

Research Journal of Pharmaceutical, Biological and Chemical Sciences

Problems Of The Development Of Bocce In Russia.

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ABSTRACT

Currently, the development of Paralympic boccia is under way in Russia. However, this process is hampered by a number of serious circumstances. Among them there is a deficit of specially trained bocce trainers, able to organize a training process with the disabled of this nosological group. Also in Russia there is a significant shortage of special scientific and methodological literature, recommendations, experimentally justified means and methods of training athletes with severe lesions of the musculoskeletal system in boccia. In addition, there is no information about boccia in medical institutions and social protection services as an effective means of physical and social rehabilitation for people with severe disabilities of the musculoskeletal system. It becomes clear that for the more effective development of Paralympic boccia in Russia it is necessary to promote this sport among people with musculoskeletal disorders, improve the material and technical base for boccia in the Russian regions, including barrier-free access of people with disabilities to sports facilities. In Russia, it is necessary to involve more volunteers, sponsors and sponsors in the organization of the training process and competitions. In addition, in Russia, it is necessary to improve the scientifically-based system of training coaches and athletes in this sport.

Keywords: bocce, development problems, sportsmen with musculoskeletal injuries.

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INTRODUCTION

Progressive comprehensive development of the system of knowledge about man is possible as a result of long and versatile research [1,2]. In this regard, physiological observations [3,4], studies of the mechanisms of development of various pathologies [5,6] and evaluation of the success of various variants of correction of disturbances in the human body are important [7,8]. It becomes clear that as a result of more indepth studies of any pathological manifestations in humans [9,10] and experimental observations in animals [11,12], it is possible to achieve a higher level of health in modern society [13,14].

Despite the great successes of modern medicine [15,16], non-drug treatment of diseases does not lose its relevance [17,18,19]. Its use is possible both isolated [20,21], and in combination with drug treatment [22,23]. Despite the frequent success of this treatment option [24,25], it can not always be applied for various reasons [26,27]. In this regard, effective and without side effects with proper dosing are physical exercise [28,29]. With their help, various dysfunctions can be corrected [30,31], softly relaxing or eliminating abnormalities developing at different stages of ontogenesis [32,33]. In addition, regular physical activity can restrain the development of severe pathology [34,35] and prevent the appearance of its complications [36,37]. In this regard, it seems appropriate to continue research on the impact of physical exertion on the human body with a pronounced and completely non-removable pathology [38,39]. The success of this direction is able to approach the solution of the problem of increasing the average life expectancy of a person [40,41,42], the problems of improving children [43,44] and preventing some diseases with a multifactorial type of inheritance in their future [45].

It is promising to actively use the therapeutic potential of physical exertion in patients and invalids with a "soft" withdrawal from the state of habitual hypodynamia [46]. One of the options for such physical activities is the Paralympic sport. Recently, boccia has become increasingly popular - one of the varieties of the sports game with the ball, included in the program of the Summer Paralympic Games for persons with musculoskeletal involvement. According to the Interregional Public Organization of Disabled Persons "Federation of Bocce of Persons with Locomotor Disability", the training process of athletes in Russia began in 2008. Since 2009, the Russian Championship has been held, and since 2011 - the Championship of Russia, the Cup of Russia, the Junior Cup of Russia, currently Russian athletes take part in international competitions [47].

The development of Russian adaptive and Paralympic sports at the present stage is associated with a number of problems [48], which are being actively solved [49-53]. These include insufficiently developed the theory and methodology of sports for disabled people (this is not about accumulating and combining knowledge of physical culture, sports, medicine, correctional pedagogy, but in creating, in essence, new knowledge, which is the result of interpenetration of knowledge of each of the named sciences and disciplines); the development of a network of sports and sports clubs, children's and youth sports schools and branches for people with disabilities in all types of institutions of additional education for physical culture and sports; poor provision of barrier-free access for disabled persons to sports facilities; departmental disunity in the development of Paralympic sport; the absence in Russia of a clear system of state propaganda and popularization of physical culture and sports, especially among disabled people, which makes it difficult to involve people with disabilities into physical exercises and sports.

