



SAFETY AWARENESS, PRACTICES AND INJURY PREVENTION OF STUDENT – ATHLETES OF ZAMBALES NATIONAL HIGH SCHOOL

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Abstract-The purpose of the study was to assess the safety awareness, practices and injury prevention of athletes in Zambales National High School. Research questions were formulated to guide the study. Research question one aimed to identify the profile of the respondents as to their age, sex and sports event, research question number two was intended to know the injuries experienced by the student-athletes before, during and after sports engagement, research question number three and four was meant to assess the level of safety awareness and practices of athletes before, during and after sports engagement and the level of their safety awareness and practices in terms of first aid, healthy diet and nutrition and the last question focused on the differences between the level of awareness and practices of the athletes in any sports before and during sports engagement. The research study adopted descriptive research design. The samples were composed of 181 respondents, typically male volleyball athletes from the age group of 11-15 years old. The data were collected by the used of questionnaires.

The findings revealed that the athlete-respondents never experienced severe injuries before, during and after sports engagement. It was also revealed that they were aware of safety practices to be performed before, during, and after sports engagement. The data further revealed that they always practice safety and first aid and follows healthy diet and proper nutrition. It was revealed that there is no significant difference on the assessment of athlete-respondents on the level of injuries before, during and after sports engagement. Based on the findings of the study the researcher recommended that the coaches and sports officials must continue conducting lectures and orientation to avoid injury and casualty among athletes while engaging in sports. It was also recommended that the sports officials must have strategic planning about training in first aid and medical team assistance, to conduct seminars and lectures for healthy diet and proper nutrition and to constantly conduct intensive training on first aid among athletes, medical team and sports officials. Taking limitations and delimitations of the study, the researcher suggested conducting a parallel study with in-depth and wider in scope to validate the findings obtained in this study.

Keywords: Safety Awareness, Practices, Injury Prevention, First Aid, Student-athletes, Zambales National High School.

1. INTRODUCTION

Sport helps to strengthen important values such as team spirit and solidarity, and contributes to personal development and fulfillment. Higher safety level helps to promote physical activity and therefore combining physical activity promotion and injury prevention will increase the resulting health benefits.

If there is one best means to develop the highest human potential in mind and body, and the best tool to transcend social, political and cultural differences, it is sports. More than the physical and mental development is the formation of admirable character that makes sports incomparable to any human activity. If education teaches values, sports practices values. Beyond the self, sports cure social ills. People of varied races, culture, political affiliations and economic strata meet eye to eye in the playing field. Convergence of desires for social integration and peace is achieved through sports. Whatever level of sporting activity one gets involved in be it for leisure, fun, recreation or for high-level and serious races for victories it is always good for the person, the nation and the world. Engagement in sports and physical activity, according to Weber (1971), either actively as an athlete or in a passive way as a spectator, is of great importance in many people's lives across countries and throughout history.

Investigation from a diversity of theoretical perspectives displays that one of the best predictors of children's continuing involvement in sports is the development of positive feelings for sport involvement (Martins; Rosado; Ferreira & Biscaia, 2014). In sport, the concept of engagement reflects the energy in action, the connection between the person and the activity, and it is considered as a form of active involvement between the individual and the task (Russell, Ainley, & Frydenberg, 2005). Also, the concept of athletes' engagement reflects a relatively stable and long lasting experience that is generically characterized through positive emotions and cognitions when engaged in the act of practicing the given activity (Lonsdale, Hodge, & Raedeke, 2007).

With every type of sport, there are different kinds of injuries Sport injuries are injuries that most commonly occur during sports or exercise. Some sports injuries result from accidents, others are due to poor training practices,

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improper equipment and lack of conditioning, insufficient warm – up and stretching. Also injuries can be different among athletes and some sports are more vulnerable to injuries than the others, if an athlete recognizes risks for certain injury types, he can proactively avoid possible creation of injury. This is not only the method to prevent injuries, but it can at least lower possibility to get injured in specific sports types (Mero, 1997).

Commonly injury is defined as the physical damage that results when a human body is suddenly and unexpectedly subjected to intolerable levels of external energy or forces (Baker, 1992). The time between exposure to the external energy or forces and the appearance of an injury is relatively short. However, overuse injuries that result from longer term exposure to external forces represent a significant part of the entire spectrum of sports related injuries and therefore should not be overlooked. Sports injuries are commonly being defined as any physical complaint sustained by a player that result from a match or training.

During exercising and sports activities, there is always a risk for injuries. Sport injuries are defined as injuries that happen during sports. Injuries differ from field of sports and as an athlete. Types of injury and grade of severity, would lead to various kind of rehabilitation methods (Mero, 2007). Coaching is in key element to prevent athlete's injury. Coach can teach useful methods for an athlete of injury prevention. Outer conditions for injury prevention are proper equipment, hygiene and training circumstances. Inner conditions are food and psychological training. Different sports types have their own injuries and individual ways for prevention. (Renstrom, 2002). But certainly sporting also holds a risk of injury due to accidents related to sports or due to overexertion. Although the net health gains from regular physical activity exceed the risk of injury (BMSG, 2000; BASPO, 2001), the burden of injuries related to sports and physical activities is substantial (Engelbrechtsen & Bahr, 2009).

