce neck and arm pain. It is recommended that housewives or partners work in an ergonomic position so that they do not experience neck and shoulder problems.

Thank-you note

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