

Program of actions to prevent ankle sprains in guantanamo basketball players
Programa de acciones para prevenir el esguince de tobillo en los baloncestistas
guantanameros

Marislay Calás-Martínez ¹, Cleidy López-Pardo ²

¹*Univ.Provincial Center of Medicine Sport, Guantánamo, Cuba.*

²*Ms.Sc. Universidad de Guantánamo. Cuba.*

Email:

marislaycm@cug.co.cu

cleidyvp@cug.co.cu

Reception date: January 4, 2022

Acceptance date: February 18, 2022

ABSTRACT

Prevention programs in sports provide a variety of methods that help reduce physical, psychological and environmental alterations of the player. Sports associations must implement prevention in annual planning, to comply with the safety of players during their sports performance. The article presented has the purpose of exposing the importance and need to develop a program of actions for the prevention of ankle sprains in the youth category basketball players of the EIDE of Guantánamo, since it is a problem that afflicts said sport and category. The application of methods such as observation, interviews, surveys and document analysis allowed to address with greater foundation the deficiencies detected in relation to the prevention of ankle sprains, which gave rise to the problem under investigation.

Keywords

Program; actions; Prevention; Ankle sprain; Basketball.

RESUMEN

Los programas de prevención en el deporte aportan una variedad de métodos que ayudan a disminuir alteraciones físicas, psicológicas y ambientales del jugador. Las asociaciones deportivas deben de implementar la prevención en la planificación anual, para cumplir con la seguridad de los jugadores durante su desempeño deportivo. El artículo que se presenta tiene el propósito de exponer la importancia y necesidad de elaborar un programa de acciones para la prevención del esguince de tobillo en los Baloncestistas categoría juvenil de la EIDE de Guantánamo, pues es una problemática que aqueja a dicho deporte y categoría. La aplicación de métodos como la observación, entrevistas, encuestas y el análisis de documentos permitieron abordar con mayor fundamento las insuficiencias detectadas con relación a la prevención del esguince de tobillo lo cual dio origen al problema que se investiga.

Palabras clave

Programa; Acciones; Prevención; Esguince de tobillo; Baloncesto.

INTRODUCTION

In the annals of history, in countries like India and China, injury prevention is recorded before 1000 BC. They recognize the methods used by the Romans, Egyptians and Greeks who, to assist practitioners of physical activities, showed knowledge of diets, hydrotherapy, massage and exercise therapy. This presupposes the emergence of prevention in sport that emerged in the Modern Age before 1900, in Central Europe (Hüter-Becker, Schenwe and Heipertz, 2005).

In Cuba, in 1960, the Medical Department of the National Institute of Sports, Physical Education and Recreation (DM-INDER) was created, which had a medical consultation, dental chair, pharmacy, laboratory and physiotherapy service, whose work was purely healthcare. On December 3, 1966, the Institute of Sports Medicine was created and began to function by Resolution 500 of the Executive Committee of the Council of Ministers of the Republic of Cuba (Pino, 2013).

The Institute of Sports Medicine undertakes the psychomorphofunctional study of the athlete since its foundation, to learn how to face physical effort and improve biological organization without affecting the balance of the internal-organic environment, due to the influence of the external environment - sports training- and includes somatic recovery, a multidisciplinary work system is proposed to care for athletes with the application of prophylactic plans and assumes responsibility for the health of the group by paying taxes in the rest of the medical specialties and they are integrated into the technical groups of trainers.

In recent years, qualitative steps have been taken in the field of sports prevention since scientific methods have been incorporated that do allow the different strategies to be evaluated and thereby reduce the injury rate, since the effectiveness of the procedure used is known (Van Mechelen, Hlobil and Kemper, 1992).

Despite the foregoing, in the social field progress is slow when it comes to injury prevention and only significant space and time is devoted to therapeutic rehabilitation. There is scientific evidence that demonstrates effective preventive systematicity in injury prevention, since it changes the process and derives benefits (Báez, Campillo and Guerra, 2012).

The intention of prevention is to reduce the appearance of injuries caused by sports practice; Its function is to rule out risk factors and depends on a series of components such as: physical and psychological preparation, compliance with the rules and regulations of each particular sport, health controls, food and hydration, and the recovery of those parts of the body overloaded with physical effort (Martínez, 2006).

