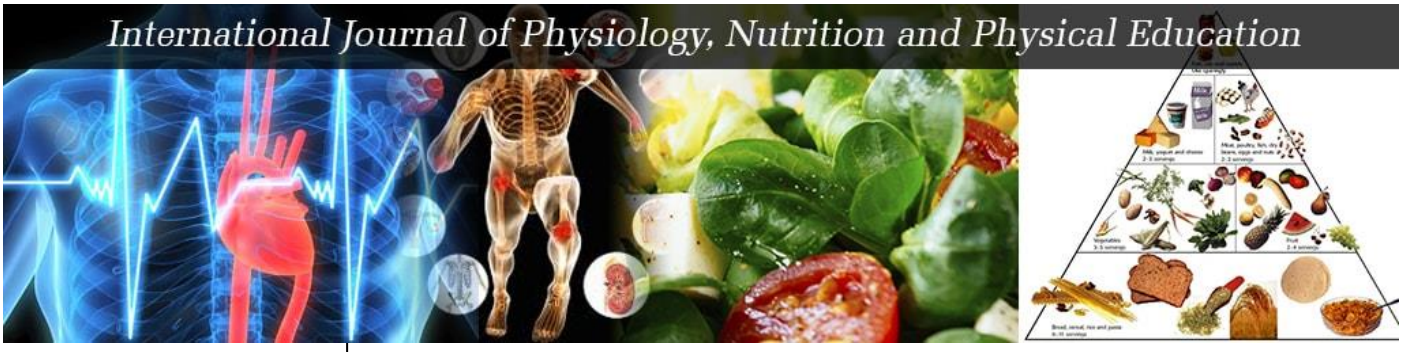

ISSN: 2456-0057
IJPNPE 2017; 2(2): 505-507

www.journalofsports.com
Received: 25-05-2017
Accepted: 26-06-2017

Parveen
Research Scholar, Department of Physical Education and Sports Sciences, University of Delhi, Delhi, India

Dr. JP Sharma
Supervisor and Associate Professor, Department of Physical Education and Sports Science, University of Delhi, Delhi, India

Corresponding Author:
Parveen
Research Scholar, Department of Physical Education and Sports Sciences, University of Delhi, Delhi, India

Assessment of the status of injury knowledge prevention and management at various levels of sports persons

Parveen and Dr. JP Sharma

DOI: https://doi.org/10.22271/journalofsport.2017.v2.i2i.253

Abstract
In the present scenario of sports injury has been identified as major adolescent health problem. The purpose of this study was to investigate the current level of knowledge of sports injury prevention and management and its present status among different level of sportspersons. For accomplish the study a total 100 sportspersons were randomly selected as sample. The age of the sample were ranged from 17 to 35. To assess the knowledge of sports injury prevention and management a self-structured knowledge questionnaire was used which consists of 25 questions related to injury prevention, injury type, injury management, dressing and extremity fixation, hot and cold padding, CPR, traumatic bleeding management, and shock management respectively. For analysis demographic information mean, standard deviation, were used as descriptive statistics, percentage & percentile method were used to access the status of injury knowledge. The SPSS version 21 was used to perform the statistical equations.

Keywords: sports injury prevention and management, CPR

Introduction
Knowledge plays an important role in every field of life. It makes differences between humans and animals. It determines the success in the life event. Like other events knowledge is also play an important role in sports to prevent injuries and other sports related physical hazards. A sound knowledge of sports injuries prevention and management is very essential for a sportsperson, for a coach and an individual who attach to the field of sports directly or indirectly. Injury can destroy the future of an elite sportsman and it can be prevented. The basic methods of sports medicine should be the part of training schedule; it should be part of our school curriculum and also at the college level student. Before training it is responsibility of a coach or a trainer to teach their wards about the method of injuries prevention theoretically or practically also. Because, if you know the mechanism of injury occurred you can prevent it. Some studies have been done previously on this area.

Caroline Finch (2006) [1] has been conduct a study entitled "A new framework for research leading to sports injury prevention" the purpose of the study was to establish a injury prevention practice framework. This model builds on the fact that only research that can, and will, be adopted by sports participants, their coaches and sporting bodies will prevent injuries. Evert A. L. M. Verhage, Maartje M. van Stralen, Willem van Mechelen (2010) [2], had conducted a study entitled "*Behavior, the Key Factor for Sports Injury Prevention*". The purpose of this study was to study the different type of behavior relate to injury risk factor and injury mechanism. Various types of behavior by, for example, the coach, referee, physical therapist or sports associations, also influence risk factors and injury mechanisms. In addition, multiple behaviors often act together. Some types of behavior may directly affect injury risk and are by definition a risk factor. Other behaviors may only affect risk factors and injury mechanisms, and influence injury risk indirectly.

