



# **Research Article**

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# Modern Status of Mini Football $5 \times 5$ (B1) (Sports of Blind People) in Russia

Popenko KS1\* and Makhov AS2

<sup>1</sup>Department of Sports, Sports-adaptive school of Paralympic reserve, Yoshkar-Ola, Russia <sup>2</sup>Department of Theory and Methods of Physical Culture and Sports, Russian State Social University, Moscow, Russia

## Abstract

In recent years, mini football  $5 \times 5$  (B1) (sports of the blind) is actively developing in Russia. This creates the need for comprehensive research in this field. The questionnaires of athletes,  $5 \times 5$  (B1) mini-football coaches (sports of blind people), as well as heads of public organizations, civil servants and specialists from the physical culture and sports industry from 7 regions of Russia were conducted. As a result of the processing of the data obtained, it was found that the most significant problems of the development of  $5 \times 5$  (B1) mini-football in Russia are "insufficient number of  $5 \times 5$  (B1) mini-football coaches for mini-football  $5 \times 5$  (B1)"; "Inadequate promotion of mini-football  $5 \times 5$  (B1) in the media." Respondents believe that the solution to these problems is the widespread involvement of the maximum possible number of disabled people in sports without preliminary selection, the expansion of the calendar of sports competitions in mini-football  $5 \times 5$  (B1) at the regional level; creation of conditions for active training among visually impaired students of high class for performances at all-Russian and international competitions; improving the scientifically based system of training trainers and athletes in this sport; complete the formation of the legal framework for the sport of the blind; active popularization of this sport; the creation in the regions of adapted sports facilities with the necessary equipment for the implementation of sports training in mini-football  $5 \times 5$  (B1); active involvement of volunteers, patrons and sponsors in the organization of the training process and competitions.

Keywords: Invalid; Competitions; Mini-football; Sport of the blind; Development of sport

\*Correspondence to: Popenko KS, Department of Sports, Sports-adaptive school of Paralympic reserve, Yoshkar-Ola, Russia, E-mail: ilmedv1@yandex.ru

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#### Introduction

The emergence of any dysfunction can significantly weaken the human body [1,2]. The appearance of pathology further aggravates the disturbances in the body and often makes their spontaneous elimination impossible [3,4]. This dictates the need for continuous improvement of various health effects on the human body [5,6] with special attention to their complexity [7] and non-pharmacological method [8,9]. An effective option is to participate in sports competitions and sports training, which strengthens the functioning of all systems of the human body. This is associated with their pronounced healing effect on the body of various categories of patients and people with disabilities [10].

To date, the elements of medical and rehabilitation physical culture have gone beyond hospitals, clinics, rehabilitation centers and have acquired an independent direction-physical education and sports for disabled people. This movement takes various forms: groups, sections, sports and health clubs and sports clubs. This has a strong stimulating effect on the bulk of the disabled, contributes to the development of their physical qualities, and improves their mental state. Entering into competition with rivals, a disabled person learns to overcome difficulties and fatigue [11].

Thanks to the competitive component on the background of the normalization of the psychoemotional state, the disabled people are

recovering their everyday habits, normalizing their motor functions and consolidating the previously acquired skills, training a new profession, returning a disabled person to a society with successful employment.

A big step towards the development of  $5 \times 5$  (B1) mini footballs in the world was the inclusion of this sport in the program of the Summer Paralympic Games in Athens in 2004. The winners of the final match were the Brazilians, who won the penalty with a score of 3:2 from Argentina. At the Beijing Games, gold was once again won by Brazil, winning the hosts Paralympic Games 2: 1. South Americans also took the lead in the last two Paralympics. Currently, mini football  $5 \times 5$  (B1) is practiced in more than 20 countries around the world, including in Russia [12].

In 2007, the Federation of Football of the Blind and Visually Impaired Athletes (FFSS) was established in Russia. By the order of the Federal Agency for Physical Culture and Sport, since March 23, 2008, football of the blind has been recognized as a new sport and entered into the list of sports recognized as the executive body in the field of physical culture and sports [13].

In Russia there is a pronounced positive dynamic of the number of blind disabled sportsmen involved in football-more than 1000 people participating in the competitions are registered. At the same time, the



percentage of blind people involved in football in Russia is 9%, while in most countries of the world-2.7% [14].

