

The organization and conducting of paratriathlon competitions

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Purpose: to analyze the system of the organization and conducting of competitions among paratriathletes concerning compliance with specifics of this sport – the consecutive overcoming of the combined distance by means of different types of physical activity.

Material & Methods: the analysis of conditions of the organization and conducting of competitions of paratriathletes in six competitive categories was made on the basis of studying of articles of the UNO Convention on the Rights of physically disabled people, the regulatory base of the international federations of triathlon and Federation of triathlon of Ukraine.

Results: the compliance of the organization and conducting of paratriathlon competitions concerning specifics of continuous triathlon with certain modifications of passing of stages of the combined distance by sportsmen with limited physical capacities is revealed.

Conclusions: competition rules on paratriathlon, which allow conducting the fair competitive competition in the spirit of fair, competitive and safe rivalry to athletes with different physical deviations, are developed for more active attraction to sports activities, and also for the purpose of removal of discrimination barriers from physically disabled people.

Keywords: assistant, classification, leader, continuous triathlon, paratriathlete, paratriathlon, competitive categories

Introduction

According to experts, till 650 million of physically disabled people lives on our planet, including about 3 million today – in Ukraine [8].

December 13, 2006 the General Assembly of the United Nations adopted the first new UNO Convention on Human Rights in the XXI century – the UNO Convention on the Rights of physically disabled people [11].

Physically disabled people have to have on an equal basis with others opportunity to participate in sporting events according to the paragraph 5 of the article 30 of the UNO Convention [8; 11]. The rapid development of the Paralympic movement on different types of sport involving in the sphere of people of various status and age began in this regard in the world. The increasing popularity on an equal basis with traditional competitions on continuous triathlon is gained by paratriathlon which is carried out under the auspices of the International Federation of Triathlon (ITU) and the International Paralympic Committee (IPC) [15].

Sportsmen with limited physical capacities (without their status) on an equal basis with everybody took part in overcoming of the combined distances, various on extent, and showed high sports results during the formation of paratriathlon [1; 4; 5]. So, the triathlete with the amputated leg to the knee competed (on sports artificial limb), and he has shown the best time in overall classification at the final running stage from 250 participants, having overcome marathon running for 2 hours 49 minutes that can unambiguously be regarded as commission of sports feat in the open championship of Hungary “Extreme Mam Hungary, 2005” (Nadyatadt), carried out under patronage of the World corporation of triathlon (WTC) at the classical distance of 226 km 257 m (3,862 km of swimming +

180,2 km of cycle driving + 42,195 km of run) [4; 5; 6].

To create equal conditions for sportsmen with different physical deviations in consecutive overcoming of the combined distance by means of different types of physical activity, ITU developed the corresponding rules of the organization and competitions on paratriathlon in ITU P.2 taking into account the status of participants [15; 16].

Considering that preparation and participation in competitions on paratriathlon – one of the perspective directions of the development of Paralympic sport in the world, and the Federation of Triathlon of Ukraine (FTU) began to propagandize this innovative direction in invasport in our country, only in one type of the program so far – triathlon and at one sprint distance (0,75 km of swimming + 20,0 km of cycle driving + 5,0 km of run) [6; 13; 14].

However, the questions concerning features of the organization and competitions in paratriathlon taking into account physical defeats of sportsmen according to the rules of ITU P.2 and also the degree of compliance to their main requirement of triathlon – continuous and consecutive overcoming of the combined distance by means of swimming, cycle driving and run, are far not completely studied [2; 3; 7; 10; 15; 17; 18].

The purpose of the research: to analyze the system of the organization and competitions among paratriathletes by the rules of ITU P.2 on compliance to their specifics of this sport – consecutive overcoming of the combined distance by means of different types of physical activity.

Research problems:

1. To open conditions of the organization and competitions on

paratriathlon on the basis of the international rules.

2. To define the degree of compliance of competitions in the rules of ITU P.2 to specifics of continuous triathlon among paratriathletes.

