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How Does The Covid-19 Pandemic Impact On The Training Patterns Of Indonesian Sitting Volleyball Athletes?

Prayogi Dwina Angga[1*], Deddy Whinata Kardiyanto[2]
[1]Teacher Training, and Education Faculty / Universitas of Mataram / West Nusa Tenggara / Indonesia
[1]Majapahit Street No. 62, Gomong, Selaparang, Mataram, West Nusa Tenggara, 83115, Indonesia
[2]Faculty of Sports / Sebelas Maret University / Central Java / Indonesia
[2]Ir. Sutami Street No. 36, Kentingan, Jebres, Surakarta, Central Java, 57126, Indonesia
[1]prayogi.angga@unram.ac.id, [2]deddywhinata84@gmail.com

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ABSTRACT
This study aims to determine the impact of the COVID-19 pandemic on the training patterns of seated volleyball athletes for the Indonesian national team. All members of the Indonesian seated volleyball national team participated in filling out a questionnaire consisting of sports participation, exercise intensity and volume, the impact of COVID-19 on exercise patterns, and training support infrastructure. A total of 11 athletes who were all male with an average age of 31.91 (± 7.43) had completed the questionnaire in the period July to August 2020. Most of the athletes practiced 5 times per week (73%) which was carried out in the morning and evening. in the afternoon (36%), they do exercises with direct guidance from online trainers both synchronously and asynchronously (82%). Athletes also feel that they experience a reduction in exercise volume and intensity (45%) compared to when they were at the national training center. Most athletes (82%) felt that they had experienced a decline in their physical condition. it is very clear that the COVID-19 pandemic is having a huge impact on the training patterns of seated volleyball athletes, they must focus more on maintaining their training to maximize their fitness so that they perform optimally when competition resumes.

Keywords: *COVID-19; Traning; Sitting Volleyball.*

INTRODUCTION

Coronavirus disease (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the disease was first detected in December 2019 in the city of Wuhan, China (Gorbalenya et al., 2020; Lake, 2020; McIntosh, 2020; Pan et al., 2020). The World Health Organization (WHO) has officially designated this disease as a pandemic and has affected nearly 210 countries worldwide, with more than 109.16 million confirmed cases and 2.41 million deaths (Burki, 2020; Cucinotta & Vanelli, 2020). The respiratory system, especially the lungs and respiratory tract tissue, is the part that is first attacked and infected by this virus (Harapan et al., 2020; Singhal, 2020), but in some cases that are considered extreme, this virus also hurts

most organs in the body, causing serious systemic failure. severe in some people and lead to death. Although there are already several vaccines being developed as a solution to this virus until now there is no effective treatment for this disease. In addition, pre-existing pathological conditions or comorbidities such as age are the main reasons for premature death and increased morbidity and mortality, not least in the disabled group who are also susceptible to this virus.

The real impact of the COVID-19 pandemic caused by SARS-CoV-2 has changed all aspects of life (Cucinotta & Vanelli, 2020), and poses a very devastating threat to everyone in terms of health, economy, education, lifestyle including sports (Wardle et al., 2021; Wong et al., 2020). Various rules and appeals have been issued by the government to prevent the spread of COVID-19, one of which is a lockdown accompanied by social distancing behavior (WHO, 2020). People are asked to stay at home and reduce activities outside the home. Of course, the rules of lockdown and social distancing will greatly limit the movement of people and will also change their daily habits and routines. WHO recommends countries to actively combat the disease through preparedness, preparedness, and critical response measures following the "Strategic Preparedness and Response Plan for COVID-19" and "WHO-defined transmission scenarios" as appropriate. This situation directly results in a decrease in the intensity of physical activity, which is accompanied by an increase in overall sedentary behavior (Ammar et al., 2020; Chen et al., 2020a; Gasmi et al., 2020).

The daily life restrictions associated with the COVID-19 pandemic have made it difficult for many previously physically active individuals to continue their chosen activities as well as a barrier for those who wish to become more physically active, including athletes, having to change, quit, or be physically active. even stopped as a result of the pandemic. The main focus on regular sporting activities or training comes from the notion that such mass gatherings can significantly exacerbate the risk of spreading the virus because of the environment in which they train. Lockdowns also distance athletes from their daily training and competition routines and increase uncertainty about the future. Lack of training and loss of performance capacity reduces their future competitiveness, undermines physical, technical capacity, and increases psychological stress (Andreato et al., 2020; Henriksen et al., 2020). Physiological side effects of isolation include increased levels of body fat and decreased muscle mass, impaired immunity, loss of mental acuity and toughness, insomnia, and depression (Bosquet et al., 2013; Chen et al., 2020b). All of these consequences can have short- and long-term

negative effects on athletes' physical fitness and competitive performance.

