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Perspectives Of Rink-Bendi Development Among People With Hearing Impairment In Russia.

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ABSTRACT

The consideration of the opinion of persons with hearing impairment who regularly train physically is very important for the further development of adaptive physical culture and sports in Russia. A competent application of the received information in practice can improve their effectiveness in improving the physical training and ensure their fuller social adaptation and integration. As a result of the research, a list of the main motives of people with hearing impairment to engage in very popular rink-bandi was identified. It was found out that "rink-bendi is less traumatic in comparison with hockey and puck"; "Rink-bandi is less economical in terms of purchasing equipment and equipment", "It is able to improve health", "It helps to find friends and comrades", "It satisfies the desire to do a new sport". The basic needs of hearing impaired people for organizing rink-bendi classes include: "the availability of a well-trained hockey arena", "the availability of special sports equipment (sticks, balls, shields, etc.)", "conducting free classes", "Availability of qualified trainers with experience in working with people with hearing disabilities", "availability of a convenient schedule of classes," "attracting healthy athletes to training and competition." Taking into account the wishes of athletes with the pathology of hearing can provide stimulation of this kind of adaptive sports in Russia. **Keywords**: deaf, disabled, adaptive sports, training, rink-bendi.



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INTRODUCTION

Despite the serious efforts of modern medicine in various branches [1,2,3], the prevalence of the pathology of internal organs [4,5], the organs of support and movement [6,7] and sense organs [8,9] remains very high in human society [10-12]. Numerous experimental [13,14] and clinical [15,16,17] observations showed that the onset of dysfunctions and persistent pathology significantly weakens the body [18,19]. Their presence may be the cause of the development of persistent disability [20-23]. At the same time, practical medicine and fundamental physiology recognize the reversibility of the development of many types of pathology [24,25] against the background of competently organized treatment [26,27]. Its important component is not only medicinal preparations [28,29], but also different variants of non-medicamentous effects [30,31]. Prominent place among them is occupied by dosed physical exercises [32,33] including adaptive sports. Regular classes are able to both heal the disabled person and ensure his socialization [34].

Very promising in this regard can be rink-bendi - a mini-hockey competition with a ball. His great prospects are related to the fact that you can play this game on the same venues as ice hockey. About 30 years ago, the International Federation of Bandy organized the rules of the game and held a tournament in the Swedish city of Örebro [35]. After streamlining the rules, mini-hockey quickly gained popularity. Especially they were fond of girls, who started international competitions since 1980 [36].

In Russia, rink-bendi was very popular in the 1990s, but a recession in the development of rink-bendi in Russia was caused in 1998 by a financial crisis, when many domestic teams could not go to the World Cup [37]. At present, rink-bandi has again become very popular in the regions of Russia.

Very economically accessible and slightly traumatic, he attracted a lot of people to hockey. Now competitions on rink-bendi are held at the level of municipalities and at the level of local communities. In this regard, from the point of view of the motives and requirements of persons with hearing impairment to conduct rink-bandi classes. Taking into account these requirements can help involve persons with disabilities in physical exercises, enhance their social adaptation and integration into society. In this regard, the goal is set: to assess the prospects for the development of rinkbendi among persons with hearing impairment.

MATERIALS AND METHODS

The study was approved by the local ethics committee of the Russian State Social University on September 15, 2015 (protocol No. 9). The study was conducted on the basis of the Russian State Social University in Moscow, Russia.

67 people with hearing impairment were examined. Polling methods and questionnaires were used.

To establish the hierarchy of significance and structure of the motives of people with hearing impairment, a questionnaire was developed and interviewed by 67 athletes from five Russian regions (Ivanovo, Vladimir, Nizhny Novgorod, Yaroslavl, Kostroma regions).

Respondents were asked to indicate the importance of each of the motives presented in Table. 1 on a 10-point scale (9-10 points - "extremely important", 7-8 points - "very important", 5-6 points - "quite important", 3-4 points - "not very important", 1- 2 points - "absolutely not important").

To establish the importance of the basic requirements of people with hearing impairment to organize classes on rink-bandi in their regions. Athletes were asked to indicate the degree (score) of their importance on a 10-point scale (1 point - minimum, 10 points - maximum). The degree of importance of each indicator, expressed in points, was formed by categories: 9-10 points - "extremely important", 7-8 points - "very important", 5-6 points - "quite important", 3-4 points - " not very important ", 1-2 points -" absolutely not important ".

The results are processed by the method of mathematical statistics.



RESULTS AND DISCUSSION

The results of the survey made it possible to identify the main motives of people with hearing pathology during rink-bendi classes (Table 1).

