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## Prevalence of Sport Injuries and Patterns of Management among Amateur Footballers in Tarauni Local Government Area

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### ABSTRACT

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Sport injuries have afflicted athletes and are recognized as a cause of absence from matches and training and to some extent a cause of loss of career and deformities. The aim of this study is to determine the prevalence of sport injuries and patterns of management among the local footballers in Tarauni Local Government area. A total of 100 post season injury questionnaires were administered to the Amateur footballers in Tarauni L.G.A that are sampled using purposive sampling technique, completed questionnaires were retrieved successfully, the data generated were analyzed using descriptive statistics of mean, standard deviation, frequency distribution and percentages. It was shown that there was high prevalence of sport injuries among the participants whose age ranged 15-30 years, most of the players were at senior secondary (42%) or tertiary institutions (58%), the result showed a high prevalence of hamstring injuries (49%) and toes injuries (43%) in the lower extremities, wrist and hand injuries (33%) and shoulder injuries (30%) in the upper extremities. The highest risk factor for sport injuries was the nature of playing field (99%) among the participants. The players managed their injuries using first aid (53%) and traditional means (46%), but do not usually treat it using physiotherapy means. It was concluded that, there was high prevalence of sport injuries among the local footballers in Tarauni Local Government and majority use of first aid and traditional means of managing sport injuries. It was recommended that, there is need to orient and educate amateur footballers in Tarauni L.G.A about the risk factors and causes of sport injuries and to educate them on the roles of physiotherapy in the managements of sport injuries.

## INTRODUCTION

Football (soccer) is one of the most popular sports in the world Adamczyk *et al* (2002). It is evident that sport, and health-giving aspect, may present a danger to health in the form of injuries and accident (Adamczyk&Luboinski2002). High-velocity trauma and direct contact between sportsmen have made football kind of a combat sport, connecting both the consequences of chronic overuse and acute injuries Adamczyk *et al* (2002).

Currently Federation of International Football Associations generalizes 203 national associations and represents about 200 million active players, of which about 40 million are women. The popularity of professional football leads to a big financial effect (Drovac *et al.*, 2000).The prevalence of football injuries is estimated to be 0.35 per 1000 game hours. One athlete plays on average 100 hours of football per year (from 50 hours per player of a local team, up to 500 hours per player for a professional team). So every player will have at least one performance limiting injury per year (Adamczyk, 2002).

Ekstrand and Karlsson (2001) showed that, the overall risk was approximately 100 times higher for professional players than for high risk industrial occupations. The governing bodies for international football, FIFA and UEFA (Union of European Football Associations), as well as national football associations have expressed their concern about the demands placed on the modern footballer, and the translation of these physical and mental demands into injuries (Ekstrand, &Karlsson, 2003). Engaging in sports activities has numerous health benefits, but also carries the risk of injury (Cain *et al* 2005). At every age, competitive and recreation athletes sustain a wide variety of soft tissue, bone, ligament, tendon and nerve injuries, caused by direct trauma or repetitive stress.(Beynnon *et al* 2005) .

According to Mwandila (2012), injuries in football have been the subject of increasing interest, and many studies have been published during the last two decades. These studies have checked for injury patterns (Ekstrand, 1988, Tysvaer and Lochen, 1991; Inklaar 1994, Dvorak and Junge, 2000:). Other studies paid attention on skill-level differences (Poulsen *et al.* 1991; Junge *et al.*, 2000; Peterson *et al.*, 2000). For instance, injury pattern studies documented by Inklaar (1994a, b) and Dvorak and Junge (2000) concluded that injury prevalence is higher during game time (7.4–37.2 injuries/1000 h) than during practice (1.5–7.6 injuries/ 1000 h). Other researchers observed that 60–90% of all injuries occur in the lower extremities and that prevalence of injury increases with ages (Engstrom *et al.*, 1991; Tysvaer and Lochen, 1991; Tysvaer, 1992; Inklaar, 1994a; Chomiak *et al.*, 2000; Dvorak & Junge, 2000; Ostenberg and Roos, 2000; Soderman *et al.*, 2001). The prevalence of football injuries is estimated to be 1.5–7.6/ 1000 h of training and 12–35/1000 matches.

