

# Health Management of Indonesian Athlete in Covid-19

Catur Supriyanto<sup>1,\*</sup> Setiyo Hartoto<sup>1</sup>

<sup>1</sup> Universitas Negeri Surabaya, Indonesia

\*Corresponding author. Email: [catusupriyanto@unesa.ac.id](mailto:catusupriyanto@unesa.ac.id)

## ABSTRACT

In the Covid-19 era, Professional athletes have been compelled to reschedule their training plans to maintain their condition while at home due to postponed several large-scale sporting events. As a consequence, health management becomes one of the critical issues that should be prepared in detail. This study aims to investigate the health management of Indonesian Athletes in Covid-19. The subject of the research were twenty athletes and three coaches. This research uses the descriptive method and case study approach. The result showed that there were two ways of facilitating athletes' health management. The first is the training from a Home session, and the second is the New Normal Puslatda (PNN) session. There were also five health protocols for the athletes, coach, and sports organizers: Protocol for Athlete Health and Training, psychological health protocols, health protocols before and during exercises, health protocol after exercise, and Health Protocol Organization of Sports Training. Implication and Recommendation are suggested in the article.

**Keywords:** Health, Management, Covid-19, Athlete.

## 1. INTRODUCTION

Sport participation, at all levels and talents, contributes significantly to an individual's physical, psychological, and emotional well-being. The pandemic of Coronavirus Disease 2019 (Covid-19) and Indonesia's Large-Scale Social Restriction (PSBB) policy resulted in mental, psychological, and nutritional issues for athletes, as well as a decrease in maximum oxygen consumption (VO2Max) and a loss of strength and muscle mass. Athletes are also at risk of contracting an infection. Covid-19. The athlete's health maintenance activities are critical to be done. Sports organizations and athletes will have to make difficult decisions about continuing training and competition in the current conditions.

During the COVID-19 pandemic, competitions, Olympiads, and all sporting events had to be postponed indefinitely. Athletes, like people in general, must stay at home to avoid infection with COVID-19. This COVID-19 pandemic condition can undoubtedly affect the performance, physical health, and mental health of athletes. The level of healthcare management differs from country to country.[1] With some large-scale sporting events postponed, professional athletes have been forced to reschedule their training programs to maintain their fitness while at home. Athletes feel that the postponement of many sporting events is the threat

of termination of the contract by the sponsor who has signed it. The same pandemic is affecting Indonesia, which has resulted in the postponement of important sporting events such as PON [1], which influences players' health. For example, due to event delays, Indonesian athletes are bored with training. It causes athletes to lose their daily dietary patterns and adopt poor nutritional habits. Occasional overeating or snacking, especially foods high in sugar and fat and processed foods, can cause daily dietary patterns [2], resulting in increased body fat levels and decreased muscle mass [3].

The State University of Surabaya is one of the Sports centers to develop athlete career development. Therefore, the regional sports committee and the stakeholder set the New Normal Puslatda (PNN) session to prepare the East Java athlete. To keep the health management, the regional sports committee started to promote offline training and online training. Previous research on the impact of the pandemic on athletes' mental health has been widely explored [2][3], but there has been little research on the health management of Indonesian athletes in Covid-19. As a result, this article was prepared to fill in the athlete's area's health management gaps.

## 2. HEALTH MANAGEMENT OF INDONESIAN ATHLETE

### 2.1. Sports Management

Essentially, the management function is separated into two parts: organic and inorganic processes, the latter of which, if not carried out, can lead to the management's collapse [4]. Supporting roles are referred to as inorganic functions, and if they exist, control will be more comfortable and practical [5]. Through the functions of planning, organizing, leadership, supervising, and staffing, the process of integrating and coordinating the use of organizational resources can be used to achieve goals.

Professional athletes have been compelled to reschedule their training plans to maintain their condition at home due to postponed several large-scale sporting events [6]. Another issue that athletes are concerned about due to the postponement of several sporting events is the fear of contract termination by the sponsor who signed the contract.

Other parties involved in the sports sector, in addition to professional athletes, are affected. We all know various enterprises in the sports industry, including league organizations, events, business travel, tourism, infrastructure, transportation, catering, and media broadcasting. The great sports industry's economic value is unquestionably dangerous because the sports industry's business cannot normally function [7].