Material and Methods
A total 100 sportsperson were randomly selected as sample from the Indira Gandhi Institute of Physical Education and Sports Science B-Block Vikas Puri, New Delhi and M D University,

Rohtak and from the different stadiums of Haryana. The age of the sample were ranged from 17 to 35 years. a self-administered questionnaire was used to assess the knowledge of sports injury prevention and management. The questionnaire was consists of 25 items related to injury prevention, injury type, injury management, dressing and extremity fixation, hot and cold padding, CPR, traumatic bleeding management, and shock management respectively. Each right question scored 4 point and 0 for wrong answer. A total 100 points test was prepared. 60 points were determined as average satisfied score out of 100.

Data Collection

Data were collected through an online form of questionnaire. Google forms were used as an online form tool. Questionnaire was send to the candidates through help of email and other exist services of social media. Before feeling up the questionnaire all important instruction regarding questionnaire has been delivered to the candidates. The candidates have assured that the information given by them will be kept confidential and be used only for research purpose.

Results

Table 1: Descriptive statistics of the age of selected sample

N	Minimum	Maximum	Mean	SD
100	17	35	24.23	4.60

Table 2: Descriptive statistics of Regions, game type, participation level and academic achievement

		Percentage
Game type	Individual	54.5
	Team Game	45.5
	Total	100
Participation level	State	34.1
	National	63.6
	International	2.3
	Total	100
Academic standard	Secondary	13.6
	Graduation	29.5
	Post-graduation	56.8
	Total	100

Table 1 and 2 shows the descriptive statistics of selected sample. Table 1 reveals that the range of the age of sample is ranged from 17 minimum and 35 is maximum and average age is 24 approximately. Other information related to group separation has been given to the above table.

The questionnaire was consists of 25 items related to injury prevention, injury type, injury management, dressing and extremity fixation, hot and cold padding, CPR, traumatic bleeding management, and shock management respectively. The details of the correct and incorrect responses are given in the table below.

Table 3: Percentage of correct and incorrect responses

	Responses (%)	
Factors	**Correct**	**Incorrect**
Injury prevention	38.8	61.2
Injury type	64.2	35.8
Injury management	63.1	36.9
Dressing and extremity fixation	26.3	73.7
Hot and cold padding	39.5	60.5
CPR	35.7	64.3
Heat related illness	56.2	43.8
Traumatic bleeding management	64.1	35.8
Shock management	71.7	28.3