Thus, the goal is set: to identify the problems faced by athletes engaged in bocce in Russia and to identify possible solutions to them.

MATERIALS AND METHODS

The study was approved by the local ethics committee of the Shuya branch of the Ivanovo State University on September 12, 2017 (protocol No. 9).

54 athletes and coaches from bocce teams from Moscow and the Moscow region, St. Petersburg, Omsk, Rostov-on-Don, Volgograd, Chelyabinsk, Krasnoyarsk, Perm Krai, NaberezhnyeChelny, Saratov, Kazan, Sevastopol, Ivanovo region took part in the study. Identification of the list of problems that arise in persons with musculoskeletal disorders involved in bocce was carried out by interviewing and questioning on the basis of the Penguin Sports and Health Club for Disabled People of the Shuisky Branch of the Ivanovo State



University, the sports club of the disabled with the defeat of the locomotor apparatus Nadezhda Ivanovo, a sports club for disabled people "Volya" in Ivanovo, a sports club for invalids "Volga", Puchezh.

In the work a questionnaire was used with a list of problems encountered by athletes in the course of boccia: 1) the lack of a special method for training athletes in boccia, taking into account their disease; 2) absence (insufficient quantity) of specially trained bocce trainers; 3) lack of sponsors; 4) low salary of trainers; 5) lack of information about boccia in medical institutions; 6) insufficient quantity of scientific and methodological literature on boccia; 7) lack of information about boccia in social protection services, city and regional sports committees; 8) insufficient number of sports grounds for training; 9) insufficient number of competitions at the city and regional levels; 10) absence (insufficient number) of medical personnel (masseurs, etc.); 11) absence of special equipment for boccia; 12) unwillingness of parents (guardians) to drive disabled people to classes; 13) lack of desire for disabled persons to practice bocce; 14) lack of information about bocce in the mass media; 15) absence (insufficient number) of volunteers; 16) impossibility of transportation of athletes to places for training.

Respondents were asked to indicate the degree (score) of importance of the problems indicated in the questionnaire on a 10-point scale (1 point - minimum, 10 points - maximum). Depending on the degree of urgency of the problem, expressed in points, the answers were divided into groups: 9-10 points - "absolutely relevant", 7-8 points - "relevant", 5-6 points - "hard to say", 3- 4 points - "not relevant", 1-2 points - "absolutely not relevant". The obtained data were statistically processed using the mean value method (calculations were performed using the standard Microsoft Excel for Windows software package).

RESULTS AND DISCUSSION

The results of statistical processing of data on the importance of the problems of the development of bocce in Russia from the point of view of athletes and coaches are given in Table 1.

Table 1: Results of processing data on the importance of the problems of the development of boccia in Russia

Nº	The main problems of the development of bocce in Russia	X (points)	m (points)	Me (points)	Mo (points)	σ (points)	Ex	As	V, %
1.	Absence of a special method for training athletes in boccia, taking into account their disease	9.46	0.170	10	10	0.832	-0.61	-1.09	9
2.	Absence (insufficient quantity) of specially trained bocce trainers	9.42	0.169	10	10	0.830	-0.81	-0.87	9
3.	Absence of sponsors	9.17	0.177	9	10	0.868	-1.62	-0.35	9
4.	Low salaries of trainers	9.13	0.184	9	10	0.900	-1.78	-0.26	10
5.	Lack of information about boccia in medical institutions	9.13	0.326	10	10	1.597	2.07	-1.76	17
6.	Insufficient number of scientific and methodological literature on boccia	9.08	0.216	10	10	1.060	-1.63	-0.42	12
7.	The lack of information about bocce in the social services of population, city and regional committees on sport	9.04	0.285	10	10	1.138	-0.14	-1.12	15
8.	Insufficient number of sports grounds for training	9.00	0.359	10	10	1.934	2.92	-1.89	21
9.	Insufficient number of competitions at the city and regional levels	7.96	0.397	9	9	1.944	-0.38	-0.83	24
10.	Absence (insufficient number) of medical personnel (masseurs and others)	7.92	0.380	8	7	1.863	0.98	-1.01	23
11.	Absence of special equipment for boccia	7.88	0.494	9	10	2.419	-0.83	-0.85	31