Football injuries may be classified into two categories such as minor injuries and major injuries. Minor injuries require care but usually do not interrupt the player's practice or game schedules (Mwandila, 2012). However, if not properly treated, they on occasion, progress to become major injuries, for example a simple laceration, improperly treated may become infected and life threatening (Samaranch, 1990). The severity of an injury can be determined by the number of days that have elapsed from the date of injury to the date of the player's return to full participation in team training and availability for match selection (Samaranch, 1990).

Tarauni Local government area being a densely populated area within the metropolis has a high number of youths with a lot of amateur footballers and fields and therefore this makes it suitable for the study. This study therefore, was carried out to determine the prevalence of sport injuries and patterns of management among local footballers in Tarauni local government area.

## METHODOLOGY

The major aim of this study was to investigate the prevalence of sport injuries and patterns of management among Amateur footballers in Tarauni Local Government area. The study also aimed to find the common causes and risk factors of sport injuries among Amateur footballers in Tarauni Local Government Area.

### Research Design

The research design for this study was a descriptive survey research design.

### Population of the Study

The population of this study was all Amateur footballers playing in specific football teams, all footballers participating in school based teams in senior secondary schools, tertiary institutions and recreational footballers playing at a specific football field located within Tarauni Government Area.

### Sample Size and Sampling Technique

A sample of 100 Amateur footballers was sampled using purposive sampling technique. The formula below was used to determine the sample size.

$$N = z^2 pq / d$$

Where:

N = required sample size

Z = confidence level

p = estimated prevalence of sport injuries in general population, if not known 50% will be used

q = 1-p and d = marginal error = 0.05

### Inclusion Criteria

The participants included in this study had the following criteria.

1. Footballers must be playing within Tarauni local government area.
2. Footballers must be aged between 15-30 years.
3. Footballers must have a specific playing field.

4. Footballers must be males in gender.

### **Exclusion Criteria**

Any sport players other than footballers was not considered in this study.

### **Data Collection Instruments**

Data collection instruments used in this study include:

- Modified form of Post season injury questionnaire.
- Data record sheet
- Informed Consent form

### **Data Collection Procedure**

Consent forms were given to each participant and only the participants that agreed to participate were given the questionnaires. Before the distribution of the questionnaires, the procedure was explained to the participants. Those that could read/write were given the questionnaires to fill while those that could not read/understand/write were interviewed by the researcher. The questionnaires used was modified form of post season injury questionnaire, It consists four sections namely; section A (demographics), section B (Sport injuries base on location on the body), section C(risk factors of sport injuries) and section D (patterns of management of sport injuries) a record sheet was used to record the response of the participants .

### **Data Analysis Procedure**

The data collected was analyzed using descriptive statistics of mean, standard deviation, frequencies and percentages. Inferential statistics of chi-square was used to find out the association between sport injuries and patterns of management of sport injuries. All data was analyzed using SPSS version 16.0.

## RESULT

A total of 100 Amateur footballers from Tarauni Amateur Government participated in this study. The age range of the participants is between 15-30 years. The findings are presented in the tables. Table 1 showed the demographic characteristics of the participants. The majority of the participants were at the age range of 21-26 years, they were the tertiary school students and other participants were at the senior secondary school level of education.

**Table 1: Demographic data of the participants**

Variables	n (%)
<b>Age</b>	
18-22	37(37)
23-27	56(56)
28-32	7(7)
<b>Education level</b>	
Tertiary institutions	58(58)
Senior Secondary Schools	42(42)
<b>Gender (males)</b>	100(100)

Key

N = Frequency

% = Percentage

Table 2 below showed upper limb injuries. Among these injuries, wrist and hand injuries were found to be the highest, followed by shoulder injuries, forearm injuries. The upper arm and elbow injuries were the least injuries that occurs.