Table 1: List of motives for people with hearing impairment for rinkbendi

N⁰	Motives
1	Rink-bandi - less traumatic in comparison with ice hockey
2	Rink-bandi - more economical in terms of purchasing equipment and equipment
3	Improvehealth
4	The desire to find friends, comrades
5	Desire to do a new sport
6	Increase the level of physical fitness
7	Getting new impressions (feeling of excitement, struggle, victory)
8	Aspiration for self-assertion (getting a rank, title)
9	Educate yourself in the moral and volitional qualities
10	Form a need for regular classes of rink-bendi
11	The desire to be useful to society
12	Desire to find employment outside the home

The results of statistical processing of the survey material sare given in Table. 2.

Table 2: Results of statistical data processing with revealing the significance of the main motives of people with hearing impairment to rink bendi studies (n = 67)

Nº	Motives	\overline{X} (points)	m (points)	
1	Rink-bandi - less traumatic in comparison with ice hockey	9.45	0.19	
2	Rink-bandi - more economical in terms of purchasing equipment and equipment	9.37	0.12	
3	Improve health	9.33	0.16	
4	The desire to find friends, comrades	9.27	0.21	
5	Desire to do a new sport	9.13	0.19	
6	Increase the level of physical fitness	8.76	0.11	
7	Getting new impressions (feeling of excitement, struggle, victory)	8.66	0.16	
8	Aspiration for self-assertion (getting a rank, title)	8.23	0.11	
9	Educate yourself in the moral and volitional qualities	8.09	0.12	
10	Form a need for regular classes of rink-bendi	7.98	0.17	
11	The desire to be useful to society	7.87	0.19	
12	Desire to find employment outside the home	4.64	0.21	

As can be seen from Table. 2, none of the motives was attributed by respondents to the category of 5-6 points - "quite important" and 1-2 points - "having no value".

To the number of exceptionally significant motives, people with hearing impairment have taken the numbers No1-5: "Rink-bandi is more economical in terms of purchasing equipment and equipment" (\overline{X} =9.37±0.12), "improve health" (\overline{X} =9.33±0.16), "the desire to find friends, comrades" (\overline{X} =9.27±0.21), "the desire to engage in a new sport" (\overline{X} =9.13±0.19). At the same time, the leading motive is the fact that

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"rink-bendi is less traumatic in comparison with hockey and washer" ($X = 9.45 \pm 0.19$). These indicators show that people with disabilities are attracted by hearing by using new sports for themselves, which are more accessible from an economic point of view and less safe for health.

To the category of "very important" motives belong indicators No 6-12: "to increase the level of physical preparedness" (\overline{X} = 8.76±0.11 points); "Getting new impressions (feeling of excitement, struggle, victory)" (\overline{X} =8.66±0.16 points); "The desire for self-affirmation (obtaining a discharge, rank)" (\overline{X} =8.23±0.11 points); "Educate yourself in moral and volitional qualities" (\overline{X} = 8.09±0.12 points); "To form a need for regular classes of rink-bendi" (\overline{X} =7.98±0.17 points); "The desire to be useful to society" (\overline{X} =7.87±0.19 points).

This suggests that in people with hearing impairment, rink-bandi classes can be popular with the aim of gaining new impressions, self-affirmation, maintaining a good physical form, and a desire to be in demand by society.

A specific value for the surveyed disabled athletes has the desire "to find an occupation outside the home" (\overline{X} = 4.64±0.21 points).

To establish the significance of the basic requirements of individuals with impaired hearing to training on rink-bendi, we carried out a questionnaire survey and a survey of people with hearing disabilities wishing to engage in the sport.

The results of statistical processing of these basic requirements of persons with hearing impairment to the organization of rink bandi classes and the importance of each of them are given in Table 3.

Requirements for the organization of classes for rink-bendi	X (points)	m (points)	Me (points)	Mo (points)	σ (points)	Ex	As	V (%)
1. The presence of a qualitatively prepared hockey ground (arena)	9.77	0.041	10	10	1.441	4.679	-2.24	17
2. The presence of special sports equipment (sticks, balls, flaps, etc.)	9.69	0.028	10	10	0.677	5.777	-2.71	9
3.Free classes	9.57	0.211	9	10	1.756	2.725	-2.73	17
4. Availability of qualified specialists, coaches with experience in working with people with disabilities	9.51	0.124	9	9	0.588	1.767	-2.45	12
5. Convenient class schedule	9.31	0.142	9	9	1.499	2.558	-1.96	17
6.Involvement of healthy athletes for training and competition	9.15	0.217	9	9	1.731	-0.701	0.27	13
7. Holding competitions among similar sports clubs	8.72	0.074	9	9	1.562	4.743	-1.01	21
8.Individual approach to athletes with disabilities in the process of training	8.65	0.066	9	8	1.636	1.557	-1.06	11
9.The special program (technique) of training of disabled athletes for	8.41	0.041	8	9	0.770	1.548	-1.78	19

