Abdimas Umtas: Jurnal Pengabdian Kepada Masyarakat
LPPM-Universitas Muhammadiyah Tasikmalaya
Volume: 5 Nomor: 1
E-ISSN: 2614 - 8544

Realizing The Intelligent Community In Physical Rehabilitation For COVID-19 Survivors

Eki Pratidina, Tri Nur Jayanti, Rahmat Santoso, Ana Ikhsan Hidayatullah, Akbar Marta Nurpauzi, Fazry Rachmatulloh, Gita Puspitasari, Intan Asmarani, Nurlieta Ananda T, Saarah Putri K. P, Tiara Nuraeni, Erika Sri Yulia Agustiani, Hana Nabiilah, Yafi Cahyana Mauladan, Anita Rushendarti, Mitha Syaharani, Ida Nurfikah, Risa Agustiani, Ayu Diyana, Ayu Triani, Maharani Citra Nabila, Mutia Maudina, Putri Intan Pandini, Mutiara Mumthaz

Universitas Bhakti Kencana, Tasikmalaya Indonesia
Corresponding Email: tri.nur@bku.ac.id

ABSTRACT

COVID-19 patients who have been declared cured may experience residual symptoms such as fatigue, shortness of breath, impaired mobility, problems in activities of daily living, and insomnia. Unresolved sequelae can lead to long-term disability, so physical rehabilitation is important to improve the functional capacity. This community service activity aims to increase public knowledge about physical rehabilitation after COVID-19. The activity was carried out by providing blended education to 13 offline and 125 online participants. The material was divided into 4 sub-topics, physical exercise, nutrition to increase immunity, herbs and supplements to increase immunity, and prevention of COVID-19 reinfection. Education was carried out using lecture, discuss, and demonstrations. Various media such as powerpoint, video, banner, brochure, and leaflet are also used. Pre-test and post-test were conducted using a questionnaire as a form of evaluation. The results obtained, of the 78 participants who filled out the questionnaire, 49% of them had less knowledge during pre-test and turned into 100% good knowledge at the post-test. After the education, participants also able to practice physical exercises, use masks properly, and wash their hands according to the material provided. Based on these results, it can be concluded that education is effective in increasing public knowledge.

Keywords: Physical rehabilitation, COVID-19, survivor

INTRODUCTION

COVID-19 (Coronavirus disease) is an infectious disease caused by the SARS-CoV-2 virus. Currently, COVID-19 has become a problem in the world, including Indonesia. Based on data from Satuan Tugas Penanganan COVID-19 dated 21th July 2021, there were 536,756 confirmed positive cases and 405,350 confirmed recovered from COVID-19 in West Java. Although COVID-19 patients have been declared cured, there are some cases who still experience complaints and sequelae such as anxiety, depression, Post Traumatic Stress Disorder (PTSD), fatigue, cognitive deficits, shortness of breath, impaired mobility, problems in daily living activities, insomnia, and memory disorders (Kholilah & Hamid, 2021). Therefore, COVID-19 survivors need to get the right treatment in order to be able to achieve optimal health through rehabilitation.

Rehabilitation is defined as activities designed to reduce long-term disability and optimize function in individuals with health conditions in interaction with their environment (Ridwan, et al, 2021). Based on this understanding, physical rehabilitation is appropriate for COVID-19 survivors so that their organs can function optimally.

Physical rehabilitation can be done in several ways, one of which is physical exercise. Physical exercise can reduce post-COVID-19 symptoms and improve productivity and health status. Physical exercise can increase muscle strength and endurance. A fit physical condition after doing structured and measurable exercise can increase the immune response, so that a person will have a better immunity against the virus (Hammami et al., 2020). In addition, the drug and food supervision of the Republic Indonesia stated that nutritional intake and consumption of herbs and supplements can also

be done to increase the immunity of COVID-19 survivors. However, a COVID-19 survivor still has the risk of reinfection, so health protocols are a standard of prevention that must be always applied (West, Everden, & Nikitas, 2021; Perry, 2020).

Based on the background, our group want to provides education about physical rehabilitation to the community. This activity aims to increase public knowledge, especially for COVID-19 survivors about physical rehabilitation so that they can maintain their physical health, increase immunity, and avoid COVID-19 reinfection.