Sports injuries can affect on several levels of well – being. These are physical, emotional and social well –being. Physical well – being includes pain, rehabilitation, physical change in athletes' body and either permanent or temporary physical restrictions. Emotional well – being includes feelings of loss and grief, trauma and rehabilitation. Social well – being includes dependence of others, separation from family and friends, new relationships and maybe loss of social roles. Self – concept includes loss of sense of control, dealing with altered self – image, threat to important life goals and values as well as necessity for decision making under stress (Russell, 2011).

Sports injury epidemiology evolved from the pioneering work of Haddon (1970). He expanded on the standard epidemiology approach by adding a time sequence to emphasize the event leading up to the injury. The addition of a time sequence led to the creation of Haddon's Matrix, a conceptual model used to create ideas for the prevention of various injuries. Haddon's Matrix is divided into three time-phases: the pre-event, event, and post-event. Each phase adds to the potential likelihood that an injury would occur due to the predisposing factors leading up to the injury (pre-event), the type of event in which the injury arises (event), and the consequences that transpire after the injury occurs (post-event).

Based on the above-mentioned studies and cases, the researcher who is currently teaching Sports Track assessed the safety awareness, practices and injury prevention of athletes in Zambales National High School. Findings of this study will provide coaches and trainers as well as physical educators and sports enthusiast with adequate information to avoid injuries before, during and after every sport, whether their physical activity is for fun, fitness or competition makes health and safety priority. It will likewise assist in establishing corrective measures so they can prevent injuries that might occur before, during and after their engagement in sports and other sport-related physical activity.

2. OBJECTIVES OF THE STUDY

The study attempted to assess the safety awareness, practices and injury prevention of student-athletes in Zambales National High School. Specifically, it sought to answer the following questions: (1.) What are the profile of the student-athletes in terms of Age, Sex, and Sports Event; (2.) What are the the injuries experienced by the athletes before the sports engagement, during sports the engagement, and after the sports engagement; (3.) What are the level of safety awareness of the athletes in any sports as to before the sports engagement, during the sports engagement, and after the sports engagement; (4.) What are the level of safety awareness and practices applied of athletes in terms of First Aid and Healthy Diet and Nutrition; (5.) Is there a significant difference between the level of awareness and practices of the athletes in any sports before and during sports participation?

3. METHODOLOGY

The researcher utilized a descriptive research using a quantitative method. It is designed for the researcher to analyze and assess the safety awareness, practices and injury prevention of student-athletes during and after sports engagement. Descriptive research provides essential knowledge about the nature of objects and persons. The survey is a common data gathering procedure from the field regarding current conditions (Calmorin, 2003). Hence, said method is believed to be appropriate for the investigation because it accentuates the safety awareness, practices and injury prevention of student-athletes in Zambales National High School. The study used the total population sampling technique. The main instrument used in gathering data was the researcher's self – administered



questionnaire. It was validated using thirty (30) respondents from Senior High School student-athletes of President Ramon Magsaysay State University. The collection, analysis and interpretation of data were needed in the preparation of the base reference data to assess the level of safety awareness, practices and injury prevention of student-athletes. For analyzing and interpreting the data effectively, the researcher used mean, percentage and ANOVA as statistical treatment.

4. RESULTS AND DISCUSSION

A total of 181 student-athletes were included in the study from junior high school and senior high school in Zambales National High School. The greatest frequency of the respondents were 129 or 71.30% are from the age group of 11-15 years old and 52 or 28.70% are from the age group of 16-20 years old. The computed mean age of the respondents was 14.43 years old. Majority of the respondents were from the age group between 11-15 years old and they are considered relatively young in their adolescent period. Andersen (2006) stated that physical activity is an important lifestyle factor with preventive potential also in early ages, in 11–15-year-old children, the degree of physical activity is also related to the quality of life according to Nesheim & Haugland (2003). Also, at this age children are full of energy and it is the age of play and physical activities amongst the youth.

The greatest frequency of respondents were 119 or 65.70% are males and 62 or 34.40% are females. Compared to females, men are physically fit to engage in sports and high-risk takers and men are more susceptible and vulnerable to pain. Sabo & Veliz (2008) stated those girls that engage in sports experiences bullying, social isolation, negative performance evaluations, or the loss of their starting position. Additionally, girls were afraid to be tagged gay, enough to push them to quit in sports.

The study revealed that most of the athlete-respondents were from volleyball event. Out of 181 respondents, 26 or 14.36% are engaged in basketball event; 64 or 35.36%, from volleyball; 18 or 9.4%, from athletics; 13 or 7.18% from Badminton and Swimming respectively; 12 or 6.63% from Sepak Takraw and 10 or 5.52 % Taekwondo; 5 or 2.76% from Table Tennis and 9 or equivalent to 4.7% is from Softball event.

