

Level Of Knowledge Of Futsal Athletes PON Sumut XXI 2024 Against Doping (Clenbuterol)

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Abstract

The purpose of this study was to determine the extent of knowledge of North Sumatra PON XXI 2024 futsal athletes on doping (*clenbuterol*). There are several reasons an athlete uses doping to achieve an achievement. One of the reasons is because he did not achieve maximum training results. The research method used is descriptive method with data survey technique, with a sample size of 15 people, namely all North Sumatra PON XXI 2024 futsal athletes with total sampling technique. The instrument used in this study was a questionnaire about *clenbuterol* doping. The results of research on the level of knowledge of North Sumatra PON XXI 2024 futsal athletes against doping (*clenbuterol*) are as follows: level of knowledge about doping in the “Good” category with a percentage of 75.00%, level of knowledge about the effects of doping in the “Excellent” category with a percentage of 84.67%, attitude towards doping in the “Good” category with a percentage of 77.82%, and level of knowledge about *clenbuterol* in the “Good” category with a percentage of 73.97%. The overall research results regarding the level of knowledge of North Sumatra PON XXI 2024 futsal athletes against doping (*clenbuterol*) in the “Good” category, with a percentage of 77.11%.

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INTRODUCTION

Since time immemorial, humans have used doping to increase body strength and increase courage. (Lippi et al., 2020). For example, Indians in Central America and some tribes in Africa, they eat substances from certain wild plants or eat honey before facing a long journey, hunting or war. The history of doping in sports began in the 19th century in swimming, but the most common use of doping is in bicycle racing (Soemardiawan et al., 2019). At that time popular substances used were caffeine, sugar dissolved in ether, alcohol-containing beverages, nitroglycerine, heroin and cocaine (Afrina & Tohidin, 2019).

The existence of doping among athletes is rather difficult to stem as long as the athlete does not recognize his own existence and physical abilities. There are many rules and restrictions that are deliberately made to always maintain honesty, even many strict sanctions, ranging from mild to severe, are imposed on those who are proven to violate (Safa et al., 2024). Although it has been officially banned, many athletes still use doping as an alternative to winning matches. In addition, doping is also dangerous for the health of the athlete because it can cause disease, disability, and even death. So, the benefits gained are not balanced with the losses that will be suffered years later. Not to mention that if caught, the athlete and his coach must endure shame (Sujatno, 2022).

The positive effects of using doping in general are increasing stamina, increasing self-confidence, increasing body strength and increasing courage, pain relief when menstruation is approaching (Ungusari, 2023). In addition, to increase

calmness, reduce shaking hands, lower heart rate to make it easier to concentrate. The negative effects of doping include muscle spasms, nausea, headaches, and fainting. Too frequent use may cause kidney and heart problems. Especially for female athletes, the use of this doping will cause the growth of male traits, such as mustaches, heavy voices, and hoarseness. Then, there are menstrual disorders, changes in the distribution pattern of hair growth, shrinking the size of the breasts and increasing aggressiveness. In children there will be growth disturbances (Mylsidayu, 2024).

Achievements achieved in a sportive manner in the form of maximum training and also supported by nutritious and healthy foods. while in an unsportsmanlike manner athletes usually use doping to achieve an achievement (Asiva Noor Rachmayani, 2020). But many athletes do not realize that the food they consume contains not a few *clenbutero* substances. For example, when athletes consume meat that already contains *clenbuterol*. Many athletes or coaches who do not know the dangers of using doping, especially *clenbuterol*, so that not only from food athletes can get caught in doping cases, but it could be due to offers from drug manufacturers that offer various kinds of body strength enhancing drugs. (Nikolopoulos et al., 2021). This is one of the reasons why athletes or coaches must know the dangers of using doping, especially the use of *clenbuterol*. But there are also athletes who deliberately use *clenbuterol* to maintain muscle mass so that the maximum strength of the muscles is maintained without paying attention to the side effects that will result from the use of

doping (*clenbuterol*) (Deligiannis et al., 2020).