**Table 2: Upper Limb Injuries Sustained by the Participants**

Body parts	n (%)
<b>Shoulder injuries</b>	
Yes	30(30)
No	70(70)
<b>Upper arm injuries</b>	
Yes	18(18)
No	82(82)
<b>Elbow injuries</b>	
Yes	16(16)
No	84(84)
<b>Forearm injuries</b>	
Yes	23(23)
No	77(77)
<b>Wrist/hand</b>	
Yes	33(33)
No	(67)

Key

N = Frequency

% = Percentage

Table 3 showed that the majority of sport injuries sustained by the footballers were found in the lower extremities part of the body. The hamstring injuries was the highest injury sustained , followed by toes injuries , shin , groin injuries , calf and Achilles injuries , quadriceps and knee injuries, ankle injuries ,and gluteal region injuries .

**Table 3: Lower Limb Injuries sustained by Participants**

Body parts	n (%)
<b>Gluteal region injuries</b>	
Yes	11(11)
No	89(89)
<b>Groin injuries</b>	
Yes	26(26)
No	74(74)
<b>Quadriceps injuries</b>	
Yes	20(20)
No	80(80)
<b>Hamstring injuries</b>	
Yes	49(49)
No	51(51)
<b>Knee injuries</b>	
Yes	20(20)
No	80(80)
<b>Shin injuries</b>	
Yes	39(39)
No	61(61)
<b>Calf injuries</b>	
Yes	21(21)
No	79(79)
<b>Achilles injuries</b>	
Yes	21(21)
No	17(17)
<b>Ankle injuries</b>	
Yes	29(29)
No	71(71)
<b>Foot injuries</b>	
Yes	19(19)
No	81(81)
<b>Toes injuries</b>	
Yes	43(43)
No	57(57)

Key N = Frequency % = Percentage



Table 4 shows the highest risk factor for sport injuries among the participants was the nature of the playing field in which only one of the respondent's playing field has grasses and the rest of the playing fields are sandy in nature.

The second risk factor that leads to sport injuries after nature of playing field among amateur footballers was cool down ,followed by sport dress, nature of foot wears(inserts), warm up and holes in the playing pitches were least. Regarding the number of times played per week, table 4 showed that amateur footballers played more than three times per week, some of them played thrice weekly, some of them played twice in a week and the rest of them played once in a week.

**Table 4: Risk factors of sport injuries**

Risk factors	n (%)
Warm up	
Yes	76(76)
No	24(24)
Cool down	
Yes	31(31)
No	69(69)
Holes in playing field	
Yes	71(71)
No	21(21)
Playing field grasses/sand	
Yes	1(1)
No	99(99)
Sport dress	
Yes	61(61)
No	39(39)
Foot inserts	
Yes	69(69)
No	31(31)
Number of times played/week	
Twice	34(34.5)
Thrice	12(12.1)
Greater than 3times/week	30(30.1)

Key %=percentage n=frequency  
 $\bar{x} \pm SD$ =mean and standard deviation

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Body part Interventions

Table 5: Patterns of Management of Sport Injuries

Variables	n(%)
Ignored	
Yes	18(18)
No	82(82)
First aid	
Yes	53(53)
No	47(47)
Traditional healers	
Yes	46(46)
No	54(54)
Self medications	
Yes	19(19)
No	81(81)
Stretch/ice	
Yes	19(19)
No	81(81)
Hospital	
Yes	17(17)
No	83(83)
NSAIDS	
Yes	37(37)
No	63(63)
Orthoses	
Yes	11(11)
No	89(89)
Massage	
Yes	2(2)
No	98(98)
Mobilization	
Yes	24(24)
No	76(76)
Hot water	
Yes	20(20)
No	80(80)
Antibiotics	
Yes	34(34)
No	66(66)
Topical analgesics	
Yes	33(33)
No	67(67)
Others	
Yes	2(2)
No	92(92)