3. To prove need of involvement of physically disabled people to paratriathlon classes in Ukraine.

Material and Methods of the research

1) studying and synthesis of data literary and Internet sources, normative documents of the UNO Convention on the Rights of physically disabled people, IPC, ITU, ITU P.2, WTC, FTU and other international federations for assessment of degree of study of problem and definition of compliance of rules to the main requirement which is the cornerstone of competitive process in paratriathlon;

2) analysis of conditions of the organization and competitions in paratriathlon among sportsmen with different physical defeats by the rules of ITU P.2 for the purpose of identification in them the essential distinctions influencing the sports results, which are shown by paratriathletes when passing of the combined distance.

Results of the research and their discussion

Competitions on paratriathlon within one sporting event have to be held in common, according to the Constitution of ITU during competitions in types of the program triathlon and duathlon under the auspices of ITU in which winners are also defined and on age groups (18–29, 30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79 years old) [12; 13; 16].

The World Cups and the continental championships on paratriathlon among sportsmen with limited physical capacities in different types of the program are held separately [13; 15].

That paratriathletes could compete with different physical defeats together in overcoming of the combined distance and conduct the private fight in the spirit of fair, competitive and safe rivalry; they are divided by the rules of ITU P.2 into six competitive categories (TRI) depending on classification of condition of their health:

TRI-1	Paraplegia (defeat by paralysis of the lower extremities), quadriplegia (paralysis of the upper and lower extremities), amputation of two legs.
TRI-2	Serious damage of legs, including amputation of leg higher than knee.
TRI-3	Multiple sclerosis, muscular dystrophy, cerebral palsy, amputation of two lower extremities, paralysis of several extremities.
TRI-4	Paralysis of hands, amputation of higher and lower than elbow, defeat in both upper extremities.
TRI-5	Average damage of legs, including amputation below knee.
TRI-6	Vision disorder (ITU after consultation with IPC in 2013 subdivided this category into two subgroups: 6a – for completely blind sportsmen and 6b – for sportsmen with vision disorders) [12, 13, 15].

Note. The sportsmen having physical defeats less than 15% on any extremity are not allowed for participation in competitions on paratriathlon in categories TRI-1, TRI-2, TRI-3, TRI-4, TRI-5, and in category TRI-6b – having maximum of sight 20/200 at the best adjustment. Also the sportsmen, who are incapable to competitions to transfer the heat or cold having artificial joints (endoprostheses), foreign bodies (spare-part surgery), kidney dialysis, hearing disorder, are not allowed. Besides, paratriathletes of categories TRI-1, TRI-6 are not allowed to competitions in the following types of the program of continuous triathlon: cross-country duathlon, cross-country triathlon and winter triathlon [15].

Conditions of the organization and carrying out paratriathlon on the rules of ITU P.2 are identical both to men, and to women (often they are carried out in common and include number of consistently held events before start and observance of special modifications during the competitions) [12; 13; 15].

Classification. All participants of the competitions on paratriathlon, which are held under the auspices of ITU, have to have the international classification on compliance to the minimum criteria of physical defeat in the category [15].

Paratriathletes, who need to undergo the procedure of classification, have to visit the classification commission prior to the competitions and on the basis of the presented medical examination (the documents describing physical defeats of the sportsman), photo (3,5 cm x 4,5 cm), personal survey to be classified by the ITU qualifier [15].

Assistants and leaders. Assistants and leaders in the following categories are relied for rendering the specific help to sportsmen with limited physical capacities during competitions on paratriathlon:

TRI-1 – no more than two assistants;

TRI-2, TRI-3, TRI-4, TRI-5 – one assistant;

TRI-6 – one leader (can also combine and function of the assistant) [12; 13; 15].

Assistants help participants with artificial limbs and other devices, lift sportsmen on the bicycle and wheelchair and remove from them, take off diving suit and clothes, eliminate arisen malfunction of the bicycle and “racing wheelchair” on conducted - and running stages of competitions [12; 13; 15].

Leaders help to be guided to participants with vision disorder by distances of continuous triathlon, at the same time they have to be not younger than 18 years old and the same sex with them. If they earlier participated in the international competitions of ITU, then not less than one year after their last performance have to pass before they are able to become the leader for the sportsman in paratriathlon [12; 13; 15; 16].

Note. All assistants and leaders have to follow competition rules of ITU P.2, and also requirements of referees. Any their actions, regarded by the referee as stimulation of the sportsman to move forward (to pull it or to push), are punished by penal time or disqualification of the participant.

Briefing. Meetings are surely held by the technical delegate (TD) before the competitions on paratriathlon for participants (coaches can be also present).