Doping in futsal, as in other sports, is a significant concern due to its potential to provide an unfair advantage and pose health risks to athletes. (Oseid, 2020). The prevalence of doping in competitive sport varies widely, with studies reporting rates

Persentase	Category	from
80% - 100%	Very Good	0 to
60% - 79%	Good	73%,
30% - 59%	Medium	althou
10% - 29%	Less	gh
<10%	Very Less	most
		fall

below 5%. This pattern reflects the wider issue of doping in sport, where the use of substances to enhance performance has historical roots dating back to the ancient Greeks and Romans. (Sipavičiūtė et al., 2020). The ethical implications of doping are profound, as it challenges the integrity and fairness of sport, prompting international sports federations and organizations such as the International Olympic Committee (IOC) to deem it unethical and impose sanctions on offenders. (Backhouse et al., 2020). The physiological demands of futsal, such as high-intensity play and the need for endurance, can tempt athletes to use doping to improve performance, as seen in studies exploring the effects of substances such as sodium bicarbonate on lactic acid tolerance and endurance in futsal players. (Hopker et al., 2024). Additionally, the risk of dehydration, which can impair performance, is a concern in futsal, highlighting the importance of proper hydration strategies to maintain performance without the use of banned substances. Despite the challenges in

accurately assessing doping prevalence due to inconsistencies in data reporting, efforts continue to improve the quality of evidence and testing methodologies, such as the use of advanced technologies like metabolomics in drug testing. (Tăbîrță et al., 2024).

Overall, the fight against doping in futsal and other sports is ongoing, with a focus on maintaining the spirit of fair competition and safeguarding the health of athletes through strict anti-doping measures and ongoing research into effective testing and prevention strategies.

METHODS

The method of this research is descriptive method. Descriptive method is research conducted to determine the value of independent variables, either one or more variables (independent) without making comparisons, or connecting with other variables. This research does not test hypotheses or use hypotheses, but only describes what information is in accordance with the variables studied. (Sugiyono, 2013).

This study used an instrument in the form of a closed questionnaire which was used as a data collection tool about the survey of knowledge of North Sumatra PON XXI 2024 futsal athletes regarding doping (*clenbuterol*). The data analysis technique used by the author in this study is a percentage. The number of each aspect will be adjusted to the standard assessment.

To find the category of knowledge of North Sumatra PON XXI 2024 futsal athletes regarding clenbuterol doping is as follows:

Sumber : (Sugiyono, 2013)

RESULTS AND DISCUSSION

From the results of questionnaire research that has been distributed to North Sumatra PON XXI 2024 futsal athletes with a total of 15 people, the questionnaire value data and scores about the level of knowledge of North Sumatra PON XXI 2024 futsal athletes regarding doping (*clenbuterol*). Furthermore, respondents get a questionnaire that has been distributed one by one for a total of 15 people in the form of a statement for each questionnaire totaling 34 statement items consisting of 4 indicators, namely Understanding Doping, Doping Effects, Attitudes Towards Doping,

Clenbuterol. Indicators about understanding doping amounted to 3 statements. Indicators of doping effects amounted to 5 statements. Indicators of attitudes towards doping totaled 13 statements. Indicators regarding *clenbuterol* amounted to 13 statements. Survey of Knowledge of North Sumatra PON XXI 2024 futsal athletes against Doping (*Clenbuterol*) is compiled based on indicators, namely: Definition of Doping, Doping Effects, Attitudes Toward Doping, *Clenbuterol*. In detail the contribution of these indicators can be seen in the following table :

Table 3 Percentage data of knowledge level on doping (Clenbuterol)