Key n=frequency %=percentage

	First aid	T.B.S	Self-Med	Stretch & ice	Hosp. mgt	NSAIDS	Orthoses	Massage	Mobilizat ion	Hot H <sub>2</sub> O	A/Biotics	T. Analgesics
Shoulder	X <sup>2</sup> =0.002 P=0.965	X <sup>2</sup> =1.503 P=0.220	X <sup>2</sup> =0.028 P=0.867	X <sup>2</sup> =0.028 P=0.867	X <sup>2</sup> =1.218 P=0.270	<b>X<sup>2</sup>=5.313</b> <b>P=0.021*</b>	X <sup>2</sup> =0.238 P=0.625	X <sup>2</sup> =4.762 P=6.029	X <sup>2</sup> =2.673 P=0.103	X <sup>2</sup> = P=1.000	<b>X<sup>2</sup>=3.743</b> <b>P=0.053*</b>	<b>X<sup>2</sup>=3.743</b> <b>P=0.053*</b>
U/ arm	X <sup>2</sup> =0.645 P=0.422	X <sup>2</sup> =2.018 P=0.155	X <sup>2</sup> =0.146 P=0.700	X <sup>2</sup> =0.148 P=0.700	X <sup>2</sup> =0.424 P=0.515	<b>X<sup>2</sup>=3.893</b> <b>P=0.041*</b>	X <sup>2</sup> =2.824 P=0.030	X <sup>2</sup> =0.448 P=0.503	X <sup>2</sup> =1.999 P=0.157	X <sup>2</sup> =0.152 P=0.606	<b>X<sup>2</sup>=5.125</b> <b>P=0.024*</b>	<b>X<sup>2</sup>=5.125</b> <b>P=0.024*</b>
Elbow	X <sup>2</sup> =0.69 P=0.703	X <sup>2</sup> =0.039 P=0.844	X <sup>2</sup> =2.012 P=0.156	X <sup>2</sup> =2.012 P=0.156	X <sup>2</sup> =0.237 P=0.601	X <sup>2</sup> =1.177 P=0.278	X <sup>2</sup> =0.044 P=0.834	X <sup>2</sup> =0.389 P=0.533	X <sup>2</sup> =0.288 P=0.502	X <sup>2</sup> =1.974 P=0.160	X <sup>2</sup> =0.026 P=0.871	X <sup>2</sup> =0.026 P=0.871
F/arm	X <sup>2</sup> =0.320 P=0.571	X <sup>2</sup> =2.913 P=0.088	X <sup>2</sup> =2.061 P=0.151	X <sup>2</sup> =2.061 P=0.151	<b>X<sup>2</sup>=14.842</b> <b>P=0.007*</b>	<b>X<sup>2</sup>=7.354</b> <b>P=0.687</b>	X <sup>2</sup> =0.162 P=0.687	<b>X<sup>2</sup>=6.832</b> <b>P=0.007*</b>	<b>X<sup>2</sup>=3.836</b> <b>P=0.050*</b>	X <sup>2</sup> =0.903 P=0.342	X <sup>2</sup> =5.846 P=0.016	X <sup>2</sup> =5.846 P=0.016
Wrist/han d	X <sup>2</sup> =1.144 P=0.285	X <sup>2</sup> =1.841 P=0.173	X <sup>2</sup> =3.142 P=0.076	X <sup>2</sup> =3.142 P=0.072	X <sup>2</sup> =2.184 P=0.139	X <sup>2</sup> =0.009 P=0.926	<b>X<sup>2</sup>=5.247</b> <b>P=0.022*</b>	X <sup>2</sup> =0.267 P=0.606	X <sup>2</sup> =0.002 P=6.968	X <sup>2</sup> = P=	X <sup>2</sup> =0.993 P=0.319	X <sup>2</sup> =0.993 P=0.319
Gluteal	X <sup>2</sup> =1.931 P=0.166	X <sup>2</sup> =0.001 P=0.960	X <sup>2</sup> =0.005 P=0.917	X <sup>2</sup> =0.005 P=0.917	X <sup>2</sup> =0.012 P=0.917	X <sup>2</sup> =0.502 P=0.470	X <sup>2</sup> =0.046 P=0.820	X <sup>2</sup> =0.252 P=0.616	X <sup>2</sup> =0.730 P=0.388	X <sup>2</sup> =0.919 P=0.338	X <sup>2</sup> =0.249 P=0.618	X <sup>2</sup> =0.249 P=0.618
Groin	X <sup>2</sup> =1.028 P=0.311	X <sup>2</sup> =1.833 P=0.173	X <sup>2</sup> =0.001 P=0.917	X <sup>2</sup> =0.001 P=0.917	X <sup>2</sup> =0.920 P=0.338	X <sup>2</sup> =0.860 P=0.390	X <sup>2</sup> =2.431 P=0.110	X <sup>2</sup> =0.717 P=0.397	X <sup>2</sup> =0.165 P=0.685	X <sup>2</sup> =0.468 P=0.494	X <sup>2</sup> =0.006 P=0.910	X <sup>2</sup> =0.006 P=0.910
Quadrice ps	X <sup>2</sup> =0.400 P=0.841	X <sup>2</sup> =0.362 P=0.547	X <sup>2</sup> =1.316 P=0.250	X <sup>2</sup> =1.316 P=0.251	X <sup>2</sup> =2.551 P=0.110	X <sup>2</sup> =1.544 P=0.214	X <sup>2</sup> =0.409 P=0.523	X <sup>2</sup> =0.510 P=0.475	X <sup>2</sup> =0.219 P=0.646	X <sup>2</sup> =6.250 P=0.012	X <sup>2</sup> =2.184 P=0.139	X <sup>2</sup> =2.184 P=0.139