However, further development of mini-football  $5 \times 5$  (B1) in Russia requires further research in this area. In this connection, the authors set the goal of the work: to identify the most important problems of mini-football  $5 \times 5$  (B1) in Russia and to outline possible solutions to them at the present stage.

### Materials and Methods

The study was approved by the local ethics committee of the Russian State Social University on September 15, 2017 (protocol No. 9). The study was carried out by questioning in 2018 during the indepth medical examination of the Russian national football team  $5 \times 5$  (B1) in Moscow on February 6 and the Russian Cup in mini-football  $5 \times 5$  (B1) in Yoshkar-Ola 24-26 February. The study involved active sportsmen and coaches of  $5 \times 5$  (B1) mini football from Yoshkar-Ola, Kazan, Nizhny Novgorod, Moscow and the Moscow Region, Makhachkala, Khabarovsk Territory, as well as civil servants, heads of public and sports organizations, employees physical culture and sports. A total of 108 respondents took part in the survey.

An assessment of the respondents' opinion on the compiled list of problems faced by blind players: 1) Lack of information about football (sports of the blind) in the media; 2) Lack of information about minifootball  $5 \times 5$  (B1) in the social services of population, city and regional committees on sport; 3) Lack of information about mini-football 5  $\times$ 5 (B1) in medical institutions; 4) Inadequate number of federations in mini-football  $5 \times 5$  (B1) in the regions; 5) Lack of support programs for the development of  $5 \times 5$  mini football (B1) at the federal and regional levels; 6) Lack of special equipment for mini-football  $5 \times 5$ (B1); 7) Insufficient number of specially equipped training grounds for mini-football  $5 \times 5$  (B1); 8) Absence (insufficient quantity) of specially trained coaches for mini-football  $5 \times 5$  (B1); 9) High requirements for the competencies of the mini-football coach  $5 \times 5$  (B1); 10) Lack of a special method for training athletes in mini-football  $5 \times 5$  (B1), taking into account their individual pathology of the disease; 11) Insufficient number of competitions in mini-football  $5 \times 5$  (B1) at the city and regional levels; 12) Absence (insufficient number) of volunteers; 13)

Impossibility of transportation of athletes to places for training; 14) Insufficient amount of scientific and methodical literature on mini-football  $5 \times 5$  (B1); 15) Absence (insufficient number) of conferences (symposiums, seminars) devoted to mini-football  $5 \times 5$  (B1).

In the questionnaire, respondents were asked to indicate the degree (score) of their importance 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 degree of importance of the development of mini football  $5 \times 5$  (B1) (sports of the blind) in Russia from the point of view of respondents from the physical education and sports sector are given in Table 1.

The presented results show that none of the problems considered is classified as "absolutely irrelevant" (1-2 points), "not relevant" (3-4 points) and "difficult to say" (5-6 points). Each of the problems in the list presented by the respondents was assessed as topical (over 7 points).

Problem number 15 "Insufficient amount of scientific and methodical literature on mini-football 5 × 5 (B1) (sports of the blind)" occupies a position corresponding to the category "relevant" (7-8 points) with a value of 7.02 ± 0.194. This problem corresponds to negative values of kurtosis (Ex) and asymmetry (As), and the mode value (Mo)=8 points. This indicates, firstly, the heterogeneity of opinions expressed by respondents; secondly, that for most respondents this problem is of great concern, and a significant group of respondents indicated a score that exceeds the arithmetic mean ( $\overline{X}$ ). The relatively high coefficient of variation (V=25%) also emphasizes the last statement.

Also, in the group of "topical" (7-8 points) were problems N N = 2-14. The average score of answers was from 7.23  $\pm$  0.236 "Absence

Table 1. Results of statistical processing of data on the importance of the development of blind football in Russia from the point of view of athletes and coaches.