Sportsmen, assistants, leaders are registered before entrance on briefing. Participants, who are not present at meeting, but warned about this TD, will be displaced on 10 positions concerning their previous position on pre-starting construction back. Participants, who are not present at briefing and not warned TD about the absence, can be not allowed to competitions or are displaced on the last prestart position (at the discretion of TD).

On the end of briefing, depending on competitive category, the starting package is provided to competitors, in which are:

TRI-1 – red hat for swimming, 6 self-adhesive numbers-stickers (3 for helmet, 1 for the hand-operated bicycle, 1 for “racing wheelchair”, 1 for daily wheelchair), 3 breast numbers (1 for the sportsman, 2 for assistants);

TRI-2, TRI-3, TRI-5 – yellow or green hat for swimming, 7 stickers (3 for a helmet, 1 for a bicycle, 3 for artificial limbs / auxiliary devices), 2 breast numbers (1 for a sportsman and 1 for an assistant);

TRI-4 – yellow hat for swimming, 7 stickers (3 for a helmet, 1 for a bicycle, 3 for artificial limbs), 2 breast numbers (1 for a sportsman and 1 for an assistant);

TRI-6 – 2 hats for swimming (green for a sportsman, white for a leader), 7 stickers (6 for two helmets and 1 for a cycle-tandem), 1 breast number for a sportsman and 1 breast number for a leader with the inscription “GUIDE”.

Note. *The local organizing committee (LOC) after the briefing also gives out the t-shirt, corresponding to their status to the registered assistants and leaders.*

Just before start participants of race with the assistants and leaders undergo pre-starting registration. At the same time the sports equipment and artificial limbs of sportsmen have to be identified by the self-pasted numbers (compliance of LOC is checked) [12; 13; 15].

Transit (transitional) zone. All sports equipment, artificial limbs, crutches, canes of the sportsman have to be in the specially allotted place in the transit zone according to his competitive category and bib number (if there is no “disguise zone”). Only assistants and leaders can be in the transitional zone, except sportsmen.

Rules of conduct in swimming zone. The diving suit in swimming segment is allowed to be used at any temperature, it is obligatory to put on at actual water temperature 18°C and below.

Note. *Actual water temperature is analyzed, in case, air temperature is lower than water temperature, by calculation 0,5 degrees on each degree of difference between air temperature and water (for example, actual (calculated) water temperature will make 17°C at water temperature 18°C and air temperature 16°C).*

Considering the raised safety rules when carrying out swimming stage among sportsmen with limited physical capacities, they are in order of the competitive categories on the line of start (and in swimming hats of the color): **TRI-6, TRI-5, TRI-4, TRI-3, TRI-2, TRI-1**. At the same time assistants

bring swimmers of category **TRI-1** in water after when all five categories of sportsmen are already in it.

The start in competition on paratriathlon is given when all swimmers are in water, i.e. from water.

Note. *Sportsmen with vision disorders of category TRI-6 during swimming have to be attached to the leader (around waist, leg or foot), and at athletes of category TRI-1 during this stage of leg have to be connected between shin and knee [12; 13; 15].*

It is allowed paratriathletes to use any way of swimming.

Use by sportsmen during swimming of additional objects (flippers, vests and other devices facilitating movement in water), and also swimming with artificial limbs and orthoses, that will lead to disqualification, is forbidden.

Passing of swimming stage by sportsmen is strictly regulated on time for all categories and should not exceed at sprint distance (750 m) – 45 minutes, at the Olympic distance (1500 m) – 1 hour 10 minutes, on double Olympic (3000 m) – 1 hour 40 minutes, on triple Olympic (4000 m) – 2 hours 15 minutes.

If the paratriathlete does not keep within the taken-away limit of time and more than 100 meters is until the end of heat, then he acts from competitions (if less than 100 meters – continue to participate) [9; 12; 13; 14; 15].

LOC has to provide in “exit zone from water” presence of at least 12 assistants, who will help swimmers to leave with limited physical capacities water and to reach transit zone, on end of the first stage of continuous triathlon.

Depending on color of swimming hat on the head of the participant of competitions, assistants give them the following help:

red – the sportsman needs to be lifted from water and to carry in transit zone;

yellow – the sportsman needs to be supported during exit from water to transit zone;

green, white – the sportsman does not need the help.

