

Counseling Activities and Early Detection of Low Back Pain Cases with Farmers Group of Rukun Sentosa 1 Ngemplak Boyolali

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ABSTRACT

Farming is a job that is mostly done by people in Boyolali. Low back pain in farmers often occurs because of the working position carried out by farmers, namely bending over. The use of a lumbar corset can reduce low back pain in farmers. The purpose of community service at the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali Farmer Group is to empower farmers to know about early detection, prevention and treatment of low back pain that is often experienced by farmers. The activity is carried out in three months starting from May 31, 2021 to August 10, 2021. The stages of activity are preparation, implementation and evaluation. Preparation is carried out by conducting a preliminary survey to see conditions in the field and obtaining permits for activities in farmer groups. The implementation is carried out by empowerment in the form of counseling in the form of discussions with farmer groups, detection of farmers who experience pain, and giving a Lumbar Corset. Evaluation of activities is carried out for each stage by collecting and concluding data from each stage of activity. The result of the activity is the implementation of counseling and early detection of low back pain to farmers and providing a lumbar corset to be used by farmers to reduce back pain when farming. Implementing the activities of lecturers and students and assisted by the management and members of the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali farmer group.

Keywords: community service, farmer groups, low back pain, lumbar corset

INTRODUCTION

The Pain Study Group of the Indonesian Neurologist Association conducted a study in May 2002 in 14 teaching hospitals, with the results showing that the number of pain sufferers was 4456 people (25% of total visits), 1598 people (35, 86%) were sufferers of headache and 819 people (18.37%) were sufferers of LBP (Meliata 2004). While in Indonesia, although there is no epidemiological data regarding LBP, it is estimated that 40% of the population of Central Java aged between 65 years have suffered from back pain and the prevalence is 18.2% in men and 13.6% in women (Meliawan 2009).

Pain can be felt by all ages. Pain is an important comorbid factor in many diseases and can interfere with a person's quality of life. Pain is the reason a person seeks medical help (Maizura 2015). One of the pains that can cause disability and become the biggest threat to world health problems is low back pain or LBP (Corputty, Amat, and Kareri 2021). LBP is pain that is felt in the lower back area, it can be local pain or radicular pain or both (Smeltzer and Bare 2014).

Low Back Pain is a symptom and not a diagnosis. In some cases the symptoms match the pathological diagnosis with high accuracy, but in most cases, the diagnosis is uncertain and lasts a long time (Sharma et al. 2020). Low Back Pain is a health problem that is found in the community. The World Health Organization states that there are approximately 150 types of musculoskeletal disorders suffered by hundreds of millions of people that cause pain and inflammation for a very long time as well as disability or functional limitations, causing psychological and social problems for sufferers. One of the causes of pain is low back pain, which is the most common complaint among other pain complaints. Body postures such as work positions can cause back pain in a worker, but psychological burden or stress can cause increased muscle activity, causing pain that most commonly occurs in the neck, shoulders, back and buttocks (Ni'mah and Soekiswati 2018). psychosocial factors such as job demands, work

stress and social support as risk factors for LBP (Sarwendah 2013). LBP is often ignored but is very worrying because it can reduce a worker's productivity (Corputty et al. 2021).

Lumbar Support is a device that is mounted on the dorsal side of body which cover lumbar bon. Lumbar Support is to provide support to the dorsal back muscle and direct protection of extensive body movements to prevent injury and with abdominal pressure makes the body upright when doing work or lifting weights (Rachmat and Zubaidi 2020). The lumbar girdle serves to support the spine from the outside and is worn on the lower back. The lumbar corset is attached to the body. Application of support to the lower back is one of the simplest forms of orthotic appliance support (Schott et al. 2018).

The concern that long-term use of orthotic devices weakens the muscles that stabilize the trunk is controversial. There are studies that have found muscle strengthening (Holmström and Moritz 1992; Kawaguchi et al. 2002). Some have shown decreased strength, and studies have used the same muscles before and after using orthotic devices (Eisinger, Kumar, and Woodrow 1996; Walsh and Schwartz 1990). Another hypothesis is when the increase in intra-abdominal pressure is erect. by the lower back muscles. However, this hypothesis cannot be proven (Van Poppel et al. 2000). there is a relationship between attitude and workload with musculoskeletal complaints in farmer groups (Ratunuman, Suoth, and Joseph 2018)

Pain in farmers often occurs because of the working position carried out by farmers, namely bending. Our previous study was about the effect of using a corset on low back pain. This community service at the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali Farmer Group is part of the application of the 2020 research results. The results of the study state that there is an influence of the use of the lumbar corset on lower back pain (Rachmat and Zubaidi 2020). It is hoped that the community will be able to know early detection, prevention and treatment of low back pain that is often experienced by farmers, especially the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali Farmer Group.

