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The role of physiotherapy in promotion of physical activity during the COVID-19

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ABSTRACT

Background: Physical activity is the right therapy in minimizing the incidence of non-communicable diseases in the community. Physiotherapy has a role in improving body function and movement, one of which is by using physical activity therapy. This study wanted to know the role of physiotherapy in promoting physical activity during the COVID-19 pandemic.

Methods: The research design is descriptive quantitative using a questionnaire in order to collect data. The questionnaire consists of 12 statements with Likert scale answers. A total of 42 physiotherapists were selected by simple random sampling spread across developing provinces in Indonesia.

Results: During the COVID-19 pandemic, 84% of physiotherapists continued to serve patients, even almost every day. Promotion of physical activity by physiotherapy is better during the COVID-19 pandemic than before the pandemic. The 97% of physiotherapists agreed to promote physical activity. The 66% physiotherapists believe that patients can be motivated to do physical activity if given recommendations by physiotherapists. As many as 79% of physiotherapists have time to provide promotions to their patients. Physiotherapists also stated that 45% of health workers know about physical activity and 66% of physiotherapists believe that clients/patients will do physical activity if recommended by them.

Conclusions: It is a necessity for Physiotherapists to always promote physical activity to clients/patients and the wider community.

Keywords: Physical activity, Promotion, Physiotherapy, COVID-19

INTRODUCTION

Physical activity is any activity carried out by expending energy. Physical activity is something that is difficult for people to do because it has been spoiled by technology. The more sophisticated technology, people only use finger movements on their respective devices to get something, no need to walk when they want to eat, no need to walk to bus stops and so on. According to the basic health research namely Riskesdas in 2018 that less physical activity was increased than the 2013 data, which was 7.4%.¹ The condition of physical activity has been less and less supported since the WHO stated that the COVID-19 pandemic occurred in the world at the end of 2019 and arrived in Indonesia early March 2020. During

COVID-19 pandemic, people are encouraged to keep their distance and avoid crowds to avoid transmission of COVID-19. so that people spend more time at home and spend more time sitting down to work.²⁻⁴

Previous research in various countries such as in Japan, Germany, US, Canada, Indonesia, and perhaps many other countries stated that there was a decrease in the level of physical activity in society, both in children and the elderly during the COVID-19.⁵⁻⁹ Indonesia applies large-scale social restrictions so that public facilities are limited in number of density and for physical activity facilities such as parks and open spaces are closed. This condition makes people do a lot of activities at home. Physical activity is a risk factor for the incidence of non-

communicable diseases, such as the incidence of heart disease, stroke, cancer, diabetes, joints, and others. Sufficient physical activity can improve blood circulation and metabolism in the body. Physiotherapy is a health professional who focuses on the health of body function and movement. The presence of physiotherapy is very necessary, especially for problems of function and movement, which can be improved by physical activity. Optimizing body function and movement is the goal of physiotherapy, both preventive and rehabilitative.

Physiotherapy referred to in physical therapy health workers according to Indonesian health data in 2020 is 9,309, when viewed from the total number of health professions, physical therapy is the profession with the smallest number among other health workers.¹⁰ Physical therapy as a health effort to control body movements and functions needs to overcome current health problems in Indonesia, in the form of individual health and public health, so that they can reach and serve the widest possible community. Public health efforts can reach a wider community by providing regular promotion to the community. Promotion is an educational effort given to the community, so that people can know what needs to be done and what cannot be done to improve their health.

Making promotion efforts to clients or patients is fundamental for all health workers, including physiotherapy so that people have a healthy paradigm. Physiotherapy services are currently a trend for patients who are aware of the role of physiotherapy, but the number of patients is not directly proportional to the number of physical therapists.¹¹ Research conducted at a private hospital at a physiotherapy clinic found that the time spent per patient was not sufficient to carry out a complete management process, and it got worse during a pandemic which minimized patient interaction with physiotherapy to reduce the spread of the COVID-19 virus.¹² It is a necessity for physiotherapy to promote even in the midst of impossible conditions in order to reduce the prevalence of non-communicable diseases, then what is the role of physiotherapy in promoting physical activity during this COVID-19 pandemic? For that purpose, this study aims to determine the role of physiotherapy in promoting physical activity during the COVID-19 pandemic.