12.	Unwillingness of parents (guardians) to drive disabled people to classes	7.86	0.556	9	9	2.234	0.23	-1.29	35
13.	Lack of desire for disabled people to practice bocce	7.75	0.331	8	8	1.622	0.69	-0.83	21
14.	Lack of information about bocce in the media	7.42	0.454	8	8	2.225	0.58	-1.12	30
15.	Absence (insufficient number) of volunteers	7.04	0.553	6.5	10	2.710	-1.35	-0.18	38
16.	The impossibility of transporting athletes to places for training	6.67	0.693	7	10	3.397	-1.23	-0.56	51

The presented results indicate that none of the problems under consideration is classified as "not relevant" by the athletes (3-4 points) and "absolutely irrelevant" (1-2 points).

Intermediate position between the categories "difficult to say" (5-6 points) and "relevant" (7-8 points) is occupied by the problem Ne 16 - impossibility of transportation of athletes to places for training (6.67 \pm 0.693). This problem corresponds to negative values of kurtosis (Ex) and asymmetry (As), high coefficient of variation (V = 50%), which indicates the heterogeneity of the opinions expressed by respondents. The value of the mode (Mo) is 10 points, therefore, for most athletes this problem is of absolute importance. Thus, the issues related to the transportation of athletes have been resolved only in isolated cases.

The group "relevant" (7-8 points) included problems Nos. 9-15. The average score (X) of answers was from 7.04±0.553 (absence (insufficient number) of volunteers) to 7.96 ± 0.397 (insufficient number of competitions at the city and regional levels). Indicators Nos. 9, 11 and 15 have negative values of kurtosis (Ex) and asymmetry (As), which indicates the presence of a numerical majority of a whole series of indicators that significantly exceed the arithmetic mean (X). These data are almost completely confirmed by the values of the median (Me) and mode (Mo). The coefficient of variation of the indicators included in this subgroup is

the median (Me) and mode (Mo). The coefficient of variation of the indicators included in this subgroup is quite high - up to 40%, therefore, the opinions of the respondents on these issues were divided. Problems No. 10, 12, 13, 14 have a positive kurtosis (Ex) and a negative asymmetry (As). The values of the coefficient of variation (V) for the questions of this subgroup range from 21% to 38%, the values of the median (Me) and the

mode (Mo) exceed the arithmetic mean (X). Thus, the opinion of the majority of athletes on these issues is the same, and most of the estimates are higher than the average arithmetic.

CONCLUSION

Despite great attention to bocce, in many regions of Russia its development is hampered by a number of serious circumstances. Among them there is a deficit of specially trained bocce trainers, able to organize a training process with the disabled of this nosological group. There is also a significant shortage of special scientific and methodological literature, recommendations, experimentally justified means and methods of training athletes with severe lesions of the musculoskeletal system in boccia. In addition, there is no



information about boccia in medical institutions and social protection services as an effective means of physical and social rehabilitation for people with severe disabilities of the musculoskeletal system. It becomes clear that for more effective development in Russia boccia it is necessary to promote this sport among people with musculoskeletal disorders, improve the material and technical base for practicing boccia in the regions, including barrier-free access of people with disabilities to sports facilities. Also in Russia, it is necessary to attract more volunteers, sponsors and sponsors to the organization of the training process and competitions, and also to improve the scientifically based system of training coaches and athletes in this sport.

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