Efforts to empower farming communities in preventing low back pain that can be done are by carrying out various activities, namely by providing counseling and education about low back pain, the occurrence of low back pain, prevention of low back pain, good working positions when farming, including solutions for using the lumbar spine. corset when already experiencing low back pain. Based on the above background, the problem can be formulated as follows: Counseling Activities and Early Detection of Low Back Pain Cases with the Rukun Sentosa Farmers Group Ngemplak 1 Ngemplak Boyolali.

The objectives to be achieved from making this program are as follows:

1. Provide socialization and increase knowledge about Low back Pain to the community
2. Implementing one of the roles of higher education institutions as a source of knowledge and technology for the community in the form of community service dharma.
3. Introducing and promoting the prosthetic orthotics profession in the community.
4. Develop good relations and cooperation between the Poltekkes Kemenkes Surakarta, especially the Prosthetic Orthotic Major, and the community.
5. Provide alternative solutions in overcoming problems in the health sector, especially low back pain in the community.
6. Developing the potential of the community itself through science and technology to overcome existing health problems.
7. Through outreach programs on community activities, it can improve the quality of life and prevent secondary effects that may occur.
8. Carrying out early detection, collecting data on cases of early detection and prevention of cases of Low back Pain, residents of the Rukun Sentosa Farmers Group Ngemplak Boyolali 1 Ngemplak boyolali

Expected Outcomes are scientific articles on community service.

METHOD

The stages to resolve the problems faced by partners, the solution offered is to conduct Counseling and Early Detection of Low Back Pain Cases with the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali Farmer Group with details: Efforts to empower farming communities in preventing low back pain by conducting outreach and education activities about low back pain, occurrence of low back pain, early detection of low back pain, prevention of low back pain, good working position when farming, including solutions for using a lumbar corset when experiencing low back pain. This activity starts from:

1. Survey Stage

Selection for community service location is determined to include the state of the problems faced by the target community, especially regarding the understanding of low back pain cases.

2. Partnership Agreement Stage

The next step after it was agreed on the place of implementation was to make an agreement with the chairman of the Farmers Group, asking for his willingness to be a partner to participate in the implementation of community service, namely Counseling and Early Detection of Low Back Pain Cases with the Rukun Sentosa 1 Farmer Group Ngemplak Boyolali.

3. Implementation of Counseling Activities and Early Detection of Low Back Pain

This Community Service activity was carried out for 3 months at the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali Farmer Group with monthly monitoring. The approach method used to assist partners in solving problems was (1) Preparation of service activities (2) discussions with farmer groups (3) counseling lectures (4) cadre training for early detection of low back pain (5) cadre assistance (6) Monthly monitoring (7) seminar results (8) submission of reports and evaluations.

RESULTS

Counseling and Early Detection of Low Back Pain Cases with the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali Farmer Group, taking place from May 31, 2021 to August 10, 2021. Some of the activities carried out include (1) Preparation of service activities and obtaining permits for community service activities (2) discussions with farmer group leaders and farmer group administrators (3) counseling lectures using powerpoint presentations and demonstrations accompanied by discussions (4) cadre training for early detection of low back pain, cadres are farmer group administrators (5) cadre assistance is carried out by direct or indirect discussions with social media whatsapp (6) Monthly monitoring with farmer group leaders (7) seminar results in the form of presentations to farmer groups (8) submission of reports and evaluations to farmer group leaders.

DISCUSSION

Timeline and documentation of Counseling and Early Detection of Low Back Pain Cases with the Rukun Sentosa 1 Farmers Group Ngemplak Boyolali as shown in the following table 1.

Table 1. Activities of counseling and early detection of low back pain cases

No	Date	Time	Activity
1	Tuesday, May 31, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- Preparation for service activities- Management of community service activities permits

No	Date	Time	Activity
2	Tuesday, June 8, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- Discussion with the head of the farmer group about Planning of activities and schedule
3	Tuesday, 15 July 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- Discussion with the head and management of the farmer group
4	Tuesday, 22 June 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- counseling lectures using powerpoint presentations- demonstration- discussion
5	Tuesday, June 25, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- Low back pain early detection lecture- Lecture on Prevention of low back pain- Corset use for low back pain
6	Tuesday, June 29, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- cadre training for early detection of low back pain- cadres are managers of farmer groups
7	Tuesday, July 6, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- cadre assistance- Giving a lumbar corset for farmers who experience low back pain- discussion- continued discussion with social media whatsapp
8	Tuesday, July 13, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none">- cadre assistance- Lumbar corset monitoring for farmers who experience low back pain- Discussion- continued discussion with social media whatsapp

