Research Paper Education

Incidence of Sports Injuries Among Secondary School Students with and without Disabilities in Nsukka Local Government Area of Enugu State: Implications for School Sports Development in Nigeria.

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ABSTRACT

The main thrust of the study was the inventory of sports injuries during inter-house sports competitions in secondary schools in Nsukka Local Government Area and their implication for school sports development in Nigeria. The study took account of the various types of injuries which occurred during the 2010 inter-house sports competition in the area. Six public secondaryschools were used for the study. Fifty student-athletes from each of the six secondary schools were used. On the whole 300 student-athletes formed the sample for the study. The questionnaire served as the instrument for the study. It was made up of two sections. Section A contained he demographic variables while section B had the main variables of the study. Simple percentages were used to analyse the data. It was found that 89.7% of the students participating in secondary school intramural sport program in Nsukka Local Government Area Enugu state suffer sport related injuries.The result also revealed that poor sport facilities and equipment are responsible for the causes of sport injuries during school inter-house sport competition. The study further revealed that most students (86.3%) do not make use of sports protective equipments when participating in school inter-house sports competition, it was found to be part of causes of sports injury during inter-house sports competitions.It was therefore recommended that Government should improve the quality of sports facilities in the secondary schools so as to help reduce the risk of students sustaining injuries during inter-house competitions.

KEYWORDS Special Education, Disabilities, Sports Injuries

Introduction

Sport is a world ofits own especially when it concerns the very the serious competitors. It is usually accompanied by pursuit for excellence, and intense desire to outwit the opponents. Onifade (2001) defined sport as an activity that may contain one or two element of play and game but more importantly has the component of competition and prowess.

As the number of people participating in sporting activities in order to promote health, is increasing, sport and exercise are also constantly presenting an inevitable danger, involving accidents and injuries (Conne, Annest, & Gilchrist 2003). Consequently, injury is considered one of the major factors for concern relating to the risks of sport participation, a factor that can cause people to stop participating in sporting activities or not to start at all (Petrie &Perna 2004). According to United State Center for Disease control and Prevention (2008) secondary school student forms larger portion of those involved in competitive sporting activity, sport involvement by adolescent is an outgrowth of their natural tendency to be recognized. Typically, adolescent can spend hours in sport with great importance given to the outcome (Gotsch, Annest, Holmgreen, & Gilchrist 2002). National Federation of State High School Associations (2006) in addition stated that adolescent represent a unique segment of the general population, with a lifestyle characterized by vigorous and systematic physical exertion in mostly informal (self organized) sport program in schools. Sport programs in school are usually intramural, extramural and interscholastic sport programmes. Out of the three method of organizing sport in schools, intramural(more often called inter-house sports) is more common among adolescent sport because it provide opportunities for both the skilled and unskilled adolescent to participate (Bauzon, 1997). Inter-house sport is designed to promote 'participation through sport' to help develop friendships between fellow students within schools and departments encouraging students of all abilities to participate (Kim and Heo 2003).

Students involved in secondary school inter-house sport competitions are subject to the risk of sudden injuries, usually due to certain factors like inexperience, negligence and others. are always unexpected events. Agbanusi, (2001) defined injury as an unplanned incident that can happen to any individual, making the person physiologically, psychological as well as physically traumatize, could be self-inflicted or from an external body. According to Petrie and Perna, (2004) Sports injuries is define as conditions where there are physical damages to the body or parts of the body resulting from accident during sporting activities.In the words of Kim and Heo (2003), injuries are inevitable where competition is keen and sport is rough among young inexperienced athlete especially in the contact sports, they attributed these to be common with secondary school intramurals but different compared to the vast number of athletes participating safely in a wide variety of organized sports.

Participation in secondary school sports has helped to promote physically active lifestyle among students. Secondary school sports participation has grown from an estimated 4 million participants during the 1971-72 school year to an estimated 7.2 million in 2005-06 (National Federation of State High School Associations 2006). However, despite the documented health benefits of increased physical activity such as weight management, improved self-esteem and increased strength, endurance, and flexibility those who participate in secondary school sportsprogramme are at risk for sports-related injuries which could have serious implications on sport development. This is why this study on injuries during inter-house and the implications on sports development is very pertinent.

Methods

The design of this study was the descriptive survey research design. The population was made up of all the student-athletes who took part in the inter-house sports competitions in

all the secondary schools in Nsukka Local Government Area. Six secondary schools were selected from all the public secondary schools in the local government.Fifty student-athletes from each of the six secondary schools were used. On the whole 300 student-athletes formed the sample for the study. The questionnaire served as the instrument for the study. It was made up of two sections. Section A contained he demographic variables while section B had the main variables of the stydy. Simple percentages were used to analyse the data.