### 2.2. Health Management in Covid- 19

A health manager's primary role is to aid in the achievement of organizational goals. A health manager provides direction and effective leadership to his team, directing their efforts toward a single goal. An effective manager delegates authority and then supervises and monitors it effectively [8]. In the Covid-19 era, health management refers to health checks, daily symptom screening, risk assessment, case management, information giving, and contact tracing, which can be documented by trainers and team management in the preparation program PSBB time. PSBB results in each athlete's development and health condition being precisely and continuously unknown during activities. Moreover, training in their respective homes, preventing more detailed information from being extracted based on the available data and compared with the athlete's health history and comorbid factors before the pandemic.

The COVID-19 pandemic has wreaked havoc on communities worldwide, imposing severe limits on all aspects of society, including sport. COVID-19 has had

various effects on people, with many reporting deteriorations in their mental and financial well-being. Sporting organizations and participants will have to make difficult choices regarding continuing training and competition under the current situation. The regional sports committee has collaborated with the university partners, sports club, and sports stakeholders to create a structure to guide the return to sport. However, studies are scarce, particularly in sporty groups, that have set a sports framework for the health management of Indonesian athletes.

Sports activity will be reintroduced gradually and methodically, based on the best available research to ensure athlete and community safety. The principles presented in the framework apply to high-performance/professional sports, competitive community sports, and individual passive (non-contact) sports.

## 3. METHODS

The descriptive qualitative method was applied in this study, employing a case study methodology. A case study is an in-depth and detailed examination of a particular situation [9]. The subject of this research was twenty New Normal Puslatda (PNN) athletes from East Java, Indonesia, and three coaches. The observation and semi-structured interviews were done at the State University of Surabaya, Indonesia. The interview was done at the athletes' dormitory on Lidah Wetan, Surabaya. The first observation was done on 21 July 2021, and the second was done on 8 August 2021. The interview was done on 9 August 2021. This study involved the researcher as partial participants. The observations were done within and after the training session. Researchers used document reviews and interviews in addition to words to acquire qualitative data. The policies or the sports framework and regulations are included in these documents. The instruments were adapted from Creswell. The observation was done to explore Health Management, especially in the coverage of policy and the implementation.

After that, all the data gathered through observations and document analysis are analyzed in three stages: data reduction, data display, conclusion drafting, and verification. Data reduction is accomplished by summarizing the information gathered during the research. Data is presented by displaying it in narrative form and describing it descriptively. Coding was done carefully on each response. For example, the coach responses would be coded with "C." Next, the athletes would be coded as 'A.' Then, triangulation was done via WhatsApp call to the respondent. Finally, conclusions and data verification are accomplished by comparing data and information collected in the field.

#### **4. FINDINGS AND DISCUSSION**

The Covid-19 pandemic is a worldwide humanitarian crisis that generates fear, anxiety, and even tension. The fear happened since the Covid-19 virus is deadly due to its ability to bring death so swiftly. The nature of the Covid-19 virus, which spreads so efficiently and quickly, makes a person vulnerable to infection. The Covid-19 virus spreads not just through the air but also droplets. Both Athletes and the coach should take the Covid-19 Swab-PCR test. The interview result shows that training from home is the policy solution applied thus far (TFH). The effectiveness of TFH practices in maintaining or improving athletic performance is questioned because the TFH cannot monitor athletes anytime. The policy from Regional Sports Committee in East Java (KONI JATIM) for adopting the New Normal Puslatda (PNN) must be followed. Quarantine implementation for the New Normal Puslatda (PNN) athletes was done seven days before the training session.

The observation also showed that the Covid-19 Swab-PCR test is mandatory for all PNN athletes and officials. Ordering or delivering things or food must go through the PNN security/group staff to avoid direct interaction from the outside. Moreover, Both athletes and coaches were not allowed to meet the shipper directly. Guests were not permitted during the PNN process. The New Normal Puslatda for the athlete prepared for national competition was designed based on the main principles. The principle is that Activities should not threaten individual or community health. With the government's consent, the second stage of sporting activities involving vast people, such as football and domestic championships, may be held, although spectators are not permitted. Individual athletes may be subjected to a strict health routine and pass a PCR test with negative findings.

