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# ANALYSIS OF THE LEVEL OF PHYSICAL FITNESS AND NUTRITION STATUS IN ATHLETES OF THE DKI PLATE ATHLETES OF HAND BALL SPORTS TOWARDS THE XX POND OF PAPUA 2021 IN THE PANDEMIC PERIOD

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#### **Abstract**

Covid-19 in every country is increasing so that WHO recommends carrying out activities that cause crowds, so all sporting events are postponed or even cancelled. So that training for athletes is limited and not optimal, making it a new problem for athletes' physical fitness, besides the order to stay at home makes the athletes' nutrition not well controlled. This study aims to determine the analysis of the level of physical fitness and nutritional status in the athletes of the Sports Branch of Handball to Pon XX Papua 2021 in a Pandemic Period. This study uses a descriptive research technique method through a quantitative approach which emphasizes the assessment in the form of numbers for the phenomenon being observed. This study uses a total sampling technique with research subjects namely the 2021 athletes in the Handball sport. Based on the results of the data that has been obtained from the study, it shows that the level of physical fitness in the athletes of the DKI Jakarta handball Pelatda during the COVID-19 period in 2021 on average is very good, and has an average level of nutritional status in the normal or ideal category, category perfect as many as 1 athlete (7%) with very good category as many as 9 athletes (60%), and with good category as much as 5 athletes (33%).

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## INTRODUCTION

The whole world is busy discussing the virus that is attacking the whole world, including Indonesia. The virus first appeared in 2019 in Wuhan, China. The virus is called the *Corona Virus Disease-19*, then at this time it is known as COVID-19. The virus that has spread throughout the world is very easy to spread. So that the COVID-19 virus becomes a pandemic and changes all human activities, especially in countries affected by it, including Indonesia. From this virus, all areas of life have an impact, ranging from daily activities to work matters, a lot of businesses have gone out of business so that unemployment during the pandemic also increases. The world of education was also affected, so the government implemented PJJ (distance learning), as a realization of the recommendation to stay at home to minimize the spread of the COVID-19 virus. The number of COVID-19 cases in each country is increasing so that WHO recommends carrying out activities that cause crowds, this has an impact on the world of sports, so all sporting events are postponed or even canceled. So that training for athletes is limited and not optimal, making it a new problem for athletes' physical fitness, besides the

order to stay at home makes the athletes' nutrition not well controlled. Physical fitness and nutritional status of athletes are the main assets for an athlete to be able to make brilliant achievements.

One of the most basic and important factors in physical education is the aspect of fitness. Physical fitness is defined as a person's ability to carry out daily activities without feeling tired. Physical fitness is also one of the important things, especially for adolescent activities because their activities are higher and have energy reserves to enjoy ordinary activities or enjoy free time for needs when needed. -time can be used. (Djoko Pekik Irianto, 2000). In general, physical fitness is influenced by two factors, namely internal and external factors. Internal factors are factors that originate from the human body itself, for example genetic factors, gender and age. While external factors are factors that originate from outside the human body in the form of physical activity, nutritional intake, health status, hemoglobin levels, adequate rest and smoking habits or consuming alcohol (Mahastuti, et al, 2018).

Nutritional status is expressed as a state of the body which is the result of food consumption and the use of nutrients with 4 classifications, namely poor, less, good and more nutritional status (Almatsier, 2009: 4). Nutritional status is a condition of the body as the end result of a balance between food (nutrients) that enter the body and the body's need for these nutrients (Desiana, 2013). Nutritional status is a state of the body as a result of food consumption and the use of nutrients in the form of certain variables that can be measured by certain methods. Meanwhile, according to Muhammad (2016: 2) nutritional status is a condition caused by a balance between nutrient intake from food and the nutritional needs needed by the body. Nutritional status is the state of the body as a result of food consumption and use of nutrients. Nutritional status is distinguished between poor nutritional status, less good, and more . Nutritional status is a state of the body as a result of food consumption and the use of nutrients in the form of certain variables that can be measured by certain methods. Inadequate nutritional intake in athletes during training and competition causes a decrease in performance and is at risk for health problems (Mountjoy et al., 2018). Continuous physical exercise leads athletes to maintain an unstable balance between food intake, energy expenditure, and the added demands of large amounts of physical activity. Thus, accurate assessment of nutritional status is very important to optimize performance, as it affects the health, body composition, and recovery of athletes (Mielgo et al, 2015). Meanwhile, according to Muhammad (2016: 2). Nutritional status or nutritional status is a condition caused by a balance between nutrient intake from food and the nutritional needs needed by the body. Physical fitness is also a state of physical ability that can adjust the functions of the body's organs to certain activities and / or to environmental conditions that must be above in an efficient manner, without excessive fatigue and have fully recovered before the data for the same task the next day. This is said to be a normal function of the human body when humans carry out sports activities (Zafar, 2012). The dynamic healthy category referred to above is the normal function of the human body's organs in a state of activity or exercise. Therefore, someone who has a dynamic healthy category will have good physical fitness or not get tired easily when doing activities, can even do other activities and may be heavier the next day. Then also explained the notion of physical fitness is the body's ability to perform a physical work that is done daily without causing significant fatigue. Without fatigue, which means that after someone has done his job, that person still has enough enthusiasm and energy to enjoy his spare time or for other sudden needs (Wiarto, 2013). Therefore, it should be a question of the quality of physical fitness and nutritional status of an athlete during a pandemic that will face PON XX Papua, so the researchers raised "Analysis of Physical Fitness Levels and Nutritional Status in Athletes of the DKI Pelatda DKI Branch of Handball Sports Towards PON XX Papua 2021 in the Future. Pandemic".