Results and Discussions

Table 1

The common sport related injuries among student

	Yes	Percentages	No	Percentages
Sustained injuries during school inter-house sport competitions	269	89.7%	31	10.3%
Incident of sprain	212	70.7%	88	29.3%
Incident of strain	200	66.7%	100	33.3%
Incident of fracture	6	2%	294	98%
Incident of dislocation	196	65.3%	104	34.7%
Incident of fainting	27	9%	273	91%
Incident of muscle pull	182	60.7%	118	39.3%
Incident of laceration	171	57%	129	43%
Incident of puncture	200	66.7%	100	33.3%
Incident of incised wound	189	63%	111	37%
Incident of abrasion	292	97.3%	8	2.7%
Incident of contusions	0	0%	300	100%

Table 1 above presents the frequencies and percentages of response on common sport related injuries among student during secondary school intramural sport competition in Nsukka local Government Area of Enugu State. The result shows that out of 300 respondents that participated in school intramural sport competition 89.7% of them sustained injuries, while only 10.3% of them reported not to have sustained injury during their school intramural sport competition. The table further indicated the rate of incident of certain injuries as reported by the respondents, showing that 70.7% of the respondent reported to had suffered sprain, 66.7% responded to had suffered strain 2% suffered fracture, 65.3% suffered, 9% fainted, 60.7% suffered muscle pull, 57% suffered laceration, 66.7% suffered puncture, 63% suffered incised wound and 97.3 responded to suffered abrasion.

Research question 2: What is a rate of sport injuries among secondary school student during school inter-house sport competition?

Table 2a (unexposed injuries)

The rate of sport injuries among student during inter-house sport competition

Sporting activities	Sprain	Strain	Fracture	Muscle pull	Fainting	Dislocation	Total	Percentages
a Football	67	59	4	55	9	59	253	84.3%
b Handball	39	40	0	49	0	44	173	57.3%
c Volleyball	17	19	0	7	0	16	59	19.7%
d Athletics	31	29	0	23	19	25	124	41.3%
e Hockey	0	0	0	0	0	0	0	
f Tennis	0	0	0	0	0	0	0	
g Table tennis	4	4	0	9	0	3	20	6.7%
h Basket ball	54	49	2	39	2	46	192	64%
Total	212	200	6	182	27	196	823	
percentages	70.7%	66.7%	2%	60.7%	9%	65.3%		

From the table above a total of 253 (84.3%) injuries incidents were reported from participating in football, 172 (57.3%) of the incident were from handball, 59(19.7%) of these incident were from athletics, 20 (6.7%) of these incident from table tennis, and 192 (64%) of these incident from basket ball.

Tables 2B (exposed injuries)

The rate of sport injuries among student during inter-house sport competition

Sporting activities	Laceration	Puncture	Incise wound	Abrasion	Total	Percentages
a Football	54	61	53	77	245	81.7%
b Handball	46	46	49	73	214	71.3%
c Volleyball	21	16	44	29	111	37%
d Athletics	13	34	0	46	93	31%
e Hockey	0	0	0	0	0	0
f Tennis	0	0	0	0	0	0
g Table tennis	0	2	0	10	12	4%
h Basket ball	37	40	43	57	177	59%
Total	171	200	189	292	452	
Percentages	57%	66.7%	63%	97.3%		

From the table above a total of 245 (81.7%) of these incident of sport related injuries were reported from participating in football, 214 (71.3%) of these incident from handball, 111 (37%) of these incident from volleyball, 93(31%) of these incident from athletics, 12 (4%) of these incident from table tennis, and 177 (59%) of these incident from basket ball.

Research question 3: how does the attitude of student influences the causes of these sport related injuries during school intramural sport competition?

Table 3

Whether student attitude and the condition of sport facilities and equipment influences injury rate

	Yes	Percentages	No	Percentages
Always used protective equipment before engaging in sport	68	22.7%	232	77.3%
Participate in sport when sick	259	86.3%	41	13.7%
Warm up before sport program	21	7%	279	93%
The condition of school sport facilities and equipments are in good shape	39	13%	261	87%
Bad school sport facilities and equipment increase injury rate	300	100%	0	0%
School maintain school sport facilities	27	9%	273	91%

Table 3 show presented frequencies and percentages of responses sought to investigates whether students attitudes influences the causes of these sports related injuries during school intramural sport competition. The result shows that majority (77%) of the student that participate in secondary school intramural sport competition do not make use of sport protective equipment, 86.3% of them even partake in sport program when sick and most of them (93%) don't warm up before sport program. The table 3 further shows that 87% of the respondent reported that their school sport facilities are in bad shapes, and 91% of them reported that schools don't maintain these sport facilities. All of the respondents in addition attributed these to be responsible to the causes of injuries.