Moreover, the Regional Committee set five major health protocol guidelines or health frameworks in Indonesia for PNN. This guideline was shared through the sports club and the coach. The first protocol is Protocol For Athlete Health and Training. Both athletes and coaches use hand sanitizers or wash their hands with soap and water in this protocol. They have to open the door with their elbow and hit the elevator button. They had to avoid touching the training area's standard facilities/equipment regularly. Whether they were practicing, they were not allowed to wipe their face before washing their hands. The athlete and their coach should maintain a one-meter minimum separation. They avoid making physical contact, such as shaking hands or hugging for a victory celebration. Masks were always worn in the arena atmosphere, and they were removed during matches and then re-used afterward. Before and after the game, both athlete and coach wash their hands, bathe, and change their clothes. Personal items such as

eating/drinking equipment, towels, and other items should not be shared.

The second protocol is the psychological health protocol. In this protocol, the athlete should measure on a scale of 1 to 10 to rate their current psychological situation. Provide an assessment by assessing the level of anxiety, for example, if the athlete were suffering anxiety. Self-healing or self-management could be used to alleviate anxiety, boredom, stress, or other unpleasant psychological circumstances if the score is in the 1-5 range. If the psychological tests show that the athlete has a negative attitude in the 6-10 range, It is required to see a psychologist or counselor. The athlete should meet the psychologist team in PNN to receive therapy and other psychological assistance to deal with challenges.

The third protocol is health protocols before and during exercises. In this protocol, the athlete was recommended to shower prior before practicing. In addition, it is required to wear a mask in the region, and it is advisable to replace the cover used from outside the practice. Finally, when undertaking high-intensity exercise, pay attention to the spacing between members and remove the mask before practicing.

The fourth protocol is health protocols after exercise. In this protocol, the athletes were recommended to wash their hands with soap and water or use hand sanitizer after practice. In addition, athletes and coaches do not use sports equipment together and clean the equipment with a disinfectant before and after use, shower, and change clothes after training.

The fifth protocol is the Health Protocol Organization of Sports Training. In this protocol, the organizer creates a match schedule that reduces attendees at sporting events. Moreover, the organizer conducts health checks and examinations Swab-PCR before the match to ensure that athletes are in excellent health, both in general health and about Covid-19.

Depending on the claim for the proficiency of a cadre of healthcare managers, the level of healthcare management differs from country to country [4]. The sports organizer should provide easily accessible hand-washing facilities with soap or hand sanitizer. The sports organizer disseminates information about Covid-19 transmission prevention, such as the necessary use of masks, maintaining a safe distance, washing hands with soap and running water, or using hand sanitizer, cough etiquette, and others, in critical locations at venue locations. If possible, set aside a separate area/room for athletes and sports players who exhibit symptoms such as fever, cough, runny nose, sore throat, and shortness of breath while attending a sporting event. The sports organizer should clean and disinfect spaces or facilities frequently shared and touched regularly at least three times each day.

Furthermore, the interview result showed that implementing both pieces of training from Home and The New Normal Puslatda (PNN) had promoted some pitfalls and strengths. The strengths of both programs were about the health management of the athlete. Home and The New Normal Puslatda (PNN) training could be done with strict health protocols regulation. In training from home sessions, the supervision of the health protocols was done in an online mode. The use of technology could enhance this process. The following excerpt supports this information:

(C1) *We use Whatsapp to track our athletes' health before, during, and after training. The health rules should be appropriately followed even if they practice at home.*

The athlete should report their health and physical training to the regional Sport committee even though they practice training at home. The following excerpt supports this:

(A3) *We have to make a weekly report about our practice and achievement to our coach and KONI during the training from the home session.*

However, there are some pitfalls in the implementation of Health Management Athlete in Covid-19. Many athletes tend to feel bored and overwhelmed with the health protocols. The following excerpt supports this information:

(A1) *I miss my family a lot, and I could not meet many people in the New Normal Puslatda. I hope that everything will be normal again. We have to wash our hands many times and report them to the coach and the committee.*

From the findings above, it could be inferred that physical health and mental health were corroborated. Therefore, the proper use of health management potentially leads to increased susceptibility to physical and mental health issues. Furthermore, maintaining a clinical apparatus geared toward performance enhancement rather than health maintenance is critical in sports organizations [7]. As a result, judgments frequently favor performance outcomes over the athletes' optimal health [8].

