Body Mass Index Conditions of Running Athletes Before Ramadan

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Info Artikel

Abstract

This study aims to determine the condition of the body mass index of athletes running in Gorontalo. The research method used is ex-post facto descriptive with a research sample of 18 athletes, consisting of 15 male athletes and three female athletes. This study uses the Body Mass Index instrument by measuring the athlete's height and weight. Data analysis using Benchmark Reference Assessment (PAP), then the data is processed using ms. Excel. This study revealed that all athletes in Gorontalo City with 100% male and female athletes have an average Body Mass Index. This study illustrates that the trainer maximized the exercise pattern and the nutritional practice to keep the Body Mass Index regular. However, coaches must continue to monitor their athletes to always have an average Body Mass Index, especially during Ramadan.

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INTRODUCTION

Sports science studies sports phenomena, and those who exercise are humans, therefore sports science has a very complex study dimension in line with the complexity of human existence. Sports Science developed from the predecessor sciences that studied humans in their various sizes by focusing on humans who carry out sports activities, sports that are carried out, and all the intricacies accompanying them to provide solutions to human health problems both for athletes. Kim, 2019) and non-athletes (Almeida Marinho & Pereira Neiva, 2020) (Haglund, 2020). Thus, sports science in this era has developed into a branch of science with advanced and experienced breadth based on human existence.

Almost all religions advocate a period of fasting (Javanmard & Otroj, 2020). Especially for Muslims, fasting is a familiar thing. Especially in the face of the month of fasting or Ramadan, which is the mandatory month for Muslims who have reached puberty (Shihab, 1999), they will have an obligation to fast in this month. Ramadan for a whole month unless you are unable to do so.

For Muslim athletes, fasting in the month of Ramadan is an obligation that must be done (unless they are unable to do so). Athletes still have to practice even while fasting. So that stamina does not decrease and remains excellent, athletes must pay attention to the key: maintaining adequate nutrition, body fluids, and rest. This does not mean athletes will be lazy and neglect to cultivate their bodies. For example, senior athletes in Gorontalo in athletics in running numbers, when researchers conducted observations and interviews with head coaches for athletes in running numbers, each athlete was given particular training tasks independently during the fasting month. Apart from being a form of supervision, this unique training is provided to make the physical condition of the athletic athlete in the running number always fit and maintain the athlete's ideal weight.

The importance of this study is to analyze the athlete's weight related to the Body Mass Index (BMI) owned by the athlete as an illustration of the success rate of independent training and a reference for the appropriate athlete training and coaching program from the coach concerned. This is also because the average human will be lazy and not do sports activities during Ramadan (Puspitawati, 2019). In addition, this research can be used as evaluation material for training, and coaching programs for athletes carried out during the fasting month. Coaches need this data so that the training program is right on target for their athletes.

A previous study entitled Body Mass Index (BMI): An Analytical Study of Elementary School Age Junior Swimming Athletes (Budi et al., 2020). The method used is ex-post facto research. The population in this study were junior swimming athletes at the Tirta Kembar Purwokerto swimming club, while the research sample was all junior swimming athletes aged ten years, totaling 20 children. The results showed that the Body Mass Index (BMI) of elementary school-aged junior swimming athletes at the Tirta Kembar Purwokerto swimming club showed an average value for the skinny BMI vulnerable. Another previous study titled Volleyball: What is the Condition of Athletes' Body Mass Index (Kusnandar et al., 2020). The research sample is all volleyball athletes at Jenderal Sudirman University, with 10 male athletes and ten female athletes. The research instrument used the Body Mass Index test by measuring the athlete's height and weight. The results showed that the average volleyball athlete at Jenderal Sudirman University had a Body Mass Index in the normal category.

METHODS

This research is located on the Merdeka Stadium track, Gorontalo Province, from April to May 2021 before Ramadan 1442 H. This research is an ex-post-facto (Ramadan & Juniarti, 2020) descriptive study because the researchers did not treat the sample. The ex-post facto method is a type of research that does not directly control variables (Sugiyono, 2018). Researchers only took Body Mass Index (BMI) data without giving any treatment. The population in this study was 18 athletes from Gorontalo, consisting of 15 male athletes and three female athletes. The sample in this study uses a total sampling technique, which means that the entire population of this study is the sample.

After weighing and measuring athletes, a calculation will be made based on the BMI norms as follows:

Table 1. Body Mass Index Classification

Classification	BMI
Severe weight loss	< 17,0
Mild weight loss	17,0 - 18,5
Normal	18,5 - 25,0
Mild overweight	>25,0 – 27,0
Excess weight level	>27,0

Source: (Wiarto, 2013)

Data analysis used Benchmark Reference Assessment (PAP) to measure Body Mass Index (BMI) criteria. The data will then be analyzed with the help of Ms. Exel so that from these data, it will be known the number of athletes included in the BMI category of thin, normal, fat, or obese.