№	The main problems of the development of mini-football $5 \times 5$ (B1) (sports blind people) in Russia	X (points)	m (points)	Me (points)	Mo (points)	σ (points)	Ex	As	V, %
1.	Insufficient number of competitions at the city and regional levels	8.06	0.193	8	10	2.001	1.37	-1.23	11
2.	Absence (insufficient quantity) of specially trained football coaches (sports of the blind)	7.96	0.215	9	10	2.234	-0.75	-0.7	30
3.	The lack of information about football (sport of the blind) in the media	7.92	0.233	9	10	2.423	1.03	-1.35	14
4.	Insufficient number of specially equipped training grounds	7.86	0.23	9	10	2.4	-0.66	-0.82	11
5.	High requirements for the competence of the football coach (sport of the blind)	7.76	0.184	8	10	1.913	-0.61	-0.49	32
6.	Insufficient number of federations on football (sports of the blind) in the regions	7.71	0.211	8	10	2.2	-0.64	-0.58	26
7.	Lack of programs to support the development of football (sport of the blind) at the federal and regional levels	7.69	0.209	8	10	2.173	0.42	-0.94	10
8.	The lack of information about football (sports of the blind) in the social services of population, city and regional committees on sports	7.68	0.213	8	8	2.216	0.31	-0.94	13
9.	Lack of information about football (sports of the blind) in medical institutions	7.62	0.238	8	10	2.47	-0.25	-0.89	28
10.	Absence of a special method for training athletes in football (sports of the blind), taking into account their individual pathology of the disease	7.56	0.217	8	10	2.256	-0.4	-0.65	31
11.	Absence of special equipment for football (sport of blind people)	7.47	0.202	8	10	2.102	0.27	-0.68	10
12.	The impossibility of transporting athletes to places for training	7.43	0.226	8	8	2.345	0.1	-0.94	12
13.	Absence (insufficient number) of volunteers	7.4	0.21	8	10	2.187	-0.62	-0.48	29
14.	Absence (insufficient number) of conferences (symposiums, seminars) dedicated to football (sport of blind people)	7.23	0.236	8	10	2.456	-0.8	-0.54	27
15.	Insufficient number of scientific and methodological literature on football (sport of the blind)	7.02	0.194	7	8	2.019	-0.41	-0.43	25



(insufficient number) of conferences (symposiums, seminars) devoted to mini-football  $5 \times 5$  (B1)" to  $7.96 \pm 0.215$  "Absence (insufficient quantity) of specially trained coaches in mini-football  $5 \times 5$  (B1)". Indicators Nos. 2, 4, 5, 6, 9, 10, 13, 14 have negative values of kurtosis (Ex) and asymmetry (As), which indicates the presence of a numerical majority of a number of indicators that significantly exceed the arithmetic mean ( $\overline{X}$ ). These data are almost completely confirmed by the values of the median (Me). The coefficient of variation of the indicators included in this subgroup is quite high-up to 32%, therefore, the opinions of the respondents on these issues were divided, but the Mo=10 index in most of the investigated problems of this group indicates that the bulk of the respondents put scores close to the maximum.

Problems No. 3, 7, 8, 11, 12 have a positive kurtosis (Ex) and a negative asymmetry (As). The values of the coefficient of variation (V) for questions of this subgroup range from 10% to 14%, which indicates the relative homogeneity of the opinions of the survey participants, however, the majority of the estimates given are higher than the arithmetic mean ( $\overline{X}$ ).

The closest to the scale is "Absolutely Urgent" (9-10) is the problem number 1 "Insufficient number of competitions in mini-football  $5 \times 5$ (B1) (sport of the blind) at the city and regional levels" with an average score of  $8.06 \pm 0.193$ . The positive value of the kurtosis (Ex) and the negative asymmetry (As) indicate the homogeneity of the respondents' opinions. High scores of the median (Me) and mode (Mo) with a rather low coefficient of variation (V)-11% underscore the status of the problem number 1 as the most relevant in the Russian Federation.

#### Conclusion

It must be acknowledged that the main reasons for the unsatisfactory development of this sport in the regions are: insufficient number of  $5 \times 5$  (B1) mini-football competitions at the city and regional levels; lack of specially trained coaches in mini-football  $5 \times 5$  (B1); inadequate promotion of mini-football  $5 \times 5$  (B1) in the media. To solve them, it is necessary to involve as many disabled people as possible in the exercise and sports of all age groups; planning and expansion of the calendar of sports competitions in mini-football  $5 \times 5$  (B1); providing training for visually impaired people as high-class athletes; improving the scientifically based system of training trainers and athletes in this sport, to complete the formation of the legal framework for the sport

of the blind; accounting standards and requirements of the Unified All-Russian Sports Classification and the federal standard of sports training in the sport of the blind; popularization of this sport; creation in the regions of the necessary conditions for its development; active involvement of volunteers, patrons and sponsors in the organization of the training process and competitions.

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