No	Date	Time	Activity
9	Tuesday, 20 July 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none"> - cadre assistance - Lumbar corset monitoring for farmers who experience low back pain - Discussion - continued discussion with social media whatsapp
10	Tuesday, 27 July 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none"> - Monthly monitoring with farmer group leader
11	Tuesday, August 3, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none"> - Presentation of seminar results - presentation to farmer groups
12	Tuesday, August 10, 2021	09.00 - 11.00 WIB	<ul style="list-style-type: none"> - report submission - evaluation

The activity is carried out every Tuesday at the secretariat of the Rukun Sentosa Ngesrep 1 Farmers Group located at the house of the head of the farmer group, Mr. Ngadiyo. The activity begins with a survey and a permit application for community service activities. Mr. Ngadiyo welcomed and gave permission for the implementation of the activity. He provides a place at the secretariat of the Rukun Sentosa Ngesrep 1 Farmer Group for community service activities which are scheduled every Tuesday. Discussion of planning community service activities together with the chairman and management of the farmer group as many as 5 people. In the focus group discussion, information was obtained that some farmers experienced lower back pain while farming. Farmer mothers who are planting rice seeds in a bent position often experience lower back pain. Farmer group administrators agree to become health cadres in supporting counseling and early detection of low back pain cases among farmers. Furthermore, it is arranged together with a schedule of counseling and counseling assistance and early detection of low back pain which is scheduled every Tuesday. The schedule of community service activities can be seen in table 1. Counseling activities and early detection of low back pain in the form of counseling lectures with powerpoint presentations on back anatomy, back pain, causes of back pain, prevention of back pain, use of lumbar corset for back pain management. Counseling by the community service team, lecturer of Poltekkes Kemenkes Surakarta, Dr. Nur Rachmat, BPO, M.Kes, Dr. Bambang Kuncoro, MOT, Fadhila Firmanurulita, STr OP and assisted by students. After the education was given, a discussion with the participants, namely the farmers from the Rukun Sentosa Ngesrep 1 group, continued. The participants received sufficient basic information and were committed to living a healthy life by early detection and prevention of low back pain. 5 health cadres from farmer group management agreed to always coordinate. In the early detection activity, it was found that 4 farmers who experienced back pain were given a lumbar corset to wear for 2 weeks. After 2 weeks of use, the farmer felt less pain and felt the positive impact of the lumbar corset.

Cadre assistance is carried out by direct discussions every Tuesday, and using social media whatsapp. The cadres were enthusiastic in the discussion and actively contributed to monitoring farmers who used a lumbar corset to reduce low back pain. Figure 1 is a photo of the use of a lumbar corset by a farmer who has low back pain. Monthly monitoring is carried out by the

community service implementation team with the head of the farmer group. In monthly monitoring, progress of community service activities is conveyed. Monthly progress has been well achieved, as shown by the enthusiasm of cadres and members of farmer groups in attending regular counseling meetings. The submission of the seminar on the results of community service will be carried out on Tuesday, August 3, 2021. Furthermore, reports and evaluations are submitted to the head of the farmer group.

The community empowerment program is an activity that aims to increase the understanding and knowledge of the community in utilizing the existing potential (Hajar et al. 2021). Non-pharmacological effective way to reduce back pain is static stretching, because this method can break down muscles shortened, tense and stiff become more elastic and elongated, so that blood circulation is smooth oxygen will flow a lot to the back muscles and back pain is reduced (Wuriani et al. 2020).

CONCLUSIONS And RECOMMENDATIONS

The implementation of community service carried out in the form of community empowerment with Counseling and Early Detection of Low Back Pain Cases with the Rukun Sentosa Farmer Group Ngemplak Boyolali 1 went well and smoothly. The programs that have been implemented are counseling on low back pain with farmer groups, early detection of low back pain with cadres, prevention of low back pain, provision of lumbar corsets and monitoring of use, assistance to cadres and farmer groups through direct discussions and WhatsApp social media. Based on the activities that have been carried out by lecturers and students of Poltekkes Kemenkes Surakarta which were carried out at the Rukun Sentosa Ngesrep 1 Ngemplak Boyolali Farmer Group, which is expected to empower the community, especially farmers to recognize and prevent the occurrence of low back pain due to the position and workload of farming.

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APPENDIX



Figure 1. Use of the Lumbar Corset