FINDINGS AND DISCUSSION
Findings

The results of the study on the level of Body Mass Index (BMI) in running athletes in the City of Gorontalo using the Benchmark Reference Assessment (PAP) as follows:

Table 2. Body Mass Index (BMI) Calculation

Gender	weight (Kg)	height (Cm)	BMI	Inf.
Female	50	152,5	21,7	Normal
Female	46	151	20,2	Normal
Female	49	155,5	20,3	Normal
Male	52	152,5	22,3	Normal
Male	53	164	19,7	Normal
Male	55	159	21,7	Normal
Male	54	160	21,1	Normal
Male	49	160	19,1	Normal
Male	48	160	18,7	Normal
Male	63	170	21,7	Normal

Male	62	169	21,7	Normal
Male	55	165,5	20,1	Normal
Male	52	163,5	19,4	Normal
Male	58	165	21,3	Normal
Male	57	171	19,5	Normal
Male	64	165,5	23,4	Normal
Male	51	166	18,5	Normal
Male	52	158	20,8	Normal

Based on the table, it is known that 100% of running athletes are in an average body mass index (BMI).

Discussion

This study revealed that all running athletes in Gorontalo City had an average Body Mass Index. This shows that having a portion of food with good nutrition so that it can have a Body Mass Index (BMI) to an average level, because with a programmed exercise pattern if it is not balanced with a good diet, growth, in this case, is the Body Mass Index (BMI). Development can be disrupted. Previous research also revealed that an average Body Mass Index (BMI) would be able to make an athlete move quickly, firmly, and also agilely than an athlete who has a fat or thin body (Mahfud et al., 2020); moreover, it is known that the average A person's average weight will be more durable in calculating Body Mass Index (BMI) if they already have an obese or skinny body, so it will be even more challenging to achieve the desired ideal weight (Duncan & Toledo, 2018). This should be an advantage that athletes have in obtaining the desired performance.

The results also revealed no athletes who had a thin Body Mass Index (BMI). This

finding has proven that the fulfillment of the nutritional needs of athletes in Gorontalo City has been fulfilled. This can also give confidence that the athletes running in Gorontalo do not lack energy in the training process. Previous research revealed that someone who has a Body Mass Index (BMI) in the normal category has good physical fitness and can also display maximum performance (Hambali & Suwandar, 2020). Good nutritional knowledge provided by academics to coaches and athletes should continue to be delivered to apply in everyday life.

A severely underweight body can undoubtedly bring some health problems for athletes, which will indicate that the person is not getting an adequate supply of nutrients, which will impact growth disturbance. A person who does not get enough energy from food will have a body that cannot fight disease. As a result, such people will fall sick more often, and the healing process will last longer. This puts them at a higher risk of developing anemia, which can cause symptoms of dizziness, headaches, and lack of energy.

Body Mass Index (BMI) fat was also not found in this study. Being overweight or even

obese has a risk that decreases sports performance and even can cause disease. Diseases that can arise from obesity and even obesity are degenerative diseases (Erawantini et al., 2019). For athletes running, obesity can cause serious problems that can make performance decline; this is a disadvantage that must be minimized by setting a balanced diet.

A plump or commonly known body as obesity will also harm health. Obese people experience it is difficulty breathing and tend to be short of breath. It is caused by fat accumulated in the chest and neck area, making it challenging to live either to inhale or exhale air. People who are overweight often experience pain in the joints and muscles of the legs. Persistent knee pain can impair posture. All of these things happen because being overweight puts extra stress on your knees and ankles.

Ramadan is an obligatory month for Muslims to fast (Khumaedi & Fatimah, 2019). This is a total obligation unless there are obstacles. Many of the benefits of fasting can be seen from a health perspective (Subrata & Dewi, 2017). On the other hand, fasting athletes can suffer from hypohydration, changes in sleep patterns and architecture, sleep disturbances, mood swings, immunological changes, impaired psychomotor performance, overall physical exhaustion, and possibly, mental fatigue (Chamari et al., 2019). Muslim athletes who are obliged to perform fasting worship should be given a holistic approach through the

trainers and the parties responsible for the training not to experience a harmful impact.

Coaches and related parties must continue to keep their athletes maintaining their diet and exercise patterns during the month of fasting because fasting has many advantages as long as fasting is done wisely, and many disadvantages with additional risks to athletes compared to those who are not. Athletes (Laza, 2020). One of the advantages obtained is a consistent fat mass (Fernando et al., 2019). After the fasting month or commonly referred to as Lebaran, the eating pattern must also always be supervised by the trainer. The consumptive practice of the community in welcoming this Eid is increasing because it is caused by internal factors (Mardiah, 2019). In essence, the coach and related parties must constantly monitor the athletes' nutritional and training patterns that adapt to the athletes' needs.

CONCLUSION

Based on the findings of the study. Gorontalo City runners have an average Body Mass Index (BMI). So that there are no severe problems in the training and eating patterns that the coach has given. However, coaches should continue to monitor and supervise athletes' training patterns during the month of Ramadan so that athletes do not experience a drastic increase or decrease in Body Mass Index (BMI). Further research is recommended to conduct a thorough evaluation of the Athlete's Body Mass Index

(BMI). Further research is also expected to be able to examine the Body Mass Index (BMI) in running athletes in terms of eating patterns, sleep patterns, and physical activities carried out, besides that it can also identify the exercise program carried out by athletes and is associated with Body Mass Index (BMI).

AKNOWLEDGMENTS

Thank you to the Chancellor of the University Muhammadiyah Gorontalo and all lecturers of the sports science study program who have provided both material and moral support to complete this research.

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