COMPLIANCE AND POPULARITY OF (11+) WARM UP PROGRAM AMONGIRANIAN FOOTBALL COACHES AND PLAYERS

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Abstract - In the recent 4 decades, many researches have been done about injury prevention strategies, injury rate and injury related costs in the football players [1-7]. The (+11) is a warm up program with prevention approach stablished by FIFA medical assessment and research center in 2006 [8]. Results of Soligards study (2010) showed that compliance of (+11) program was high and 58% of coaches performed the program for warm up during the season[9]. After 10 years of (+11)introduction, some defects in this programwere observed[10-13]. On the other Hand, it is thoughtthat compliance and popularity of (11+) program is decreased. Aim of this study was toassess (+11) compliance and popularity among Iranian coaches and players participating in national football league of Iran. To assess (11+) program compliance and popularity,we useda questionnaire produced by Soligard (2010). After the translation of questionnaire into Persian, it was completed by coaches and players that licentiates from national football federation of Iran. Our research showed that 54 percent of coaches and players did not have a positive attitude to (11+) program. Also, 55.5 percent of them believed that (11+) program is not enough to warm up. 56.8 percent of coaches and players said that (+11) has a very low effectiveness on dribbling and 51.9 percent believed that this program has a very low effectiveness on intensity and movement speed in football players. Only 38.2percent of coaches and player said that in the future they use (+11) program. results of the present study confirm that compliance and acceptability of (+11) warmup program among football community is decreased. Coaches and players believed that (+11) program is a static program and since in this program players don't use the ball, it is not good and enough for football players` warming up. It is thought thatwe needa new approach and attitude to design injury prevention programs. It is recommended to designa new warm up program with injury prevention (primary goal) and positive function/performance effectiveness in football players. (secondary goal).

Key words - Football, injury prevention, 11+ warm up,

I. INTRODUCTION

Previous studies confirm that football is the most popular sport in the world[14, 15] and is among 10 sports with a high risk of injury[6, 16].antecedentof injury prevention designing and producingstrategies in football date back to 1980[1].Ekstrand et al after first study about prevention programsreported that the rate of injury in professional football players was reduced 75 percent[1]. After this study, for almost 20 years, no other author published the paper on the prevention of football injuries[14]. After this long break, to continue designingthe injury prevention strategies among athletics, Mcguine et al (2006) studied wobble board exercises[17],Huppert's et al (2009) investigated proprioception exercises,labella et al(2011)scrutinized neuromuscular exercise[18] and kiani et al(2010) studied special warm up program consisting of strength, balance and core exercise [19]. Results of some studies about injury prevention shown on the bellow chart.

Researcher	sex	groups	intervention	Results
Tropp et al1985 [20]	man	439 subjects	Wobble board	Reduction of injury in those with ankle injury
Lanhard et al. 1996 (18)	man	1team	Strength exercise	47% injury reduction in 2 years Power exercise compared to two years of no exercise
Caraffa 1996 [21]	man	Intervention=300n Control=300subjects	Balance board exercise	87% injury reduction in Intervention group
Heydt et al 2000 [22]	woman	Intervention47subjects Control=258 subjects	7 weeks of pre-season exercises including speed and agility exercises	significant injury reduction in Intervention group
Johnson et al. 2005	Man and woman	Intervention=16 control:16	Cognitive-behavioral exercises and mental imaging	lower injury percentage in intervention group(83)
Gilchurst et al.[23]	woman	Intervention=583 Contro=852	Target-oriented warm-up using Neuromuscular exercises	70%reduction of ACL non-contact injury

However, after all efforts to accommodate the prevention programs into daily training programs, due to different logical reasons, time limitation and do not believe to this programs, compliance and popularity of this strategiesamong football community are low.

So, some researchers tried to design injury prevention programs with warm up strategy. For example, Gilchrist et al (2008) recommended purposeful warm up program using the Neuro muscular exercise for injury prevention.[23] International football federation, focusing injury prevention importance, stablished the FIFA medical assessment and research center(FMARC) in 1994. (FMARC) researchers designed some programs for injury prevention with the assessment of risk factors, characteristic and mechanism of injuries. The (11+) program is a comprehensive warm up program with injury prevention goal produced by (FMARC) in 2006. Results of Soligard studies confirmed that (11+) compliance among football community was high. After all this, previous studies showed that there are some defects in this program such as inefficacy on prevention of ankle injuries and low efficacy of groin injuries[10, 11]. It is though that after 11 years of (11+) introduction, due to the defects seen in (11+) program, compliance and popularity of this program is decreased.Since there is significant relationship between (11+) compliance and its efficacy on injury prevention, Aim of this study was to assess the (11+) compliance and acceptability among football community.