Hamstrin g	X <sup>2</sup> =0.662 P=0.416	X <sup>2</sup> =0.382 P=0.537	X <sup>2</sup> =0.025 P=0.874	X <sup>2</sup> =0.025 P=0.874	X <sup>2</sup> =0.502 P=0.470	<b>X<sup>2</sup>=8.102</b> <b>P=0.017</b>	X <sup>2</sup> =2.333 P=0.127	X <sup>2</sup> =1.961 P=0.161	X <sup>2</sup> =1.101 P=0.204	X <sup>2</sup> =0.160 P=0.689	<b>X<sup>2</sup>=7.168</b> <b>P=0.007*</b>	<b>X<sup>2</sup>=7.168</b> <b>P=0.007*</b>
Knee	X <sup>2</sup> =0.642 P=0.422	X <sup>2</sup> =1.973 P=0.160	X <sup>2</sup> =0.260 P=0.610	X <sup>2</sup> =0.260 P=0.610	<b>X<sup>2</sup>=5.120</b> <b>P=0.024*</b>	X <sup>2</sup> =0.430 P=0.826	X <sup>2</sup> =0.409 P=0.522	X <sup>2</sup> =1.148 P=0.284	X <sup>2</sup> =1.658 P=0.108	X <sup>2</sup> = P=0.000	X <sup>2</sup> =0.011 P=0.910	X <sup>2</sup> =0.011 P=0.910
Shin	X <sup>2</sup> =0.076 P=0.783	X <sup>2</sup> =4.130 P=0.040	X <sup>2</sup> =3.176 P=0.075	X <sup>2</sup> =3.176 P=0.075	X <sup>2</sup> =0.118 P=0.731	X <sup>2</sup> =0.369 P=0.544	X <sup>2</sup> =0.715 P=0.398	X <sup>2</sup> =3.192 P=0.074	X <sup>2</sup> =0.620 P=0.531	X <sup>2</sup> =0.554 P=0.457	X <sup>2</sup> =0.013 P=0.910	X <sup>2</sup> =0.013 P=0.910
Achilles	X <sup>2</sup> =0.518 P=0.472	X <sup>2</sup> =0.085 P=0.770	<b>X<sup>2</sup>=3.888</b> <b>P=</b>	<b>X<sup>2</sup>=3.888</b> <b>P=</b>	X <sup>2</sup> =1.282 P=0.258	<b>X<sup>2</sup>=6.841</b> <b>P=0.001*</b>	<b>X<sup>2</sup>=11.478</b> <b>P=0.001*</b>	X <sup>2</sup> =0.834 P=0.362	X <sup>2</sup> =2.333 P=0.127	<b>X<sup>2</sup>=11.660</b> <b>P=0.001*</b>	<b>X<sup>2</sup>=7.432</b> <b>P=</b>	<b>X<sup>2</sup>=7.432</b> <b>P=0.006*</b>
Calf	X <sup>2</sup> =0.846 P=0.358	X <sup>2</sup> =3.251 P=0.071	X <sup>2</sup> =1.551 P=0.213	X <sup>2</sup> =1.551 P=0.213	X <sup>2</sup> =0.079 P=0.779	X <sup>2</sup> =5.884 P=0.015	<b>X<sup>2</sup>=4.455</b> <b>P=0.035*</b>	X <sup>2</sup> =1.035 P=0.309	X <sup>2</sup> =1.375 P=0.241	<b>X<sup>2</sup>=8.680</b> <b>P=0.003*</b>	<b>X<sup>2</sup>=4.604</b> <b>P=0.032*</b>	<b>X<sup>2</sup>=4.604</b> <b>P=0.032*</b>
Ankle	X <sup>2</sup> =0.226 P=0.625	X <sup>2</sup> =0.415 P=6.510	X <sup>2</sup> =0.816 P=0.366	X <sup>2</sup> =0.816 P=0.366	X <sup>2</sup> =0.024 P=0.876	X <sup>2</sup> =0.000 P=0.987	<b>X<sup>2</sup>=10.147</b> <b>P=0.001*</b>	X <sup>2</sup> =0.479 P=0.480	X <sup>2</sup> =0.867 P=0.353	X <sup>2</sup> =7.164 P=0.007	X <sup>2</sup> =0.061 P=0.804	X <sup>2</sup> =0.061 P=0.804
Foot	X <sup>2</sup> =1.226 P=0.543	X <sup>2</sup> =1.019 P=0.607	X <sup>2</sup> =2.253 P=0.324	X <sup>2</sup> =2.253 P=0.324	X <sup>2</sup> =0.318 P=0.572	<b>X<sup>2</sup>=6.794</b> <b>P=0.001*</b>	X <sup>2</sup> =0.379 P=0.827	X <sup>2</sup> =0.037 P=0.827	<b>X<sup>2</sup>=7.326</b> <b>P=0.006*</b>	X <sup>2</sup> =3.745 P=0.154	<b>X<sup>2</sup>=7.637</b> <b>P=0.001*</b>	<b>X<sup>2</sup>=7.637</b> <b>P=0.001*</b>
Others	X <sup>2</sup> =0.020 P=0.889	X <sup>2</sup> =2.389 P=0.122	X <sup>2</sup> =2.715 P=0.099	X <sup>2</sup> =2.715 P=0.099	<b>X<sup>2</sup>=4.181</b> <b>P=0.041*</b>	X <sup>2</sup> =1.972 P=0.160	X <sup>2</sup> =0.550 P=0.456	X <sup>2</sup> =0.548 P=0.459	X <sup>2</sup> =0.643 P=0.423	X <sup>2</sup> =3.666 P=0.056	X <sup>2</sup> =1.798 P=0.180	X <sup>2</sup> =1.798 P=0.180