# RESEARCH METHODS

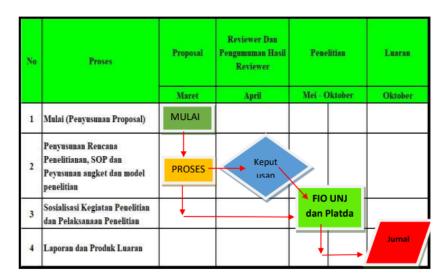
This study aims to determine the analysis of the level of physical fitness and nutritional status of athletes from the Regional Training Center of DKI in the Handball Sports to Pon XX Papua 2021 in a Pandemic Period. In a broad sense, analysis is an activity of thinking to decompose a whole into components so that it can recognize the signs of components, their relationships with each other and their respective functions in an integrated whole. The definition of analysis is more inclined to a systematic framework of thinking in order to solve a problem.

This research is a research that uses descriptive research techniques through a quantitative approach which emphasizes the assessment in the form of numbers on the phenomenon being observed.

This study uses a total sampling technique with the research subject being the athletes of the 2021 DKI Jakarta Pelatda in the Handball sport.

In a descriptive study, it will not use and do not need to test hypotheses, which means the research is not intended to build and develop previous theories (Mulyadi, 2011).

The population consists of objects or subjects that have a quantity and characteristics certain which set by researcher for studied and then drawn in conclusion, (Sugiyono, 2007). Population in study this is whole athlete ball the hands of the DKI Jakarta Regional Government. While the sample is part or representative of the population studied. retrieval technique The sample used is *total sampling*. Total sampling is a way which is used to take the sample to be taken in total, namely the sample taken is of the entire population sampled.



Research Flow Chart (Flow Chart)

# RESULTS AND DISCUSSION

The results of this study, obtained data in the form of percentages for each handball athlete as follows:

Table 1 results calculation BMI

Tuble I results culculation Bill			
Obesity	2	13%	
Obesity	2	13%	
Normal	11	73%	
Thin			
Amount	15		
Average	23.67		
<b>Deviation Raw</b>	2.16		

Table 2 results calculation shutter run

Well Very	14	93%
Well	1	7%
Currently		
Not enough		
Not enough Very		

Amount	15	
Average	11.32	
<b>Deviation Raw</b>	0.63	

# Table 3 results calculation sit and reach

Perfect	15	100%
Well Very		
Well		
Enough		
Not enough		
Amount	15	
Average	37.13	
Deviation Raw	11.56	

Table 4 results calculation sit up 2 minute

Perfect	15	100%
Well Very		
Well		
Enough		
Not enough		
Amount	15	
Average	67.67	
<b>Deviation Raw</b>	15.66	

Table 5 results calculation push up 1 minute

Well Very	8	53%
Well	2	13%
Enough		
Not enough		
Amount	15	
Average	36.47	
<b>Deviation Raw</b>	8.56	

Table 6 results calculation vertical jump

Table of estates calculation vertical jump		
Perfect	3	20%
Well Very	2	13%
Well		
Enough	2	13%
Not enough	8	53%
Amount	15	
Average	59.93	
<b>Deviation Raw</b>	8.28	

# Table 7 results calculation 300 m

Well Very	0	0%
Well	6	40%
Currently	6	40%

Not enough	3	20%
Not enough Very		
Amount	15	
Average	46.25	
<b>Deviation Raw</b>	2.91	

Table 8 results calculation bleep test

Perfect	1	7%
Well Very	9	60%
Well	5	33%
Currently		
Not enough		
Not enough Very		
Amount	15	
Average	10.80	
<b>Deviation Raw</b>	0.94	

From table in on could is known that status nutrition athlete branch sport ball hand average that is 23.67 or good very. With category normalas many as 11 athletes (73%), with obesity categories as many as 2 athletes (13%) and with obesity category as many as 2 athletes (13%). The average Shutle run test is 11.32 or very good. With very good category as many as 14 athletes (93%) and with good category as many as 1 athlete (7%). Sit and reach average is 37.5 or perfect. With perfect category 15 athletes (100%). The average push up test is 36.47 or very good. With very good category as many as 8 athletes (53%) withgood category as many as 2 athletes (13%) and with perfect category as many as 5 athlete (33%). Test sit ups the average is 67.67 or perfect. With category perfect as many as 15 athletes (100%). The average Vertical Jump test is 59.93 or Not enough. With perfect category as many as 3 athletes (20%) in good category once as many as 2 athletes (13%), with enough category as much as 2 athletes (13%) and less category as many as 8 athletes (53%). The average 300 meter running test is 46.25 or good. With good category as many as 6 athletes (40%) with moderate category as many as 6 athletes (40%), and with less category as many as 3 athletes (20%). Test Bleep test average that is 10,80 or good very. With category perfect as many as 1 athlete (7%) with very good category as many as 9 athletes (60%), and with good category as much as 5 athlete (33%). So it can be said that the level the average physical fitness of the handball Pelatda athletes in DKI Jakarta in 2021 is very good.

### **CONCLUSION**

Based on the results of all the data that has been obtained from the study, it shows that the level of physical fitness in the athletes of the DKI Jakarta handball Pelatda during the COVID-19 period in 2021 on average is very good, and has an average level of nutritional status in the normal or ideal category. With category perfect as many as 1 athlete (7%) with very good category as many as 9 athletes (60%), and with good category as much as 5 athlete (33%).

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