METHODS

This research uses a quantitative approach by using a questionnaire in order to collect data. Subjects were selected by simple random sampling during the data collection period for a week, obtained 42 physiotherapists spread across developing provinces in Indonesia. The questionnaire was made in google form which consists of 12 statements where the answers to each statement are with a Likert scale. The time regularity scale uses always, often, sometimes, rarely, and never. The scale of the statement of agreement is 0-5, namely from strongly disagree to strongly agree. One question regarding the

type of physical activity recommended to patients with an open answer to find out the answer to the respondent's choice. Questionnaires distributed to physiotherapists and answered voluntarily, where researcher asked permission before filling out questionnaire.

RESULTS

Results of data collection showed that during the pandemic 74% physiotherapy served patients 5-7 days a week, followed by 14% physiotherapy serving 3-4 days, 10% physiotherapy serving patients if needed, and 2% physiotherapy not serving patients. The regularity of physiotherapy in carrying out promotional efforts before the pandemic and during the pandemic has changed by 47%, as shown in the Table below.

Table 1: Number of physiotherapists promote physical activity before and during the COVID-19.

Variables	Before the pandemic	During the pandemic
Always	15	17
Often	14	19
Sometimes	9	5
Rarely	4	0
Never	0	1

Changes in the regularity of physiotherapy in promoting physical activity during the COVID-19 pandemic more on good promotion changes is 70%. Table 1 explains that there are 15 physiotherapists who always promote physical activity before the pandemic and during the pandemic there are 2 additional physiotherapists who always make efforts to promote physical activity. Physiotherapists who made efforts to promote physical activity were rarely before the pandemic numbered 4 and during the pandemic there were no, so that physiotherapy during the pandemic was more regularly promoting physical activity to their clients/patients. There is one physiotherapist who has never done physiotherapy during a pandemic, even though before the pandemic there was no one who did not promote physical activity.

Table 2: Number of physiotherapists changes in regularity of physical activity promoting during the COVID-19.

Changes before the pandemic	Amount
Sometimes-always	2
Sometimes-often	4
Rarely-often	1
Rarely-sometimes	2
Often-always	5
Good changes	14
Rarely so not never	1
Always so often	5
Changes are not good	6

As many as 97% of physiotherapists stated that they agreed to promote physical activity as an effort to maintain patient health and the rest stated that they were neutral. 66% of physiotherapists stated that patients could be motivated to do physical activity if they were given education, 24% of physiotherapists stated that they were neutral and 10% of physiotherapists stated that patients were not motivated even though they had been given promotions. The most recommended exercise for physiotherapy is a leisurely walk, which is 60%.

Table 3: Percentage of recommended types of exercise physiotherapy.

Type of exercise	Percentage (%)
Swimming	9
Running	5
Walking	60
Others	26

As many as 79% physiotherapists said they had time to promote their patients, 19% were neutral, and 2% said they had no time. The habit of promoting physical activity if there is a financial incentive on physiotherapy 83% disagree and 17% state neutral. Physiotherapy also stated that 45% of health workers knew about physical activity, 31% said they were neutral, and 23% said that health workers did not know about physical activity.

DISCUSSION

Indonesia was in the second highest position in the number of deaths in Asia caused by COVID-19, this made the public restless and tried to minimize transmission by carrying out health protocols against COVID-19 transmission. No exception for health workers, especially physiotherapists who are restless with transmission. In this restless state, it does not stop physiotherapists from carrying out their duties because from the results of research, almost all physiotherapists still choose to serve patients during a pandemic, even 74% of physiotherapists almost serve patients every day. In contrast to what happened in Australia where physiotherapy services, namely manual therapy, were reduced during the COVID-19 pandemic.¹³ The reduction in physiotherapy services during the COVID-19 pandemic such as in Negeria was due to the effect on mental health of the therapist, there was a reduction in the efficiency of treatment where treatment from patients usually is regular repetition.¹¹ The selection of services with telehealth is the best choice to overcome the problem of COVID-19 transmission by continuing to carry out the duties of the profession.¹⁴