Table 3 Results of mathematical and statistical data processing of the basic requirements of persons with			
hearing impairment to the organization of classes on rink-bendi			

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Г		r	r	r	r	1		1
competitions based on the								
individual characteristics of								
their nosology								
10.Attention and assistance								
of local authorities in the		0.004			4 697			4.5
development of rink-bandi	8.39	0.221	9	8	1.637	-2.321	-1.61	15
among the deaf								
11.Possibility of obtaining a								
sports qualification (rank,	8.27	0.149	8	8	1.469	-0.781	-0.34	16
referee category)			-	-				
12. The opportunity to								
participate in urban and								
regional competitions	8.12	0.167	8	9	1.607	-7.00	-1.63	17
among healthy people								
13.Popularization of sports								
achievements of disabled								
athletes through the mass	8.09	0.197	8	8	1.463	3.992	-1.75	22
media (newspapers,								
television, the Internet and								
the like)	7.00	0.170	0		4 7 6 7	0.522	0.75	10
14.Availability of showers	7.98	0.179	8	8	1.767	0.523	-0.75	19
15.Convenient schedule of	7.87	0.141	8	7	1.615	-0.112	-0.15	21
competitions								
16.Spacious, comfortable	7.67	0.038	8	8	1.331	0.339	-0.37	23
warm changing rooms		0.000				0.000	0.07	
17.The convenient location								
of seats for spectators at	7.41	0.478	7	8	1.445	0.149	-0.34	14
the competition								
18.The existence of a								
security system (protection	6.56	0.215	6	6	1.564	0.575	-0.85	25
against terrorism)								
19.Availability of an								
educational system for	6.42	0.161	7	6	1.658	-0.866	0.63	18
athletes								

As can be seen from the results presented in Table 3, none of the requirements was classified as "not very important" (3-4), "absolutely unimportant" (1-2 points).

To the category of "exceptionally important requirements", respondents included indicators Nº 1 to 6. The average score of the responses of this group was from 9.15±0.217 (attraction of healthy athletes to training and competition) to 9.77±0.041 (availability of a qualitatively prepared hockey (ground). It should be noted that the participants in the study expressed a common opinion in setting a high assessment of the significance of these indicators, which is confirmed by the proximity of the mode (Mo) and the median (Me) to the arithmetic mean (\overline{X}), low (in relation to \overline{X}) deleterious deviation (σ).

A significant positive kurtosis (Ex) of the submitted requirements indicates that a significant number of features reflected in this group are uniform. The presence of negative asymmetry (As) with a positive excess, as well as small values of the coefficient of variation (V) from 9% to 17%, confirming the homogeneity of respondents' opinions.

To the category of "rather important" respondents referred indicators N18-19. The calculated values of the arithmetic mean () were from 6.12 \pm 0.132 (the system of educational work with athletes) to 6.56 \pm 0.215 (the presence of a security system (protection against terrorism). It should be noted that the presence of indicators of number 19 negative excess (Ex) with a positive asymmetry (As) indicates that the majority of

respondents in this category have placed estimates substantially below the arithmetic mean (\boldsymbol{X}).



CONCLUSION

Examination of hearing impaired people who regularly train physically is very important for the development of adaptive physical culture and sports. Competent application of this information can improve their effectiveness in improving the physical training and ensure their fuller social adaptation and integration. As a result of the research, a list of the main motives of people with hearing impairment to engage in very popular rink bandi was identified. It was found out that "rink-bendi is less traumatic in comparison with hockey and puck"; "Rink Bandi is less economical in terms of purchasing equipment and equipment", "It is able to improve health", "It helps to find friends and comrades", "It satisfies the desire to do a new sport". The basic needs of hearing impaired people for organizing rink-bendi classes include: "the availability of a well-trained hockey arena", "the availability of special sports equipment (sticks, balls, shields, etc.)", "conducting free classes" , "Availability of a convenient schedule of classes," "attracting healthy athletes to training and competition." Taking into account the wishes of athletes with the pathology of hearing can provide stimulation of this kind of adaptive sports in Russia.

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