No Item	Indicator	Raw Data	Should be	Percentage	Category
1, 2, 3	Definition of Doping	135	180	75,00%	Good
5, 6, 11, 12, 13	Efek-Efek Doping	254	300	84,67%	Very Good
4, 7, 8, 9, 10, 14, 15, 16, 17, 18, 19, 20, 21	Effects of Doping	607	780	77,82%	Good
22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34	<i>Clenbuterol</i>	577	780	73,97%	Good
Grand Total		1573	2040	311,5%	Good
Average		393,25	510	77,11%	

From the data above, it can be concluded that the knowledge level of North Sumatra PON XXI 2024 futsal athletes on *Clenbuterol* is as follows :

1. The level of knowledge regarding the definition of doping, the percentage is 75% with the category "Good"..
2. The level of knowledge about the effects of doping the percentage is 84.67% with the category "Excellent"..

3. The level of knowledge regarding attitudes towards doping, the percentage is 77.82% with the category "Good".
4. The level of knowledge about *clenbuterol* is 73.97% with the category "Good"

Table 5 Results of Questionnaire Data for Futsal Athletes PON North Sumatra XXI 2024

No	Athlete Name	Raw Data	Should be	Persentase	Category
1	M.Aditya	113	136	83,09%	Very Good
2	Zaki Hermansyah	108	136	79.41%	Very Good

3	Rangga Trinando	96	136	70,59%	Good
4	Arya Wirawan	109	136	80,15%	Very Good
5	Reza Fadillah	104	136	76,47%	Good
6	Tedy Norton Silalhi	104	136	76,47%	Good
7	Ibre Tarigan	90	136	66,18%	Good
8	Dian Fahri	99	136	72,79%	Good
9	Ayub Maulana	103	136	75,74%	Good
10	Abdi Syahputra	104	136	76,47%	Good
11	Azmi Ramadan	116	136	85,29%	Very Good
12	Candra Fil	119	136	87,50%	Very Good
13	Wilfi Gusnadi	105	136	77,21%	Good
14	Angga	103	136	75,74%	Good
15	Habib	100	136	73,53%	Good
Grand Total		1573	2040	1156,62%	Good
Average		104,87	136	77,11%	

From the results of distributing and filling out the questionnaire, questionnaire data on the Knowledge Level of North Sumatra PON Futsal Athletes XXI 2024 Against Doping (*Clenbuterol*) was obtained. The results of research and data processing of the percentage of the Knowledge Level of North Sumatra PON XXI 2024 Futsal Athletes Against Doping (*Clenbuterol*), obtained 77.11% with the assessment norm “Good”. For more details can be seen in the table below

After conducting research starting from data collection to processing research data, the percentage level of knowledge of North Sumatra PON XXI 2024 Futsal Athletes on Doping (*Clenbuterol*) is obtained as follows :

1. Data on the level of knowledge of North Sumatra PON XXI 2024 Futsal Athletes Against Doping (*Clenbuterol*) the percentage is 77.11% with the category “Good”. From these data it can be concluded that most of the North Sumatra PON XXI 2024 Futsal

Athletes know things about doping, especially *clenbuterol*. The existence of doping among athletes is rather difficult to stem as long as the athlete does not recognize his own existence and physical abilities. There are many rules and restrictions that are deliberately made to maintain honesty, even many strict sanctions, ranging from mild to severe, are imposed on those who are proven to violate. With the sanctions that have been set, athletes who know it and also know the dangers of using doping will think long to use doping in winning a match or race.

2. The highest score based on the indicator Data Percentage Level of Knowledge Regarding Doping (*Clenbuterol*) percentage is 84.67% with the category “Excellent”, while the lowest score of the percentage is 73.97% with the category “Good”. Lack of information about the dangers of using doping for oneself and others is one of the factors that doping cases continue to occur. The importance of the level of knowledge about doping (*clenbuterol*)

must be increased so that doping cases can be reduced and athletes who play in a match or race can play more professionally.