Sportsmen by means of assistants change clothes, put on the registered artificial limbs, take seat on “bicycles” and in the continuous sequence start passing of the second piece of the combined distance in transit zone [12; 13; 15].

Cycle stage. Depending on competitive category at this stage, sportsmen use specific bicycles for paratriathlon (according to the rules of ITU P.2 section 5.2), but all of them have to correspond to the basic principles of design of the International Bicycle Union (UCI) and be set in motion only by means of force of hands or legs (but not simultaneous efforts).

Tricycles with the manual drive in “the lying position” (dimensions: no more than L – 250 cm, W – 70 cm, the existence of rear-view mirror is obligatory) are used by paratriathletes in category **TRI-1**.

Tricycles in “sitting position” (dimensions: no more than L – 200 cm, W – 95 cm) are used by sportsmen in categories **TRI-2, TRI-3, TRI-4, TRI-5**.

Note. All tricycles have to be equipped behind (at the level of the plug) by protective horizontal bar for prevention of hit in inter-wheel space of forward wheel of the bicycle going behind, at the same time all bicycles have to be equipped with brakes.

Cycle tandem (the double racing bicycle) is used by sportsmen in category **TRI-6**. The leader occupies forward sitting, paratriathlete – back. The cycle-tandem moves by means of at the same time ongoing efforts of two participants, at the same time the leader also steers the vehicle on the track of cycle stage.

Note. Carrying out cycle stage on the track having bias more than 12% is not allowed.

Considering the different speed of movement of sportsmen of different competitive categories, they should not interfere with other cyclists when overtaking.

Sportsmen get again to transit zone, where assistants help them to pass to other type of physical activity on end of cycle stage and to go to overcoming the final stage of the combined distance.

Note. The helmet on participants of cycle race has to be put on the head both will clasp prior to the movement and is taken off only after end of distance (sportsmen of category **TRI-1** remove it after end of running stage) [12; 13; 15].

Rules of conduct at running stage. The run competition in paratriathlon is initiated in transit zone. Participants of categories **TRI-2, TRI-3, TRI-4, TRI-5** can use artificial limbs, crutches, canes at this stage. Sportsmen of category **TRI-6** have to put on “black glasses” corresponding to their status and to be in them during run, at the same time their leader has to run all the time at distance no more than half-meter nearby, and during crossing of finishing line – to be sideways or behind.

Note. Leaders in category **TRI-6** are forbidden to set speed to the sportsman at any stage of competitions.

Sportsmen of category **TRI-1** overcome running distance on “racing wheelchair” which has two big wheels (diameter of 70 cm) with round manual contours and one small (diameter of 50 cm).

Bicycle helmet has to be put on the head on the participant of this category during “run” and no part of his lower extremities should touch the earth during the movement.

Violation of the above rules of competitions on paratriathlon by paratriathletes, assistants, leaders leads to charge of penal time or disqualification of the participant (to the discretion of the referee).

Note. Finding of guide dogs both in transit zone, and at the combined distance of continuous triathlon is strictly forbidden by competition rules of ITU P.2 [12; 13; 15].

Conclusions

It is possible to draw the following conclusions on the basis of the conducted research:

1. The rules ITU P.2, which are developed according to key provisions of the UNO Convention on the Rights of physically disabled people, the International Paralympic Committee and the Constitution of the International Federation of Triathlon lie at the heart of the organization and competitions on paratriathlon.

2. The competitions among paratriathletes, which are held by the rules of ITU P.2, in general, correspond to the basic rule of continuous triathlon with the specific changes in passing of stages of the combined distance caused by physical defeats of sportsmen.

3. Federation of Triathlon of Ukraine on the basis of the rules ITU P.2 developed normative documents on the organization and competitions on paratriathlon in our country, and also defined order, conditions and requirements, which are necessary for assignment of sports categories and ranks in this sport for the purpose of removal of the discrimination barriers, which are connected with questions of disability and more active involvement in sports activities of physically disabled people.

Prospects of further researches

The subsequent researches will be directed to the determination of temporary coefficient which application gives the chance to unite paratriathletes with various extent of physical defeat in one competitive category and to fight for medals in individual competition on the competitive basis.

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