Research question 4: how are student taught cautions and preventive measures against sport related injuries?
Table 4

	Yes	Percentages	No	Percentages
Instructed on safety measures before sport participation	98	32.7%	202	67.3%
Instructed on warm up exercises	64	21.3%	236	78%
Supervises by game master/teachers during sporting activities	108	36%	192	64%

Table 2 above presents the frequencies and percentages of response regarding t whether student are taught cautions and preventive measures against injuries. The result shows that 67.3% of the respondent responded not to have been instructed on safety measures against injuries during sporting activities, 78% of them reported not to have been instructed to warm up before sporting activities, while 64% of them responded not to have been supervised by their teacher or game masters during intramural sport competition.

Dissuasion of the findings
The data collected for this study indicated that most (89.7) of the students participating in secondary school intramural sport program in Nsukka Local Government Area Enugu state suffer sport related injuries as revealed in table 1. & table 2. The table further shows that certain injuries such as sprain, strain, dislocation, muscle pull, puncture, incised wound, and abrasion account for high incident rate among secondary school student participating in school intramural sport competition. Thus making these sport related injuries common among student, these findings however agreed with the report from center for disease control and prevention (2002) which reported that the basic sport injuries common among secondary school student are sprain, strain, dislocation, contusion, abrasion and fainting. Although this report were base on findings from studies conducted among high student during interscholastic sport competitions and didn't include such injuries as muscle pull and puncture wounds, the findings form this study indicated that these injuries (muscle pull and puncture wounds,) also have high incident rate among student involved in school intramural sport program, this result however can be attributed to the differences in supervision or control rate in the two system (Miller & Romano 2000). While interscholastic sport competition involved different bodies coming together to make sure everything go well, intramural sport competition in the other hands involves only the school engaging in it.

The findings from this study in addition reported that contusion and fainting in contrast to the report of the center for disease control and prevention (2002) was identified to be of low incident rate in secondary school intramural sport competition. However contract sport (football, handball, and basketball) programs during secondary school intramural sport competition account for higher incident of injuries among student participation in sporting activities thus ageing with the report form the study conducted by Marchi, Di Bello, Messi, Gazzola 1999. In addition the result from this study agreed with the view of Kim and Heo (2003) that injuries are inevitable where competition is keen and sport is rough among young inexperienced athlete especially in the contract sports.

The data contained in table 3, and 4 of this study indicated that certain factors influences the causes of these sport related injuries. Table 3 shows that 87% of the respondent reported to have poor sport facilities and equipment in their school out of which all of the respondent reported that these poor sport facilities and equipment are responsible for the causes of sport injuries during school intramural sport competition. This finding however agreed with Conne, Annest, and Gilchrist (2003) who stated that sport related injuries among student are traceable to factors, such as lack of appropriate sporting facilities and equipment or the present poor sporting facilities and equipment.

The table further present that most students (86.3%) don't make use of sport protective equipments when participating in school intramural sport competition this however leads to injury as postulated by Beers, Mark, and Robert (2004) that lacks of protective equipments among secondary school student engaging in sporting activities are likely cause of sports injury. Further, the table 3 also indicated that 87% of those students involved in school intramural sport program do so, not minding there health state and about 93% of them don't warm up before engaging in school intramural sport. These however are possible causes of sport injuries.

Table 4 shows that majority of student participating in school intramural sports are not given any orientation before such program. From the responses of the respondent in this study about 78% of them reported not have been instructed to warm up before participating in school intramural sport and about 64% of them responded not to have been supervised during sport activities. these report indicate the level of carelessness or negligent by game masters/mistress and this is of no doubt the likely causes of injuries during school intramural sport competition.

Conclusion
Based on the findings of the study the following conclusions were drawn:

1. That sports related injuries are common during inter-house sports competitions in Nsukka local government area;
2. That attitude of student athletes and condition of the sports facilities and equipment contribute to occurrence of sports injuries and
3. That failure of the staff to teach student athletes the conditioning and preventive measures is a cause of sport injuries.

Recommendations
Based on the conclusions of this study it was recommended that:

1. Students should be taught common sports injuries as part of their preparations for inter-house sports competitions
2. Government should improve the quality of sports facilities in the secondary schools so as to help reduce the risk of students sustaining injuries during inter-house competitions
3. Conditioning and of student-athletes should be taken more serious by coaches and teachers responsible for grooming the student-athletes.

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