\* significant

## DISCUSSION

The aim of this study was to find the prevalence of sport injuries and patterns of management among local footballers in Tarauni Local Government area. The most prevalent upper limb injuries among the Amateur footballers were the hand and wrist injuries. This study is consistent with the study of Melvin and Manning (2006) reported that, the wrist and hand injuries have occurred often at the goal keeper position and prevalent in other players due to a fall on the ground. Moreso, Katreenaparmelee *et al* (2005) also found wrist injuries to be commonest among footballers spatially acute fracture.

The reason why wrist and hand injuries is been more prevalent among goalkeepers than any other player may be due to attempting to retrieve a soccer ball and in other players is due to collision with other player (Malvin R. *et al* 2006). The outcome of this study showed that, shoulder injuries has high prevalence among the participants after hand and wrist injuries in the upper extremities. This was also observed by Lee D. and Kaplan (2005). This was in line with John E Bonza *et al* (2006) in his study titled shoulder injuries among United State high schools athletes. in contrast to the finding of this from this study, Malvin R. *et al* (2006) found shoulder injuries to be infrequent. Fried T. *et al* (1992) suggested that, shoulder injuries among footballers was either because of collision or due to repetitive throwing of ball.

On other hand, the lower extremities injuries were the most injuries that occurred during soccer game and the highest sport injuries among footballers are seen in the lower extremities (Michael J. *et al* 2002). The prevalence of hamstring injuries was found to be highest among the participants who sustained lower extremities injuries. This was observed by Hurg sward (2010) and Matthew prior (2009). Moreover, the outcomes of this study showed that, the foot injuries were the second most prevalent injuries in the lower extremities after hamstring injuries. Malvin R. *et al* (2006) observed that, most commonly involved foot

injuries among footballers were mid foot sprain, fractures and hematomas. In contrast to the finding above, Soderman *et al* (2001) found ankle injuries to be the highest lower limb injuries amateur footballers.