II. METHOD

This report is based on an exploratory statistical analysis of data from the intervention group. After the translation of the questionnaire,its electronic version was distributed among interviewees` group.The intervention group consisted of coaches and players licentiate by national football federation of Iran and used (+11) warm up program during the season. Totally,81 questionnaireswere completed by coaches and players. All statistical analyses were conducted using SPSS for Windows version22. We used descriptive statistic indexes for dataanalysis.

III. RESULTS

81.5 percent of people confirmed that if (+11) warm up program is done systematically, it can prevent injuries among football players. Chart 1 showed priority of (+11) different parts on injury prevention.

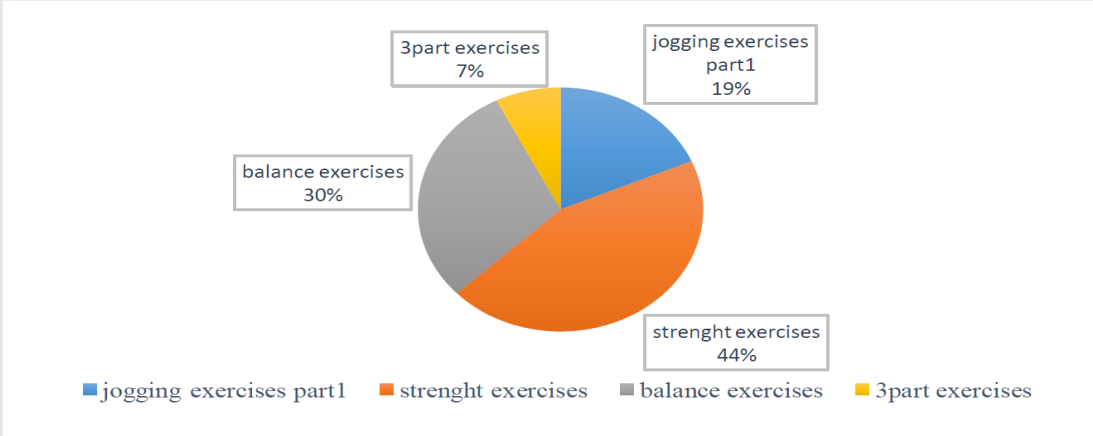


chart 1 efficacy of different parts 11+ program on injury prevention

Different parts of (11+) program based on importance include: Nordic hamstring, successive jumps, jogging part1, running part3, squat, single leg balance, bench and side bench. In 75 percent of cases the program has been trained by head coaches and other 25 percent involves players and coaches. 64 percent of coaches and players announced that they did the program at an average 3 sessions per week. The mainstream of coaches and players to accomplish the program includes: Believed that the (+11) program can reduce the number of injuries (43.2%). Believed that the (+11) program can improve the player`s performance (11.1%). Get affected by the media and the surrounding (18.5%). Sense of duty (43.2%). The main reasons of injuries among players from the coaches and Players perspective: poor training, inappropriate land quality, dangerous tackle and poor physical activity.On the opposite side, the result of our study showed that 54.3 percent of coaches and players believed that the players don't havepositive understanding about (+11) program.51 percent of people believed that (+11) program has a very low effectiveness on football development and 51.9 percent of them believed that the (+11) has a very low effectiveness on movement intensity and speed in football players. Also, 56.8 percent of them believed that the (+11) has a very low effect on dribbling performance among football players.