3. The highest score based on the questionnaire of North Sumatra PON XXI 2024 Futsal Athletes towards doping (*clenbuterol*) the percentage is 87.50% with the category “Excellent”, while the lowest score the percentage is 66.18% with the category “Good”. To achieve a competitive and combat-ready body condition, there is no better way than proper training, adequate rest, well-maintained nutrition, appropriate technique and good coaching. This manifesto is good and true. No one can deny that. But in the competitive world of sport where results are clearly visible, the five precepts are simply not achievable all the time. So doping cases continue to occur. Athletes who want to achieve achievements with their own abilities will stay away from doping, because truly professional athletes will play in *fairplay*.

Doping in sport is a multifaceted issue that encompasses ethical, legal, medical, and social dimensions, posing significant challenges to the integrity of competitive sport. The ethical implications of doping are profound, as it undermines the principles of fair play and integrity in sport, raising moral questions about the lengths athletes will go to achieve success. The prevalence of doping is significant, with research suggesting that approximately one in six competitive athletes have admitted to doping, a figure that exceeds estimates obtained through direct questioning and analytical testing. (Biewer et al., 2024).

Doping methods have evolved, with genetic doping and new drug delivery techniques presenting new challenges for detection and regulation. The anti-doping movement, spearheaded by organizations such as the World Anti-Doping Agency (WADA), aims to preserve the intrinsic value of sport by implementing strict testing and surveillance measures, although these efforts have been criticized for their invasive nature and the disproportionate penalties they sometimes inflict. Despite these measures, the battle against doping is complicated by the sophisticated networks through which performance-enhancing drugs are distributed and the role of athletes as role models, whose behavior, including drug use, is often emulated by younger generations. (Gray & Porreca, 2024).

The ongoing debate around doping highlights the need for a nuanced approach that balances the pursuit of excellence with the preservation of fairness and integrity in sport, suggesting that the current anti-doping system may require reform to address its inherent paradoxes and collateral damage. As the doping landscape continues to evolve, it is imperative for governments and sports organizations to stay informed about advances in pharmaceuticals and to implement effective strategies to regulate their use, ensuring a level playing field for all athletes. (Hostrup et al., 2024).

The relationship between illicit drugs and sports, including futsal, is complex and multifaceted, involving various social, cultural and economic dimensions. Illicit drug use is a pervasive problem that affects many aspects of society, including sport,

where athletes may use drugs to enhance performance or cope with competitive pressures. In the context of amateur sports such as futsal, drug use can be influenced by the social environment and cultural status of the players. For example, a study of amateur futsal players in Brazil highlighted how drug use among athletes can lead to their marginalization as 'outsiders', reflecting wider societal attitudes towards drug use and sport. (Bayu Sakti et al., 2024).

In a sport like futsal, where competitive advantage is highly sought after, the temptation to drug can be significant, but the consequences, both personal and professional, are severe. Therefore, it is imperative for athletes, coaches, and sports organizations to

CONCLUSION

From the results of research and data analysis that has been done about the Survey of the Level of Knowledge of North Sumatra PON Futsal Athletes XXI 2024 Against Doping (*Clenbuterol*), it can be concluded that the level of knowledge of North Sumatra PON Futsal Athletes XXI 2024 against doping (*clenbuterol*) is 77.11% with the category "Good". From the large percentage obtained, of course, to create a *fairplay* match can be realized, because athletes who know the dangers of using doping (*clenbuterol*) will certainly think more about using doping to win in a match or race.

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comply with anti-doping regulations and foster an environment that values clean competition. By addressing the root causes of doping and implementing a comprehensive anti-doping strategy, the sporting community can work towards a future where athletes compete on a level playing field, free from the influence of performance-enhancing drugs. (Mylsidayu, 2024)

Overall, the intersection of illicit drugs and futsal, like other sports, underscores the need for a nuanced understanding of the social and cultural factors that drive drug use and the development of effective strategies to mitigate its impact on athletes and communities (Pety Merita S, Ayu Rosita D, 2022).

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