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Review article

Teaching of the front crawl style: a proposal for sports continuity during the pandemic

Enseñanza del estilo crol: una propuesta de continuidad deportiva durante la pandemia

Ensinar o estilo crawl: uma proposta de continuidade desportiva durante a pandemia

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ABSTRACT

The pandemic has generated much damage in all areas, especially in sports, so strategies are needed to allow its continuity. The objective of this research is to reflect and propose strategies for teaching the crawl style, in the context of the pandemic for the return to training avoiding contagion. This study is of a theoretical nature through the review of scientific documents from the Google Scholar database, among books, theses and articles, which were selected in two dimensions: swimming for teaching the crawl style and safety interpretations during practice in the pandemic setting. A proposal for teaching the crawl style could be established for sports continuity during the



pandemic, structured in two strategies, the first called safe teaching and the second safe training. This will allow to contribute directly, as a practical document useful to coaches for the safe teaching of swimming not only in crawl but in different styles.

Keywords: Swimming; Training; Pandemic; Teaching; Crawl style.

RESUMEN

La pandemia ha generado muchos estragos en todas las áreas, especialmente en la práctica deportiva, por lo que se necesita de estrategias que permitan su continuidad. El objetivo de esta investigación consistió en proponer estrategias de enseñanza del estilo crol, en el contexto de la pandemia para el retorno a los entrenamientos y evitar contagios. Este estudio fue de carácter teórico y se realizó por medio de la revisión de documentos científicos de la base de datos de Google Académico, entre libros y artículos; estos fueron seleccionados en dos dimensiones: la natación para la enseñanza del estilo crol y las interpretaciones de seguridad durante la práctica en el ámbito de la pandemia. Se pudo establecer una propuesta de enseñanza del estilo crol para la continuidad deportiva durante la pandemia, estructurada en dos estrategias, la primera denominada enseñanza segura y la segunda, entrenamientos seguros. Esto permitirá aportar de forma directa, como un documento práctico de utilidad a los entrenadores para la enseñanza segura de la natación no solo en el crol, sino en los diferentes estilos.

Palabras clave: Natación; Entrenamientos; Pandemia; Enseñanza; Estilo crol.

RESUMO

A pandemia causou estragos em todas as áreas, especialmente na prática do desporto, pelo que são necessárias estratégias para permitir a sua continuidade. O objectivo desta investigação era propor estratégias para ensinar o estilo crawl no contexto da pandemia, a fim de regressar à formação e evitar o contágio. Este estudo foi de natureza teórica e foi realizado através da revisão de documentos científicos da base de dados do Google Scholar, incluindo livros e artigos; estes foram seleccionados em duas dimensões: natação para o ensino da natação de crawl stroke e interpretações de segurança durante a prática no contexto da pandemia. Foi possível estabelecer uma proposta de ensino do derrame de crawl para a continuidade desportiva durante a pandemia, estruturada em duas estratégias, a primeira chamada ensino seguro e a segunda, treino seguro. Isto permitirá contribuir de forma directa, como um documento prático útil aos treinadores para o ensino seguro da natação não só em rastejamento, mas também nos diferentes estilos.

Palavras-chave: Natação; Formação; Pandemia; Ensinar; Traumatismo; Traumatismo de Rastejamento.

INTRODUCTION

The pandemic caused by Covid-19 provoked all countries in the world to establish regulations to prevent contagion among citizens. Ecuador was not the exception because on March 16, 2020, by presidential decree, a state of emergency was declared due to public calamity (Córdor *et al.*, 2021) determining, among several provisions, the



suspension of gyms, training centers and places of sports practices (Presidency of the Republic of Ecuador, 2020).

As time went by, the local authorities made these provisions more flexible (Molina and Mejías, 2020), in addition, they authorized the reopening without the contagions having decreased (Chicaiza *et al.*, 2021), in order to reactivate the economy and support the continuity sports, determining compliance with pilot plans (Municipality of the Metropolitan District of Quito, 2020).