METHOD

This community service activity with the topic of physical rehabilitation education was carried out in a blended learning approach, which combines offline and online education. The activity was carried out on 10th August 2021 offline at Pasir Angin RT 02 RW 06, Talun Villages, Ibun District, Bandung City and online through zoom meetings at their respective homes. The offline activity was attended by 13 participants and online by 125 participants so that a total of 138 participants were obtained. Participants in this activity were not limited to COVID-19 survivors. People who have never been confirmed by COVID-19 were also allowed to take part in this activity. Offline activities were carried out while still implementing health protocols for the prevention of transmission of COVID-19.

Physical rehabilitation education was divided into 4 sub topics and given by 4 presenters: 1) post-COVID-19 physical exercise by Eki Pratidina, S.Kp.,MM; 2) Nutrition to increase immunity after COVID-19 by Ns. Ana Ikhsan Hidayatullah, S. Kep., M. Kep; 3) The use of herbs and supplements to help increase immunity by Drs. apt. Rahmat Santoso, M.Sc., MH. case; and 4) Prevention of COVID-19 reinfection by Tri Nur Jayanti, S.Kep., Ners., M.Kep. Educational materials were prepared by the presenters based on a literature review using relevant and credible sources. Education was provided by means of lectures, discussions, and demonstrations. Various media such as powerpoints, videos, banners, brochures, and leaflets were used to increase interest and make it easier for participants to receive educational materials. The evaluation was carried out after education by filling out a paper-based questionnaire for offline participants and a google form for online participants as well as demonstrations on the use of masks and washing hands. Evaluation was carried out to determine the extent of the participants' knowledge and understanding of the education provided.

RESULT

Educational activities are divided into several stages: pre-test, lecture and discussions, demonstration, and post-test. Pre-test was conducted to determine the knowledge of participants before being given education. From a total of 138 participants, there were 78 participants who filled out the questionnaire. The results of the pre test and post test can be seen in table 1. After being given education, all participants (100%) had good knowledge about post-COVID-19 physical rehabilitation.

Table 1. Frequency Distribution of Levels of Knowledge Before and After Education

Knowledge	Pre-test		Post-test	
	F	P	F	P
High-level	40	51%	78	100%
Low-level	38	49%	0	0%
Total	78	100	78	100

In addition to filling out questionnaires, this activity also used video demonstration. During the video playback, participants were able to follow the movements in the video together, such as physical exercise, how to use a single mask, a double mask, and how to make a medical to increase effectiveness in its use, and how to wash hands with 6 steps.

DISCUSSION

From the results of community service activities with the topic of post-COVID-19 physical rehabilitation and several sub-topics including physical exercise, nutrition to increase immunity, use of herbs and supplements to increase immunity, and prevention of COVID-19 reinfection, participants were able to understand the material as evidenced by an increase in the percentage participants have high-level of knowledge during the post test and are able to practice physical exercise and prevention of COVID-19 reinfection. The results of this activity are in accordance with the results of the dedication of Tambunan, et al (2021) that there is a change in the level of knowledge of participants from before and after education about COVID-19 and prevention of COVID-19 by washing hands, using masks, and coughing etiquette. Muliani, et al (2021) in their article also found the same thing, there were 62.5% of participants with less knowledge, 25% with sufficient knowledge, 12.5% with good knowledge before health education about adapting new habits after the COVID-19 pandemic experienced changes after being given education becomes 18.75% with less knowledge, 37.5% with less knowledge, and 43.75% with good knowledge.

Health education is an activity to convey health information to individuals, groups, or communities. Education is given to control health by influencing attitudes and behavior in making health decisions or actions through increasing knowledge. The results of the implementation of education can be influenced by various factors such as individuals, methods, media, materials or tools used and speakers. Some of these factors must work together in harmony so that results can be achieved optimally (Notoatmodjo, 2010).

In this activity, education is carried out using various methods such as lectures, questions and answers, and video demonstrations. The interaction in the selection of the method allows the participants to react directly such as a raise of the hand and a question, so that the speaker can respond to the reaction. The use of several media is also used such as powerpoint, videos, banners, brochures, and leaflets. Educational materials are written in the media by emphasizing important things in a clear, concise, and simple manner so that participants can easily read and understand them. The media also uses a blend of colors and supporting images so that participants are interested and interested in reading the material in the media. The use of methods and media in education has also been proven by Jauharie (2016) in his research, that the intervention group giving lectures and leaflets experienced more knowledge improvement compared to the lecture group without leaflets. Gejir, et al (2017) also mention that each media has advantages and disadvantages, so that the selection of media can be adjusted to the material, place, and purpose. This shows that the planning of methods and media needs to be done carefully so that in its implementation it gets optimal results.