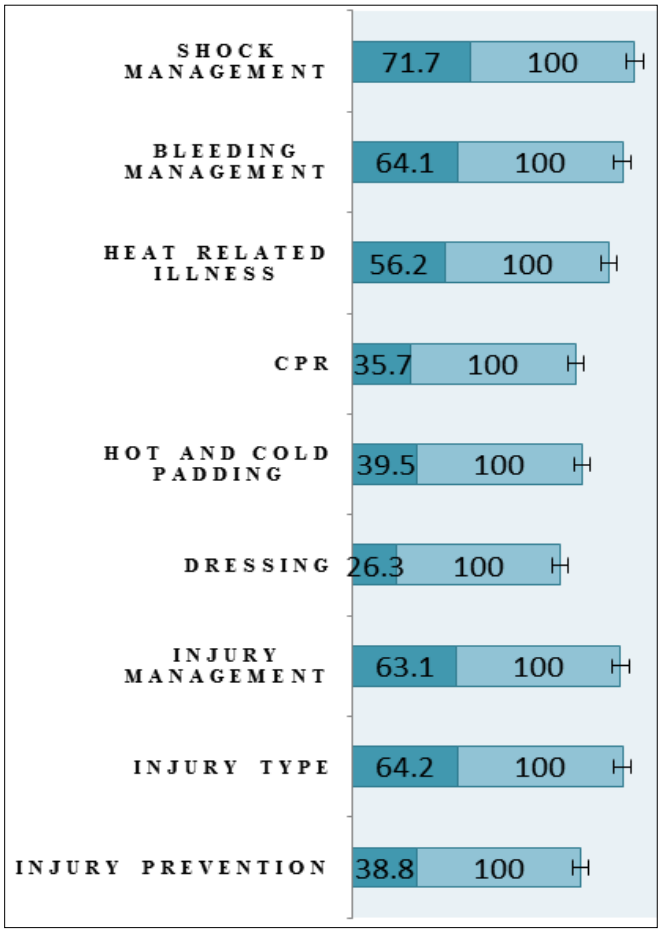

Fig 1: Right answer Percentage

Table.3 explores the percentage of responses given by respondents. After analysis the obtained results it is evident that percentage of right answer of injury prevention is 38.8%, injury type is 64.2%, injury management is 63.1%, dressing and extremity fixation is 26.3%, hot and cold padding is 39.5%, CPR is 35.7%, heat related illness is 56.2%, traumatic bleeding management is 64.1% and shock management is 71.7% respectively. The higher percentage of incorrect answer is 73.7% of dressing and extremity fixation. It means the selected samples are not familiar with the methods of dressing after injury. Next highest percentage of incorrect answer is CPR (cardiopulmonary resuscitation). It is an emergency lifesaving procedure that is done when someone breathing or heart beat has stopped. This may happen after an electric shock, heart attack, or drowning. CPR combines rescue breathing and chest compressions. It is very important aspect of injury prevention not only in sports but every person have to be adequate knowledge of CPR. Second higher percentage of incorrect answer is 61.2% with injury prevention. It means our sportspersons have the lack of knowledge regarding methods of injury prevention. The methods of injury prevention are very important aspects which can help in reduce the injury in sports. Next highest percentage of incorrect answer is 60.5% with hot and cold padding. 60.5% sample out of population does not know the proper method of hot and cold padding after an injury occurred. It is an important aspect of injury prevention and management.

The table 3 reveals the information regarding only the factors exists in questionnaire. To find out the common score of complete test we need percentile method. With the help of percentile method we can find out the position of obtained scores.

Table 4: Score of Injury Knowledge

N	Valid	100
	Missing	0
Percentile	10	22
	20	32
(Quartile)	25	36
	30	36
	40	44
(Median)	50	48
	60	48
	70	50
	75	52
	80	56
	90	64
Score of injury Knowledge	Minimum	8
	Maximum	72
	Mean	43.64

Table.4 shows the percentile score of injury knowledge of prevention and management. The score of 10^{th} percentile is 22, 20^{th} is 32, 25^{th} (quartile) is 36, 30^{th} percentile is 36, 40^{th} percentile is 44, 50^{th} percentile (median) is 48, 60^{th} percentile is also 48, 70^{th} percentile is 50, 75^{th} percentile is 52, 80^{th} percentile is 56 and 90^{th} percentile is 64 respectively. The score of 25^{th} percentile is 36. It means 25 percentage of sample have the score of less than 36. 50 percentage of sample have the score of less than 48. 75 percentage of sample have the score of less than 52 and 90 percentage of sample have the score of less than 64. The table also reveals the range of score and average score. The minimum obtained score is 8 and maximum score is 72 and the average score is 43.64

Conclusion

After analysis the obtained results we can says that 80% of the sample have the score below to sixty. It means majority of sportsperson have the lack of knowledge of injury prevention and management. If we set the passing criteria for the present test of injury prevention and management at 50% than 70% of sample are fail. Because P70 is 50 it means 70% of the samples have the score below to 50. As per the table.3 that 73.7% answers were incorrect in regard to dressing and extremity fixation and 64.3% sportsperson tick the incorrect answer in regarding CPR. So, it has been conclude that overall selected sportsperson have poor knowledge of sports injury prevention and management.

Summary and Recommendation

The obtained result shows that the selected sports persons have very poor knowledge. The Question arise here is ‘what is reason behind it?’ and ‘what are the solutions?’ curriculum of our school and college is a problem because it has no space for Physical Education and Sports Medicine. There is no any theory class available for the sportsperson regarding methods of injury prevention and management even most of the injured individual are treated by local uncertified persons. So, on the basis of obtained results it is highly recommended that change the present system and make some policies which can enhance the knowledge of sportspersons in injury prevention and management for that they can avoid and understand the mechanism of sports injury because prevention is better than cure.

References

1. Finch C. A new framework for research leading to sports injury prevention. Journal of Science and Medicine in Sport. 2006; 9(1):3-9.
2. Verhagen EA, van Stralen MM, Van Mechelen W. Behaviour, the key factor for sports injury prevention. Sports medicine, 2010; 40(11):899-906.
3. Bahr R, Krosshaug T. Understanding injury mechanisms: a key component of preventing injuries in sport. British journal of sports medicine. 2005; 39(6):324-329.
4. Heil J. Psychology of sport injury. Human Kinetics Publishers, 1993.
5. Gosling CM, Gabbe BJ, Forbes AB. Triathlon related musculoskeletal injuries: the status of injury prevention knowledge. Journal of Science and Medicine in Sport. 2008; 11(4):396-406.
6. Timpka T, Ekstrand J, Svanström L. From sports injury prevention to safety promotion in sports. Sports Medicine. 2006; 36(9):733-745.
7. Christoffel T, Gallagher S. Injury prevention and public health: practical knowledge, skills, and strategies. Jones & Bartlett Learning, 2006.
8. Mishra MK, Pandey AK, Dubey S. Effect of eight weeks yogic training on selected physiological variables. International Journal of Physical Education, Sports and Health. 2014; 1(3):16-18.
9. Mishra MK, Pandey AK, Chaubey D. A comparative study of Vo2 Max among the basketball, football, volleyball and hockey male players. IJAR. 2015; 1(11):245-247.