Faced with this, the Emergency Operations Committee of Ecuador [Coe in Spanish] regulated these authorizations with a capacity of 30 % of the capacity provided by the training center (COE, 2021), which generated pauses in the fulfillment of the athletes' plans. This problem could be seen in the use of swimming pools.

In this sense, the Secretary of Sport of Ecuador (2020) established different guidelines for the return to sports practice, so that athletes and coaches do not get infected (Posso, Marcillo and Bedón, 2021); biosafety measures were established, suggested by the World Health Organization [WHO] such as distancing, use of alcohol and a mask, ventilation, disinfection of contaminated surfaces such as sports implements, among others (WHO, 2020).

However, there was no specific direction or guideline for the practice of physical activity and sports training, only a series of prevention measures for contagion were proposed (Posso, *et al.*, 2021), but it is not said how to do it, that is, no teaching strategies are proposed where the coach can guide (Posso, 2018) and direct the athlete to reach the desired technical, physical and mental level.

To improve the technical level, it is necessary to optimize energy and follow the coach's guidelines. Álvarez *et al.*, (2020) mentions that, in addition to these elements, the confidence emitted by the coach during practices is a fundamental factor for the development of technical work (Posso *et al.*, 2021); therefore, a level of confidence and the measures taken to prevent the disease from spreading must be guaranteed.

For this reason, it was necessary for training during the pandemic to have continuity, but no specific training guidelines, use of spaces, handling of equipment, among others, were established, according to the characteristics of each sports discipline, only recommendations of biosafety, with which many coaches adapted them to their realities (Marcillo *et al.*, 2021).

As already argued, these protocols are not specific to be applied in training, so many coaches had to incorporate them into daily training plans to meet biosafety requirements, but not with standardization and, much less, with a researched basis (Posso *et al.*, 2020).

Undoubtedly, one of the most used guidelines is to look for a safe space, in which athletes can remove their mask without any danger of contagion; in this place you can recover between exercises (Posso *et al.*, 2021), but this cannot be applied during training in the pool, because, due to its context, the mask cannot be used, so the alternative of a safe space must be generated during inactivity.



With this foundation, it is proposed that the practice of swimming should have specific biosafety guidelines such as areas for disinfection, training schedules for small or personalized groups, monitoring and evaluation of the health status of athletes, with which it could start to propose strategies that allow coaches and athletes to teach and practice safely (Pinto *et al.*, 2020).

The teaching of swimming in its different styles, especially the front crawl, has changed during the pandemic due to new conditions such as distancing and the use of a mask (Córdor *et al.*, 2021); that is, as the coach is the one who teaches, he will have to take these guidelines into account when addressing his athletes, adapting teaching strategies that allow him to arrive with his knowledge, corrections and recommendations.

In this sense, verbal and corporal communication should be the priority (Posso *et al.*, 2020) at the time of training. Coaches are required to look for new alternatives on how to convey achieving their goals for sports performance, which will allow proposing multiple teaching strategies (Posso, Barba, Otáñez, 2020) of swimming in the front crawl style, for the development of the training and sports continuity in the context of the pandemic. The guidelines established by local and sectional authorities (Posso and Bertheau, 2020) are taken into account, to reduce the risks of contagion. Due to this, the objective of this research is to propose freestyle teaching strategies, in the context of the pandemic, to return to training and thus avoid contagion (Infante, 2020; Tascón, 2020).

The research carried out was theoretical (Ledesma, 2021), due to the fact that a review of 35 scientific documents was carried out, including books and articles on swimming for the teaching of the front crawl style and safety interpretations during practice in the field of swimming. pandemic. The selection criteria were based on documents from the Google Scholar database referring to two dimensions: swimming for the teaching of the front crawl style and safety interpretations during practice in the context of the pandemic, which will guarantee an extensive and effective collection of information, allowing the teaching proposal of the front crawl style to be carried out for sports continuity during the pandemic.