To carry out the needed managerial responsibilities of planning, organizing, staffing, leading, controlling, and decision making, personnel in executive roles at all levels of the organization must have strong conceptual, technical, and interpersonal abilities [5]. The competition's duration and importance, the athlete's playing status, the athlete's health and emotional well-being, and the possibility of further injury to the athlete were factors that may influence the implementation of

health management in an online mode or offline mode. Sports organizations appear to be making an essential investment in the long-term quality and duration of individual athletes' careers by facilitating effective advocacy on behalf of their athletes from their healthcare providers. This investment by sports organizations in extending the viability of athletes' careers supports the sports organization's financial survival.

During this epidemic, technology can assist athlete who is experiencing health problems [7]. The majority of young female adolescents who were aware that they were experiencing psychological distress were female. In the mental health survey, a considerably higher proportion of females than boys reported psychological discomfort, which was equivalent to the results of all adults aged 15 years [8]. This information is supported by the previous study, which states that Telemental health assists athletes in experiencing mental health symptoms and concerns. Telemental health uses information and communication technology, such as videoconferencing, to give mental health treatments to people who live far away, such as psychotherapy, mental health assessments, and medication management [9][10]. Such programs may have a higher admissions criterion during a pandemic, especially if in-person participation is essential. Furthermore, several characteristics of higher levels of care related to the pandemic have changed, including the likelihood of in-person group therapies and family gatherings.

In addition, visitors will be required to wear personal protective clothing equipment [10]. Some rigorous outpatient and partial hospitalization programs, on the other hand, include new virtual participation alternatives [11][12]. However, their effectiveness in half-day and full-day programs is unknown.

Furthermore, some virtual programs may not accept participants outside their state or country, limiting elite athletes' possibilities [13][14]. Virtual programs are also beneficial to improve the athletes' capacity building. Capacity building is an ongoing process related to quality improvement and sustainable results by advancing skills, resources, and management at the individual, organization, or community level [15][16]. The implication of this study would evaluate the importance of psychological health and physical health within the implementation of health management of Indonesian Athletes in covid-19 [17][18]. The collaboration between stakeholders and sports clubs would support the quality of health management in Indonesia [19][20]. The health protocol for the athletes could also be used to develop further health management of Indonesian athletes across the province in Indonesia. This study also gains a new finding of how technology can enhance the health management of Indonesian athletes. It was suggested that each sports

club could modify the existing health management protocol model to improve their athletes, especially in the pandemic era. This study has some limitations. The first limitation is the number of participants. Therefore, it is suggested that the future researcher could involve a more significant number of participants. The second limitation is that the detailed health protocols for each sport were not described in detail. Therefore, it is suggested that the future researcher compare and contrast health management in different sports and different countries.

## 5. CONCLUSION

This study investigates the health management of Indonesian athletes in Covid-19. The result showed that training from home and The New Normal Puslatda managed Indonesia's athletes' health. Moreover, five health protocols are well received and well implemented in both programs. The protocols were Protocol for Athlete Health and Training, The psychological health protocols, The health protocols before and during exercises, The health protocols after workouts, and the health Protocol Organization of Sports Training.

## AUTHORS' CONTRIBUTIONS

The first author was in charge of data gathering for this study. However, both authors contributed equally to other aspects of this study effort, such as data analysis, paper writing, rewriting, and editing.

## ACKNOWLEDGMENTS

The author acknowledges the PNN UNESA team, coach, and athlete for facilitating the data collection process.