The outcomes of this study also showed that, the highest risk factor that leads to sport injuries among participants was the nature of the playing field such as pressings in several part of the pitch, holes in the playing pitches were the commonest risk factors for sport injuries among the participants. This was observed by Volpi (2000).

The outcome of this study revealed that, most of the participants do not do cool down exercises after training or matches. This was also noted by Volpi (2000).as shown by the outcomes of this study; the participants have been engaged in warm up exercises. This is in line with the findings of Volpi (2000).the study also showed that, the participants have been using poorly designed foot wears especially boots designed with studs, bars, and this predisposed them to get injured more importantly if the playing pitch is uneven in nature. This was also stated by Volpi (2000).

The findings of this study also portrayed that, most of the participants played more than three times in a week and this may be a predisposing factor to the sport injuries (overuse injury).this finding is in correspondence with the work of Volpi(2000) and wayne T.*et al*(2003). The outcomes of this study showed that, the patterns of management sport injuries among the participants were medical, traditional and some physiotherapy. The study revealed that, the participants used first aid as a baseline for treatment of their sport injuries. This was also observed by R Bahr *et al* (2003).

The findings of this study also showed that, the highest percentage of the participants have been using traditional means of healings (traditional bone setting, self-medications) when they sustained injuries

during football match or training. Moreover, the study revealed that, the participants do not use physiotherapy means of managing sport injuries. The reason why this was so might be the participants (Amateur footballers) are not aware of physiotherapy techniques of managing sport injuries.

## CONCLUSION

Based on the outcomes of this study, it was concluded that, there is high prevalence of sport injuries among the Amateur footballers in Tarauni local government area.

## RECOMMENDATIONS

Based on the results and conclusions of the present study, the following recommendations were put forth:

- There is need to orient the local footballers in Tarauni local government area on the causes and risk factors of sport injuries that lead to sport injuries among them.
- The awareness programme should be organized to educate local footballers in Tarauni local government area on the roles of physiotherapy in the treatment of various sport injuries.
- Further study should be conducted to create awareness on roles of physiotherapy in the management of sport injuries to the local footballers.

## REFERENCES

- Adamczyk, G., and Luboinski, L.(2002) '*Epidemiology of football related injuries,part I*'.carolina medical center.32:462-72.
- Andersen TE., Tenga A., Engebretsen L, et al. (2004) '*Video analysis of injuries and incidents in Norwegian professional football*'. Br J Sports Med.38:626–31.

- Askling C., Karlsson, J., Thorstensson, A. (2003) '*Hamstring injury occurrence in elitesoccer players after preseason strength training with eccentric overload*'. Scand J Med Sci Sports 13(4): 244-250.
- Beynon, BD., Vacek, PM, Murphy, D et al.(2005) '*First-time inversion ankle ligament trauma: the effects of sex, level of competition, and sport on the incidence of injury*'. Am J Sports Med; 33:1485-91.
- Boden, BP., Kirkendall, DT., and Garrett, WE, Jr. (1998) '*Concussion incidence in elite college soccer players*'. Am J Sports Med 26: 238-241.
- Brynhildsen, J., Ekstrand, J., Jeppsson, A., and Tropp, H (1990) '*Previous injuries and persisting symptoms in female soccer players*'. Int J Sports Med 11: 489-492.
- Cain DJ. and Maffuli, N.(2005). '*Epidemiology of children's individual sport injuries affecting area of medicine and sport science research*'. Med sport science:84:1-17
- Caraffa A, Cerulli G, Proietti M et al (1996) '*Prevention of anterior cruciate ligament injuries in soccer. A prospective controlled study proprioceptive training*'. Knee Surg Sports Traumatol Arthrosc 4:19-21
- Drawer S., and Fuller, CW. (2001) '*Propensity for osteoarthritis and lower limb joint pain in retired professional soccer players*'. Br J Sports Med 35: 402-408.
- Dvorac, J. and Baumann (2002). '*Overall analysis, FIFA medical report*'. FIFA medical assessment and research centers.32:26-56.