DEVELOPMENT

The teaching of the front crawl style and safety interpretations during practice in the context of the pandemic

According to the documentary review carried out on the two dimensions: in swimming for the teaching of the front crawl style and the safety interpretations during the practice in the context of the pandemic, several contributions could be obtained, which provided through the interpretation different strategies (Table 1).

Table 1. - Document review results

Dimensions	contributions	Strategies
Teaching the front crawl	Training guidelines	Permanent meetings with athletes before and after training (García and Raposo, 2002) Short talks with athletes during training (Domínguez, 2020)
	Flexible schedules	Design of series of activities with volume, intensity and modifiable breaks according to the need presented (Rojas et al., 2020)



	Training	Practice of activities with application of different types of teaching according to the needs and requirements (Terán, 2021)
	Feedback	Correction of crawl style techniques and strategies (Londoño, 2017)
Safety interpretations during practice in the context of the pandemic	Accesses and secure areas	Not attending training if you have symptoms of COVID-19 Wear a mask at all times in dry areas Distance of two meters in all areas of the pool Enter through the disinfection and temperature taking area (Royal Spanish Swimming Federation, 2021)
	Training sites and equipment	Disinfect training materials and equipment after use (Spanish Society of Sports Medicine, 2020) Avoid contact with non-disinfected surfaces (Furelos et al., 2020) Stay in the area established for your training (District Institute of Recreation and Sports, 2020) Use personal sports equipment. (Palacios et al., 2020) Respect the signage in the pool. (Spanish Society of Sports Medicine, 2020) Respect the space, the use of sinks, showers and dressing rooms. (Royal Spanish Swimming Federation, 2021)

This made it possible to identify significant contributions, as could be rescued in its first dimension, such as necessary guidelines for training in the aquatic environment, flexible type planning so that coaches can better direct their training, training with alternation in teaching strategies, permanent feedback that will allow to correct the technique and tactics; the second dimension that it contributes with generating a safe environment in the access and within the areas that make up the pool, as well as the proper use of training sites and equipment.

With the establishment of different strategies according to the collected contributions, there will be fundamental elements for the establishment of a proposal for teaching the front crawl style for sports continuity during the pandemic, which allows generating safe training through complying with the guidelines and regulations for contagion prevention, the complexity of the exercises and the correction of technical errors, such as the safety and confidence of the athletes during practices, in response to the need for sports continuity.

Once the results determined in strategies are obtained, the crawl style teaching proposal can be developed for sports continuity during the pandemic; for this, some considerations must be pointed out, such as the fact that the pandemic has generated a rediscovery of the role of the coach, since new teaching strategies must be considered in order to consolidate different demands and guarantee the integrity of the athlete.

The forms of teaching in the coach are essential when transmitting his/her knowledge based on the planned objectives, that is, if it is wanted to reach the perfection of the technique, it is essential that the athlete understands what the coach wants; this, without a doubt, is accompanied by positive interactions and motivation such as cordiality, respect, consideration, suggestions, orientations, exaltation, among others, that are generated through sports teaching strategies.



It should be considered that, if it is wanted to improve the technique and tactics of the front crawl style, a number of exercises and activities must be planned and each of these must be planned with the appropriate teaching strategy. The health crisis caused by Covid-19 is a real challenge for the coach, so guidelines or standards must be established to follow due to the different realities experienced in training, to determine alternatives that must be considered more or less percentage.

Table 2 shows the content and teaching methodology carried out in the permanent meetings with the athletes before and after training and the crossing of strategies proposed for the safe practice of the front crawl style (Table 2).

Table 2. - Permanent meetings with athletes before and after training

Content	Teaching method	safe practice
Theoretical: Regulation and technical description	Explanatory self-evaluation	Wear a mask at all times in dry areas
		Distance of two meters in all areas of the pool
		Do not attend training if you have symptoms of Covid -19
		Enter through the disinfection and temperature taking area
		Avoid contact with non-disinfected surfaces
		Respect the signage in the pool.

Table 3 shows the content and teaching methodology carried out in the short talks with the athletes during training and the crossing of strategies proposed for the safe practice of the front crawl style (Table 3).