23.5 percent of people said that in the future they never use (+11) program. More information are presented in the below chart

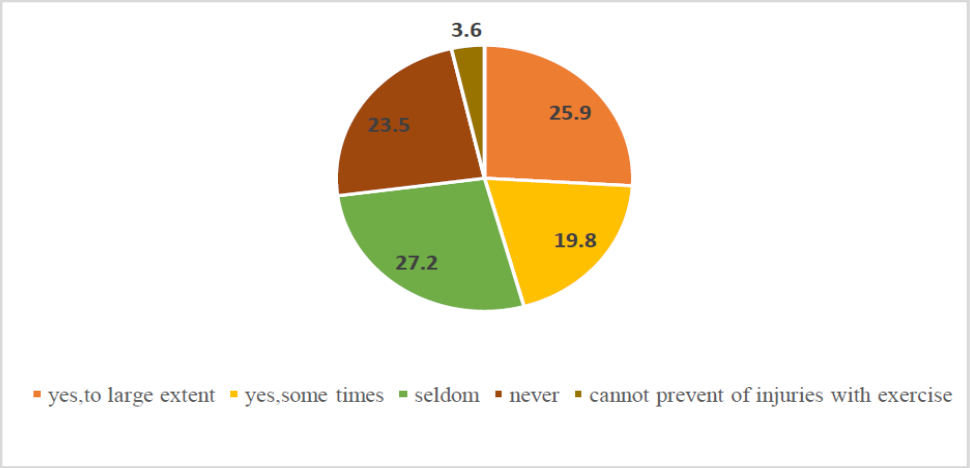


chart 2. use the program in the future?

Very important reasons for don't use (11+) program consisted of: there is no ball exercises in the program (main reason), the player motiveless to use the (+11) program for warm up and believed that (+11) program cannot prevention of injuries. In the following table,there are seen coaches and players` answers about (+11) warm up program questions.

	Completely disagree	disagree	No comments	agree	Completely agree
Is the programemotional?	23.5	34.6	7.4	27.2	7.3
Proper for warm up	25.9	29.6	9.9	24.7	9.9
High motivation in players to use the program.	16	35.8	12.3	32.1	3.7
Positive effect on physical fitness	11.1	17.3	17.3	43.2	11.1
Positive effect on injury prevention	2.5	3.7	12.3	50.6	30.9
Use the program by coaches in future	27.2	28.4	6.2	25.9	12.3

In the following table, there can be seen coaches and players` answers about (11+) warm up program

	Completely disagree	disagree	neutral	agree	Completely agree
The effect of well-known media to encourage and implement education and prevention of injury is high.			4.9	35.8	59.3
More importantly among the elites and in football is the concentration on injury prevention		1.3	7.4	33.3	58
It is important to use exercise interval in football as an injury prevention program.			8.7	40.7	50.6
Coaches` motive does not have any effect on players` attitude towards education of injury prevention.	21	21	38.3	8.6	11.1
Motivation and concentration of players were good during the 11+ program implementation.	3.7	30.9	22.2	29.6	13.6
The outcome of 11+ program was bad in football season	6.2	13.6	30.9	34.6	14.8
As a coach, I use 11+ program because I feel I am forced to do it.	6.2	8.6	28.4	34.6	22.2
Players` awareness and control on knee and ankle situation while doing different activities in football season have improved.	2.5	8	8.8	38.7	42

CONCLOUSION

Results of the present study confirm that compliance

and acceptability of (+11) warm up program among football community is decreased. with all efforts in the design and implementation of injury prevention programs, football community participation to this strsteghies has been low. results of our study confirm that although more than 80 percent of coaches and players that participanted in the research believed that if the (11+) warm up program is used in the systematic proccess, it can prevent injuries, but 55.6 percent of them stated that in the future they don't use the program. Our research showed that although injury prevention is of high importance among coaches, it is not expected that programs aiming to only prevent injuries as a part of the daily practice, are accepted among coaches and players.

The coaches,more than any other goal, are interested in enhancing the technical and physical factors in players. on the other hand ineffectiveness of (11+) warm up program on the players` function/performance has led to decrease the (11+) compliance among football community. Regarding the rapid obsoleteness of tactics and strategies in football sports, we can say that the applicability of each program related to football is highly limited to a short time.

To design a program for prevention of injury with the greatest efficacy, it is necessary to have perfect awareness of the literature and of the situation of today`s soccer sport. The second requirement needs practical experience in the playground. So, it is suggested that based on progressing in injury, the risk factors and biomechanic analysis,a new program with injury prevention (primary goal) and enhancement of players` function/performance (secondary goal) is designed.

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