From the perspective of physical performance, injury prevention in sport needs to first locate and then classify both intrinsic and extrinsic risk factors and emphasize modifiable ones because with this action measurable, quantifiable transformations can be carried out, in order to improve performance in a general and effective way, and not take preventive measures in isolation.

The interrelation between prevention and performance requires that these related ones be interconnected, which requires an initial study to assess the contingency and link the control of the indicators that can report risk, such as weaknesses and potentialities, incorrect postural and technical habits and thus be able to prevent eventual damage caused by applied sports training (Van Meerhaeghe and Romero, 2013).

According to these authors, the injury profile can be understood as the analysis and determination of weak points and entail that the athlete finds himself in situations of risk of injury. If the biomechanical and specific factors of the practice performed are not also analyzed, functional anatomical deficits cannot be put into play.

Many coaches carry out a training macrocycle to prepare athletes physically, mentally and socially for their progressive development. Sports technicians have knowledge of the work cycles, but they do not have anatomophysiological prevention methods that can avoid injuries, which weaken or hinder their training plan. That is why prevention in players before, during and after training is of vital importance to avoid injuries that could keep them out of the preparation stage.

When looking at the training of the athletes under investigation, in each of its processes, it has been observed and confirmed that the prevention stages are not present, making the players feel physically disadvantaged and having difficulty executing the exercises on the training unit. Ankle sprain is one of the most recurrent injuries in basketball, which causes too many signs and symptoms depending on the degree of intensity that causes it, athletic performance problems and limitations in the execution of activities.

In the sports physioprophylactic process, annual preventive procedures are established, with variants by training cycles, application guidelines within the microcycle and recovery techniques between training units, for each sport modality in order to reduce risk factors and the recurrence of injuries. The absence of a solid basic structure, where the preventive procedure is insufficient, makes it difficult to achieve equivalence with sports training.

Prophylactic plans as preventive procedures have played a novel role, but they have lost the integration between the related prevention and performance by hindering their effectiveness, due to the lack of methodology and evaluation and control mode that allow the detection of possible risk factors, also due

to the inaccuracy between the correspondence of the proposed preventive objectives and the procedures used. The development of work plans has been implemented for the physical and tactical increase of the athlete in sports training from seedlings to youth with the vision of being able to have a complete team in order to be better every day. But during the process, many vital methods and procedures have been ignored, such as prevention.

Support has been implemented for the different categories available in associated basketball, such as mini, catwalk, cadets and youth, with a coach with extensive knowledge and experience in sports planning in charge of each of the categories. The training process begins in the mini category, introducing the rules and forms of the basic game to the sport, from here it is observed that at an early age they are unaware of the care they must take to avoid injuries or accidents on or off the field without advice or advice. teachings from an adult; Time passes, they rise to a new category, achieving improvement in their technique and game tactics, they perform more easily on the field of play and training sessions and sports championships are increasingly demanding, giving their physical capacity to the maximum, which It can lead the athlete to suffer a sports injury without having any preventive care during their performance.

In youth and competitiveness categories closer to the professional, it can be established that the athlete may have an injury that keeps him away from sports practice through a decline in his physical development and sports life, which could have been avoided if there was a responsibility in the use of preventive measures.

During the sports training of the basketball athletes in Guantánamo, it was observed that they do not use preventive measures for the ankle. The aforementioned elements support a problem to be solved, hence the importance of the proposed research, still in development; for which it was determined as an objective to develop a physioprophylactic program that contributes to the prevention of ankle sprains in the youth category basketball players of Guantánamo.

METHODS

The investigation was carried out at the EIDE of Guantánamo in the 2021-2022 academic year. It focused on the study of ankle sprain prevention.

In the initial verification, data was collected from four fundamental sources: teachers, methodologist, students and the comprehensive preparation program for the athlete. In this sense, 6 coaches, 1 methodologist, 27 basketball athletes from the youth category were selected, for a total of 34 people, constituting 100 percent of the sample.

To determine the behavior of the current state of the ankle sprain, a schedule of tasks was carried out, divided into six moments.

At first, the diagnosis of the current state of the behavior of the injury in sport will be made.

In a second moment, the design of the actions of the proposed program will be proposed.

In a third moment, the personnel who would be in charge of training future coaches and professionals who will prepare the database for the collection of information would be trained.

In a fourth moment, the project would be generalized and applied to ball games; by own decision of the physiotherapists who are taxed to said sports. For this, it is proposed to carry out short (6 months), medium (1-2 years) and long-term (4 years) plans.