Knowledge is the result of someone knowing about an object through sensing. Good knowledge does not always lead to positive behavior, but positive behavior will last longer if it is based on good knowledge (Notoatmodjo, 2010). From this description, it can be understood that knowledge is the basic thing in changing one's behavior. After education about post-COVID-19 physical exercise, good nutrition to increase immunity, use of herbs and supplements to increase immunity, and prevention of COVID-19 reinfection, it is hoped that it will not only increase knowledge in the short term. After education, participants can apply their knowledge in daily life so that it becomes a habit to the new era after COVID-19 pandemic.

CONCLUSIONS AND RECOMMENDATIONS

This activity can be concluded that providing education about physical rehabilitation offline and online can increase the level of knowledge. It is hoped that this activity will not only increase the level of knowledge about physical exercise, the use of herbs and supplements and nutrition to

increase immunity, and prevention of COVID-19 reinfection, but also can use this knowledge as a basis for positive behavior change. Support from Puskesmas is needed so that the community continues to behave in a healthy manner in order to create optimal health degrees. Participants are also expected to be able to socialize the material that has been obtained in this activity to others so that positive changes are experienced by many people and the status of the COVID-19 pandemic can end soon.

ACKNOWLEDGEMENTS

We would like to thank for Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) of Bhakti Kencana University which has funded this activity. In addition, thanks were also conveyed to all participants as partners for their willingness, cooperation, and support so that the implementation of this activity can run smoothly.

REFERENCES

Badan Pengawas Obat dan Makanan Republik Indonesia (BPOM RI). (2020). Pedoman Penggunaan Herbal dan Suplemen Kesehatan dalam Menghadapi COVID-19 di Indonesia. *Jakarta: BPOM RI*.

Gejir, I. N., Agung, A. A. G., Ratih, I. A. D. K., Mustika, I. W., Suanda, I. W., Widiari, N. N., & Wirata, I. N. (2017). *Media Komunikasi dalam Penyuluhan Kesehatan*. Penerbit Andi.

Hammami, A., Harrabi, B., Mohr, M., & Krustrup, P. (2020). Physical activity and coronavirus disease 2019 (COVID-19): specific recommendations for home-based physical training. *Managing Sport and Leisure*, 1-6.

Jauharie, A. P. (2016). Pengaruh promosi kesehatan dengan media leaflet terhadap peningkatan pengetahuan tentang persalinan preterm. *Jurnal Mahasiswa PSPD FK Universitas Tanjungpura*, *3*(1).

Kholilah, A. M., & Hamid, A. Y. S. (2021). The Persistent Symptoms of COVID-19 Survivor: Literature Review. *Jurnal Ilmu Keperawatan Jiwa*, *4*(3), 501-516.

Muliani, R., Jayanti, T. N., Dirgahayu, I., Safarudin, I., & Anri, A. (2021). Psychosocial Support in Increasing COVID-19 and Mental Health in The Elderly. *JCES (Journal of Character Education Society)*, *4*(1), 135-147.

Notoatmodjo, S. (2010). Promosi kesehatan. Jakarta : Rineka Cipta

Parry, J. (2020). Covid-19: Hong Kong scientists report first confirmed case of reinfection.

Ridwan, M., et all. (2021). Rehabilitasi Medik Pasca Menderita Covid-19. Surabaya. Airlangga University Press

Satuan Tugas Penanganan COVID-19. (2021). Pasien Sembuh Terus Meningkat Mencapai 2.356.333 Orang. https://covid19.go.id/p/berita/pasien-sembuh-terus-meningkat-mencapai-2356553-orang. (08082021)

Tambunan, I., Pratama, A. S., Jayanti, T. N., Anri, A., & Arianti, S. A. (2021). Training of COVID-19 Volunteer. *JCES (Journal of Character Education Society)*, *4*(1), 238-247.

West, J., Everden, S., & Nikitas, N. (2021). A case of COVID-19 reinfection in the UK. *Clinical Medicine*, *21*(1), e52.

APPENDIX

Figure 1. Physical Exercise Demonstration

Figure 2. Demonstration of the Use of Masks

Figure 3. Proper Nutrition Education to Improve Immunity

Figure 4. Education on the Use of Herbs and Supplements to Increase Immunity