Table 3. - Short talks with athletes during training

Content	Teaching method	safe practice
Technical description, tactics and strategy.	Explanatory	Distance of two meters in all areas of the pool
	Corrective	
	Simulations	Stay in the area established for training
	Comparison	Use personal sports equipment
	Observation	



Table 4 shows the content and teaching methodology carried out in the design of series of activities with volume, intensity and modifiable breaks according to the need presented and the crossing of strategies proposed for the safe practice of the front crawl style (Table 4).

Table 4. - Design of series of activities with volume, intensity and modifiable breaks according to the need presented

Content	Teaching method	safe practice
Position: horizontal and lateral alignment	Control	Distance of two meters in all areas of the pool
Breathing	Evaluation	
Arms: coordination, entry and extension, sweeps, propulsion and recovery	Corrective	Disinfect training materials and equipment after use.
Legs: trajectories, kick amplitude and lateral action		Avoid contact with non-disinfected surfaces.
Arm-Leg Coordination: Shake 6, 2		Stay in the area established for your training.
		Use personal sports equipment.
		Respect the signage in the pool.

Table 5 shows the content and teaching methodology carried out in the practice of activities with the application of different types of teaching according to the needs and the crossing of strategies proposed for the safe practice of the front crawl style (Table 5).

Table 5. - Practice of activities with application of different types of teaching according to the needs and requirements

Content	Teaching method	Safe practice
Position: horizontal and lateral alignment	explanatory	Distance of two meters in all areas of the pool.
Breathing	demonstrative	
Arms: coordination, entry and extension, sweeps, propulsion and recovery	corrective	Disinfect training materials and equipment after use.
Legs: trajectories, kick amplitude and lateral action	Simulation	Avoid contact with non-disinfected surfaces.
	Observation	
	Comparative	Stay in the area established for your training
	descriptive	
	Control	



Arm-Leg Coordination: Shake 6, 2	Evaluation	Use personal sports
	Self evaluation	equipment.

Table 6 shows the content and teaching methodology carried out in the Correction of crawl style techniques and strategies and the crossing of strategies proposed for safe practice (Table 6).

Table 6. - Correction of crawl style techniques and strategies

Content	Teaching method	safe practice
Position: horizontal and lateral alignment	Explanatory	Distance of two meters in all areas of the pool.
Breathing	Demonstrative	Stay in the area
Arms: coordination, entry and extension, sweeps, propulsion and recovery.	Corrective	established for your training.
Legs: trajectories, kick amplitude and lateral action.	Simulation	Use personal sports equipment.
Arm-Leg Coordination: Shake 6, 2	Observation	
	Comparative	
	Descriptive	
	Control	
	Evaluation	
	Self evaluation	

This proposal guarantees the return of safe training, the same contents that are developed in the crawl style planning are proposed; the application of these recommendations will protect the health of athletes and coaches.

CONCLUSIONS

The pandemic has allowed sports coaches to value their athletes more, defining their own safety protocols and seeking new ways and styles of teaching, but the aquatic environment does not allow the use of masks, given this, the proposal ensures tranquility during practices.

The proposal developed in this study will allow it to be applied in front crawl training and, without a doubt, in all training in the disciplines of the aquatic environment in the context of the pandemic, with which it will be provided directly, as a practical document useful to coaches for safe teaching.

Undoubtedly, the return to face-to-face training will allow to resume the physical, technical and tactical condition of the athletes, following these recommendations will open the doors of continuity and progression to obtain the much-desired competitive sports achievement.



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Author contribution:

Pilca Bermudes Héctor Raúl: Conception of the idea 100 %, search and literature review 100 %, preparation of the instrument 100 %, application of the instrument 100 %, compilation of the information resulting from the applied instrument 100 %, analysis 100 %, preparation of tables , graphics and images 100 %, preparation of database 100 %, general advice on the topic addressed 100 %, correction of the article 100 %, translation of terms or information obtained 100 %, review of the application of the applied bibliographic standard 100 % .



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