In a fifth moment, the effectiveness of the proposal would be controlled and evaluated by qualified personnel, both in the physiological aspect and in the physical aspect.

In a sixth moment, once the effectiveness of the proposal in these sports has been verified by the bodies in charge of controlling and evaluating Sports Medicine and the Faculty of Physical Culture (Metrology and Training Control), the experience would be transmitted to other sports in the province. In addition, the proposal would be proposed in other provinces of the country interested in the subject.

Scientific research methods and techniques such as document analysis, observation, standardized and individual interviews are used. The systemic-structural-functional method.

RESULTS

Schedule of Physioprophyllactic Actions

- Diagnosis of the current state of the ankle sprain in the youth category basketball players of the EIDE of Guantanamo.
- Design of physioprophyllactic actions in the youth category basketball players of the EIDE of Guantánamo.
- Training biomedical personnel in Sports Medicine and Physiology and Medical Control in the Faculty of Physical Culture, in charge of physiologically evaluating the effectiveness of the proposal.
- Training for the teachers of the Sports Combinations, mainly for the sport of Basketball, in charge of initiating sports training.
- Training for High Performance teachers (EIDE), mainly in Basketball, in charge of consolidating sports training.
- Register and control all personnel (CEPROMEDE physiotherapists) interested in applying the program proposal in their sports universe.

- Beginning of the application of the proposal in short (6 months), medium (1-2 years) and long term (4 years) plans.
- Control and evaluation of the effectiveness of the proposal by biomedical personnel (Sports Medicine and Physiology and Medical Control in the Faculty of Physical Culture), in charge of physiologically evaluating the effectiveness of the proposal.
- Control and evaluation of the effectiveness of the proposal by the methodological staff (Sport Didactics, Statistics, Computer Science, Metrology and TMED) in charge of evaluating the progression in the physical aspect.
- The proposal would be applied to the sports of ball games in Guantanamo.
- The application of the proposal to other sports in our province interested in the subject would be proposed.
- The application of the proposal in other provinces of the country interested in the subject would be proposed.

DISCUSSION

From the study carried out, the importance and necessity of developing an action program for the prevention of ankle sprain was demonstrated. Through this program, the basketball group will benefit by increasing the interest in the physical care of its athletes inside and outside the sporting events avoiding that they may have injuries and that may affect their sporting performance. The coach will benefit from increasing his knowledge of preventive measures and being able to protect the safety of athletes before, during and after training or sports competition. Athletes could improve their physical performance and apply preventive methods by themselves to avoid getting injured like sprained ankle. The study will also benefit people interested in the prevention of ankle sprain injuries, to be applied in sports practice.

Research in development for what the author proposes: a program of actions to prevent ankle sprains in basketball players of the youth category of the EIDE of Guantanamo.

The implementation of said program will promote a better sports preparation of the aforementioned athletes.

Thanks to the scientific work carried out by specialists from the most varied sports disciplines, it has been possible to search for alternatives to solve complex problems that prevent the proper development of the current sports world, hence the importance and need to develop a program of actions. for the prevention of ankle sprains in the youth category basketball players of the EIDE of Guantánamo, since it is a problem that afflicts said sport and category.

BIBLIOGRAPHIC REFERENCES

- Hüter-Becker, A., Schenwe, H. y Heipertz, W. (2005). La rehabilitación en el deporte. Editorial Paidotribo, Badalona, España.
- Pino, P. (2013). Conferencia realizada sobre la historia del Instituto de Medicina del Deporte. <http://www.imd.inder.cu>.
- Van Mechelen, W., Hlobil, H. y Kemper, H. (1992). Incidence, severity, etiology and prevention of sports injuries. En *Sports Med*, 14, 82-99.
- Báez, A., Campillo, C. y Guerra, R. (2012). La Fisioprofilaxis un procedimiento esencial para alcanzar altos logros. Recuperado 22-09-2013. <http://angiebaezft.blogspot.com/>.
- Martínez, R. J. (2006). Prevención de las lesiones deportivas. En XVI jornadas internacionales de traumatología del deporte y prevención de las lesiones deportivas. Editorial Quaderna, Murcia, España.
- Van Meerhaeghe, A. y Romero, R. D. (2013). Análisis de los factores de riesgo neuromusculares de las lesiones deportivas. *Apunts Med Esport*. 48, 109-120.