The danger of transmission of COVID-19 continues to stalking in the community because it causes death due to respiratory disorders in patients, this is a concern for physiotherapy.¹⁵ Management of physiotherapy in Indonesia requires a long time to serve one client/patient in one visit because it includes 7 stages of service,

starting from anamnesis, diagnosis, making a therapy plan, action, followed by evaluation and ending with documentation.¹⁶ The time spent for each case is different, such as musculoskeletal cases it takes 1 hour 42 minutes, neuro cases takes 2 hours 23 minutes, and 1 hour 2 minutes for cardiorespiratory cases, so that the average service for one patient is 1 hour 42 minutes.¹² Present, people are diligent in coming to visit physiotherapy services because physiotherapy services are guaranteed by compulsory health insurance in Indonesia and people are aware of the role of physiotherapy. The limited-service time for patients in hospitals with many patients allows the stage of physiotherapy management not to run optimally. As health workers, physiotherapy has an obligation to make promotive efforts to all clients/patients, from research results 97% of physiotherapists agree to promote physical activity, but before the COVID-19 pandemic physiotherapy who always made efforts to promote physical activity was only 36% and when the pandemic increased as much as 40%. Professional work is still visible from physiotherapy, the COVID-19 pandemic does not make Physiotherapists afraid to increase service time by providing promotive efforts, besides that awareness of the importance of physical activity encourages physiotherapists to make promotive efforts. Efforts to promote physical activity during a pandemic are getting better, from those who only often promote, from those who rarely promote to often promote physical activity during a pandemic. There is one physiotherapist who has never promoted physical activity during a pandemic, whereas previously there was no physiotherapist who had never promoted physical activity, this is thought to be due to physiotherapy's not serve therapy because the transmission of COVID-19.

Physiotherapists are also aware that promotion can always be done and they have time for it, because promotion can be done at the same time as physiotherapy is doing therapy, so actually there is no need for special time or additional service time.¹⁷ Different from results of this study, other studies feel that there are obstacles in carrying out health promotion in physiotherapy due to lack of time, focus on healing disease and skepticism.¹⁸

Addition, the results of the study also stated that 83% of physiotherapists felt that promoting physical activity did not need financial incentives to them, so physiotherapists were aware that carrying out promotional efforts was part of their job. Promotion of physical activity should be widely promoted because of its great benefits for current health problems, so that in addition to promotional services with an individual approach, promotion efforts with a community approach by professional partners are also needed.^{17,19} Manual therapy as one of the services of physiotherapy is a strategy that can be transmitted to the community in the context of rehabilitation and health promotion.²⁰ Some physiotherapists still lack an understanding of physical activity as in this study there were as many as 23% of physiotherapists. Research in the UK states that although the promotion of physical activity

is integrated in physiotherapy services, there is still an inadequate understanding of the guidelines for physical activity so that in daily life physiotherapy does not do enough physical activity.²¹

There are 66% physiotherapists believe in this study that with the recommendation of physical activity carried out by them, the client/patient will be more motivated to do regular physical activity. A survey conducted in Australia to 216 physiotherapists found that each physiotherapist has its own method to be able to change the patient's behavior in order to carry out the recommended physical activity, in addition to public trust in physiotherapy regarding the promotion of physical activity.^{22,23} The public's view of health workers in Indonesia is still taken into account so that every suggestion will be followed by the community. In this study, 60% of the physical activity recommended by physiotherapists was leisurely walking every day because it is a physical activity that can be done anywhere and anytime, and does not require a fee.

Limitations

This research still uses a small number of samples so that further research can use a larger number of samples.

CONCLUSION

During the pandemic, almost all physiotherapists continue to serve clients/patients. Physiotherapists are very aware of the promotion of physical activity as part of their duties and responsibilities. Physical activity of patients and the community is the focus of intervention from the physiotherapy task, namely optimizing body function and movement. Even though the danger of COVID-19 transmission lurks, physiotherapy continues to play its role in promoting physical activity during the pandemic. Physiotherapists are required to always promote physical activity to clients/patients as well as to the wider community.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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