## REFERENCES

- [1] J. R. Reblando, "Healthcare management," *Int. J. Nov. Res. Healthc. Nurs.*, vol. 5, no. 1, pp. 306–307, 2018, DOI: 6.
- [2] R. de Q. Padilha *et al.*, "Principles of clinical management: Connecting management, healthcare and education in health," *Cienc. e Saude Coletiva*, vol. 23, no. 12, pp. 4249–4257, 2018, DOI: 10.1590/1413-812320182312.32262016.
- [3] J. B. Kangbai, "Fundamentals of Health Management First Edition," *Fundam. Heal. Manag. First Ed.*, vol. 11, no. March, p. 15, 2019.
- [4] J. Carnicero, *eHealth Handbook*. United Nations Publication, 2012.
- [5] J. M. Thompson, S. B. Buchbinder, and N. H. Shanks, "An Overview of Healthcare Management," *Underst. Heal. Care Manag.*, pp. 2–16, 2007.
- [6] A. Aroni, "Health management," *Bmj*, vol. 332, no. Suppl S3, p. 0603131b, 2006, doi: 10.1136/sbmj.0603131b.
- [7] Mehrsafara, Amir Hossien. et al. Addressing the potential impact of COVID-19 pandemic on the physical and mental health of elite athletes. *Brain, Behavior, and Immunity*. 87. (2020). 147-148
- [8] Reardon CL, Bindra A, Blauwet C, Budgett R, Campriani N, Currie A, Gouttebarge V, McDuff D, Mountjoy M, Purcell R, Putukian M, Rice S, Hainline B. Mental health management of elite athletes during COVID-19: a narrative review and recommendations. *Br J Sports Med*. (2020) Sep 23:[bjssports-2020-102884](https://doi.org/10.1136/bjsports-2020-102884). DOI: 10.1136/bjsports-2020-102884. Epub ahead of print. PMID: 32967853.
- [9] World Health Organization, W.H., Considerations for sports federations/sports event organizers when planning mass gatherings in the context of COVID-19: interim guidance, 14 April 2020
- [10] Toresdahl, B.G., Asif, I.M., In: *Coronavirus Disease 2019 (COVID-19): Considerations for the Competitive Athlete*. SAGE Publications Sage CA, Los Angeles, CA. <https://doi.org/10.1177/1941738120918876>.
- [11] Schinke, R., Papaioannou, A., Henriksen, K., Si, G., Zhang, L., Haberl, P., Sport psychology services to high-performance athletes during COVID-19. *Int. J. Sport Exercise Psychol*. 2020. 1–4. <https://doi.org/10.1080/1612197X.2020.1754616>.
- [12] Liu S, Yang L, Zhang C, et al. Online mental health services in China during the COVID-19 outbreak. *Lancet Psychiatry* (2020);7:e17–18
- [13] Edwards C, Thornton J. Athlete mental health and mental illness in the era of COVID-19: shifting focus with a new reality. *Br J Sports Med Blog*, 2020. Available: <https://blogs.bmjjournals.com/bjsm/2020/03/25/athlete-mental-health-and-mental-illness-in-the-era-of-covid-19-shifting-focus-a-new-reality/> [Accessed 26 May 2020].
- [14] Purcell R, Gwyther K, Rice S.M. Mental health in elite athletes: increased awareness requires an early intervention framework to respond to athlete needs. *Sports Med Open* 2019;5:46
- [15] While E, Mahmoud H, Naal H. Telemental health in the context of a pandemic: the COVID-19 experience. *Curr Treat Options Psychiatry* 2020;198–202.
- [16] F. Lega, A. Prenestini, and P. Spurgeon, "Is management essential to improving the performance and sustainability of health care systems and organizations? A systematic review and a roadmap for future studies," *Value Heal.*,

vol. 16, no. 1 SUPPL., pp. S46–S51, 2013, DOI: 10.1016/j.jval.2012.10.004.

- [17] M. of H. and F. Welfare, "Clinical management protocol for COVID-19," vol. 12, no. 13, pp. 754–757, 2016
- [18] D. Egger and E. Ollier, "Making Health Systems Work : Working Paper," no. 8, 2007D.
- [19] S. Dorgan and N. Bloom, "Management in healthcare report," p. 26, 2010.
- [20] V. Wendy, K. R. Mkosi, and L. Alexander, "Health Management I," 2008.