There have been many studies on the impact of economic, social, physical activity, education on the impact of COVID-19, but the research that analyzes the impact of COVID-19 on how exercise patterns, especially for persons with disabilities, is still difficult to find. The different characteristics possessed by persons with disabilities are a unique problem that they must face, for example, the blind rely more on the senses of touch and hearing to help them avoid transmitting the virus. Likewise, the deaf cannot read other people's lips when the other person is wearing a mask. In addition, chronic conditions of persons with disabilities are also an opportunity to increase the risk of transmitting the virus. This study aims to explore the impact of the COVID-19 pandemic on athletes with disabilities who are involved in competitive sports, especially seated volleyball athletes. Specifically, this study aims to get an overview of the current situation of sitting volleyball athletes, including the state of physical health, physical exercise patterns, and physical activities they do.

METHOD

This research is descriptive survey research that seeks to explore or record conditions or attitudes to explain what is happening at this time (Morrisan, 2012). Data mining was carried out by filling out a questionnaire that had been provided by the researcher to seated volleyball athletes who were taking part in the national training center program under the supervision of the National Paralympic Committee (NPC). A questionnaire containing the training patterns and the impact experienced by seated volleyball athletes was given and filled out in the period from July to August 2020. Athletes were given comprehensive information about the research to be carried out and they were also asked to fill out a written consent or consent form. Companions are also prepared for athletes who have difficulty filling out questionnaires. All information provided by athletes is strictly kept confidential and the data obtained is also disguised in the database. Several questions regarding demographics, sports participation, intensity and volume of exercise, the impact of COVID-19 on exercise patterns, training support facilities were poured into questions on the questionnaire.

All data that has been obtained is then processed in the EXCEL database (Microsoft Excel 2020, Windows, USA) for further analysis. Meanwhile, the software package in the form of SPSS (version 27; SPSS, Chicago, USA) was used to process

Prayogi Dwina Angga[1*], Deddy Whinata Kardiyanto[2]
prayogi.angga@unram.ac.id

quantitative data. Demographic data of participating athletes are presented as means with appropriate standard deviations for continuous variables, and with frequencies and proportions for categorical data.

RESULTS AND DISCUSSION

A total of 11 seated volleyball athletes who are members of the Indonesian national team prepared to face international multi-events participated in this study by filling out a prepared questionnaire. All seated volleyball athletes involved in this study were male athletes with limb deficiency with an average age of 31.91 (± 7.43). Based on the completed questionnaire, the following results were obtained.

Table 1.
Analysis of the Impact of COVID-19 on Exercise Patterns of Sitting Volleyball Athletes

Question	Answer	Number of answers (N)	Percentage of answers (%)
How many times a week do you do exercise?	2 times	0	0
	3 times	2	18
	5 times	8	73
	more than 5 times	1	9
Total		11	100
Time to do exercise	Morning	4	36
	Afternoon	4	36
	Morning and evening	3	27
Total		11	100
What training method have you been following?	Online with guidance from coach	9	82
	Self-training without guidance from a coach	0	0
	Go online with guidance from the coach and add to the training schedule independently	2	18
Total		11	100
The types of exercises you do at home	Just do physical exercise	0	0
	Just doing technical training	0	0
	Do both	11	100
Total		11	100
How do your physical training and technical training compare?	50 : 50	0	0
	60 : 40	7	64
	70 : 30	4	36
Total		11	100

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prayogi.angga@unram.ac.id

Question	Answer	Number of answers (N)	Percentage of answers (%)
How are your supporting infrastructure during training during the COVID-19 pandemic	Very adequate	0	0
	Adequate	5	45
	Inadequate	6	55
Total		11	100
Do you find it difficult to adjust the exercise pattern	Very difficult	8	73
	Quite difficult	1	9
	Not hard	2	18
Total		11	100
Are you experiencing decreased exercise volume	Have decreased exercise volume	5	45
	No change in exercise volume	4	36
	Practice more than ever	2	18
Total		11	100
Are you experiencing a decrease in exercise intensity	Experience a decrease in exercise intensity	5	45
	No change in exercise intensity	4	36
	More exercise intensity than ever	2	18
Total		11	100
The trainer evaluates the results of the exercise regularly and measurably	Once a week	0	0
	Once a month	11	100
Total		11	100
Has anyone felt a decrease in physical condition?	Yes	9	82
	No	2	18
Total		**11**	**100**