- Ekstrand, J., Gillquist, J., Möller, M., et al. (1983) '*Incidence of soccer injuries and their relation to training and team success*'. *Am J Sports Med.* 11:63–7
- Ekstrand, J. and Gillquist, J. (1983) '*Soccer injuries and their mechanisms: a prospective study*'. *Med Sci Sports Exerc* 15: 267–270.
- Ekstrand, J., Roos, H., and Tropp H. (1990) '*Normal course of events amongst Swedish soccer players: an 8-year follow-up study*'. *Br J Sports Med* 24(2): 117–119.
- Fried T. Lloyd G. *an overview of common soccer injuries and Prevention*. *sport MED* 1992; 14(4):269-75
- Fuller, CW., Dick, RW. Corlette, J., and Schmalz R (2007) '*Comparison of the incidence, Nature and cause of injuries sustained on grass and new generation artificial turf by male and female football players*'. Part 1: Match injuries. *Br J Sports Med, Suppl.*
- Hägglund, M., Waldén, M., and Ekstrand, J. (2005) '*Injury incidence and distribution in elite football: a prospective study of the Danish and the Swedish top divisions*'. *Scand J Med Sci Sports* 15:21–8.
- Hägglund, M., Waldén, M., and Ekstrand J. (2003) '*Exposure and injury risk in Swedish elite football: a comparison between seasons 1982 and 2001*'. *Scand J Med Sci Sports* 13:364–70.
- Hawkins, RD., Fuller, CW. A (1999) '*Prospective epidemiological study of injuries in four English professional football clubs*'. *Br J Sports Med* 33:196–203.

- Hawkins, RD., Hulse, MA., and Wilkinson C. (2001) '*The association football medical research programme: an audit of injuries in professional football*'. Br J Sports Med 35:43-7.
- Inklaar, H. (1994) '*Soccer injuries. II: Aetiology and prevention*'. Sports Med 18: 81-93.
- Karlsson, C., and Thorstensson, J. A. (2003). '*Hamstring injury occurrence in elite soccer players after preseason strength training with eccentric overload*'. Scand J Med Sci Sports 13:244-50.
- Murphy DF, Connolly DA, Beynon BD (2004) '*Risk factors for lower extremity injury: a review of the literature*'. Br J Sports Med 37:13-29
- Nielsen, AB., and Yde J. (1989) '*Epidemiology and traumatology of injuries in soccer*'. Am J Sports Med 17(6): 803-807.
- Ostenberg A, Roos H. (2000) '*Injury risk factors in female European football. A prospective study of 123 players during one season*'. Scand J Med Sci Sport 2000: 10: 279-285.
- Silvers. H), and Mandelbaum, BR. (2007) '*Prevention of Anterior Cruciate Ligament Injury in the Female Athlete*'. Br J Sports Med, Suppl.
- Silvers, H), and Mandelbaum, BR. (2007) '*Prevention of anterior cruciate ligament injury in the female athlete*'. Br J Sports Med. 41(Suppl 1): 52- 59.
- Soderman K, Adolphson J, Lorentzon R, Alfredson H. '*Injuries in adolescent female players in European football: a prospective study over one outdoor football season*'. Scand J Med Sci Sports 2001: 11: 299-304.

- Soderman K, Alfredson H, Pietila T, Werner S. (2001) *Risk factors for leg injuries in female soccer players: a prospective investigation during one out-door season.* *Knee Surg Sports Traumatol Arthrosc.* 9(5): 313-321.
- Van Mechelen W, Hlobil H, Kemper HC (1992) Incidence, severity aetiology and prevention of sports injuries. A review of concepts. *Sports Med* 14 (2):82-99.
- Volpi P, Pozzoni R, Galli M (2003) *The major traumas in youth football.* *Knee Surg Sports Traumatol Arthrosc* 11:399-402
- Volpi P (2000) *Soccer injury epidemiology.* *J Sports Traumatol* 22:123-131
- Wayne T. Hoskin et al. injuries in Australian Rules football: A review of the literature *acoll* 2-04b(2013)
- Yde J and Nielsen AB (1990) *SPORT injuries in adolescents' ball games: soccer, handball and basketball.* *Sports r J Sports Med* 24: 51.