Athletes train 5 times per week (73%) in the morning and evening (36%), they do exercises under direct guidance from online trainers, both synchronously and asynchronously (82%). The combination of physical and technical training is continuously carried out by seated volleyball athletes (100%), with a ratio of the portion of physical and technical exercise 60: 40 (64%). Most athletes (55%) stated that their training support facilities and infrastructure were inadequate, which was one of the reasons why athletes had difficulty in regulating exercise patterns (73%). Athletes also feel that they experience a decrease in exercise volume and intensity (45%) compared to when they were in a national training center. Evaluation of the physical condition of seated volleyball athletes is carried out once a month (100%) by the coach, but most athletes (82%) feel that their physical condition has decreased.

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The spread of COVID-19 has not only forced almost every training location to close including the temporary closure of national training centers but has also clearly forced athletes to stay home and carry out training independently or with guidance conducted online by coaches. This is done as the social distancing measures and precautions imposed to slow the spread of COVID-19 have affected the national training camp program, regular competitions, and even led to the postponement of previously scheduled multi-events, not only the Tokyo Olympic and Paralympic Games, but also all other events. , including the cancellation of qualifying tournaments including the Pekan Olahraga Nasional (PON). In addition, due to limited opportunities to get out of the house and carry out intensive and systematic training, when players are allowed to train for shorter periods, they tend to work too hard to maximize their impact, which can increase the chance of injury, which in turn, can lead to more injury. on doubt and frustration (United Nations, 2020).

Although there are many negative impacts due to the lockdown that have been felt by athletes, mitigating infection control during the COVID-19 pandemic is a top priority. It is recognized that the COVID-19 pandemic has reduced performance and hampered the performance of athletes, but what must also be considered lies in assessing the risk of a player or athlete if they continue to carry out regular training together considering that athletes with disabilities are also a group that is vulnerable to being infected with the virus (Fiorilli et al., 2021). For this reason, it is necessary to consider how to measure and reduce the level of risk of COVID-19 transmission during the training camp process (American Academy of Pediatrics, 2021), because so far there is still no clear guide on how to implement the training camp procedure in the COVID-19 pandemic conditions.

The next problem that arises due to the COVID-19 pandemic, especially in the seated volleyball sport, is the limited interaction with teammates (Peña et al., 2021), coaches, and others can make athletes even more anxious because of further uncertainty. Another missing aspect is the daily, weekly, monthly, and yearly routine, which affects the mental and physical status of players (Buchheit et al., 2015; Jukic et al., 2020). During the lockdown, not only the physical fitness of team sports athletes are affected (Impellizzeri et al., 2020; Toresdahl & Asif, 2020). As we know, the array of abilities needed for team sports such as sitting volleyball is very diverse, not only physical components, but also requires technical and tactical components, game understanding, and decision making (del Campo et al., 2011) as a paradigmatic aspect. Increasing, or even maintaining this skill level is no easy task during a lockdown. In addition,

recommendations on how to train in individual conditions are less specific to physical fitness (Peçanha et al., 2020).

Overall, due to the limited and challenging training environment around the world, it will be a challenge for players to maintain their best shape, follow special diets, and do individual tasks to keep them in good shape, at least their physical fitness does not decrease (Hammami et al., 2020; Narici et al., 2021). But on the other hand, the COVID-19 pandemic has also made athletes take the time to recover from injuries, strengthen themselves, and develop their creativity, such as using face masks to simulate physical exercise at heights.

In sports, where technique and physical skill are paramount, this can limit the effectiveness of different types of coaching exercises. Moreover, coaching programs are also likely to have to change due to the lack of closeness between coaches and athletes, leading to the replacement of technique-based coaching with strength and conditioning training, for example. Similarly, the ability of coaches to ensure the development of togetherness and a sense of belonging within teams and teams is likely to change.

CONCLUSIONS AND SUGGESTIONS

The COVID-19 pandemic has had an impact on the training patterns and mechanisms of Indonesian seated volleyball athletes, which resulted in a decrease in athlete performance. The existence of a lockdown and independent training must be used by athletes to carry out focused and independent training to maintain integral physiological and mental aspects, but these efforts must be accompanied by a planned, systematic, and personalized training program with full supervision or consultation from the coach. In addition, athletes must focus on maintaining their training to maximize their fitness so that they perform optimally when competition resumes.

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