4.1 Assessment on Injuries Experience Before, During and After Sports Engagement Injuries Experience Prior the Sports Engagement

Evidently experienced ankle injury and shoulder injury manifested in its high mean value of 2.10 and 2.04 with ranked 1st and 2nd respectively, while assess “never experienced” is on anterior cruciate ligament injury (ACL), Achilles tendinitis, runner’s knee, shin splints and gross strain with mean value of 1.45, 1.56, 1.77, 1.61 and 1.66 respectively. The computed overall weighted mean on the assessment of injuries experienced before the sports engagement was 1.76 with qualitative interpretation of “never” experienced.

4.2 Injuries Experienced During the Sports Engagement

Assessed “seldom” experienced on shoulder injury, ankle injury and pulled muscles manifested in their weighted mean of 1.98, 1.89, and 1.81 respectively while assessed “never” on groin strain, hamstring injury, shin splints, runner’s knee, Achilles tendinitis and anterior cruciate ligament injury demonstrated on their weighted mean of 1.56, 1.67, 1.55, 1.71, 1.54, and 1.46 respectively. The computed overall weighted mean on the responses towards injuries experienced during sports engagement was 1.71 with qualitative interpretation of “never” experienced.

4.3 Injuries Experienced After the Sports Engagement

The athlete-respondents assessed “seldom” experienced on swollen muscle manifested in its weighted mean of 1.97 while “never” experienced on concussions, blisters, abrasions, fracture, dislocation, tennis of gold elbow and knee ligaments injury manifested in their mean values of 1.61, 1.65, 1.52, 1.44, 1.38, 1.34 and 1.55 respectively. The computed overall weighted mean on responses towards injuries experienced after the sports engagement was 1.56 with qualitative interpretation of “never” experienced.

4.4 Level of Safety Awareness of the Athletes in Sports Engagement

4.4.1 Before Sports Engagement

It can be noted that the athlete-respondents assessed “aware “ on coaches giving them appropriate skills instruction for practice and competition, for giving them warm- up that helps them reduce friction joints and extend muscles manifested in their weighted mean of 4.15 and 4.06 which ranked 1st and 2nd respectively while least on having plans for access to emergency transportation and notification of a physician in case of emergency with mean of 3.49 and ranked 10th. The computed overall weighted mean on the assessment towards level of awareness before the sports engagement was 3.87 with qualitative interpretation of “aware”.

4.4.2 During Sports Engagement

It can be noted that the athlete-respondents assessed “aware “ on the provision of drinking water during sports competition to avoid dehydration and for endurance manifested in its mean value of 4.03 and ranked 1st while least



on the awareness on providing a medical team in case of emergency and accident with mean of 3.63. The computed overall weighted mean was 3.83 with qualitative interpretation of “aware”.

4.4.3 After Sports Engagement

The athlete-respondents assessed “always aware” for athletes to take time for rest and recovery manifested in its high mean value of 4.31 and ranked 1st while “aware” of having an immediate feed backing between the coach and the athlete with mean of 3.77 and ranked 10th. The computed overall weighted mean on the assessment towards level of awareness of athlete after the sports engagement was 3.94 with qualitative interpretation of “aware”.

4.5 Perception towards Safety Awareness, Practices and Injury Prevention Applies for Athletes as to Safety and First Aid

The athlete-respondents assessed “practice” on coaches requiring all athletes to submit themselves for medical screening to detect potential health problem and understand the importance of first aid in case of sports injury manifested in their weighted mean value of 4.13 and 4.09 which ranked 1st and 2nd respectively while least on the conduct of orientation on the basic principles of first aid such as application of adhesive bandage directly on bleeding part or wounded part of the body with weighted man of 3.85 and ranked 10th. The computed overall weighted mean was 3.93 with qualitative interpretation of “always practiced”.

4.6 Perception towards Safety Awareness, Practices and Injury Prevention Applies for Athletes as to Healthy Diet and Nutrition

The athlete-respondents assessed “practice” on coaches requiring all athletes to submit themselves for medical screening to detect potential health problem and understand the importance of first aid in case of sports injury manifested in their weighted mean value of 4.13 and 4.09 which ranked 1st and 2nd respectively while least on the conduct of orientation on the basic principles of first aid such as application of adhesive bandage directly on bleeding part or wounded part of the body with weighted man of 3.85 and ranked 10th. The computed overall weighted mean was 3.93 with qualitative interpretation of “always practiced”.

The respondents noted “practice” on the coaches action of ensuring appropriate food supplement for better absorption of vitamins and mineral manifested in its high mean value of 3.97 and ranked 1st while least “practice” on safety awareness for athletes to cut down sugar, caffeine and salty foods intake. The computed overall weighted mean was 3.83 with qualitative interpretation of “practice”.

4.7 Analysis of Variance to Test Differences in the Assessment towards Assessment on Injuries Experienced during, before and after Sports Engagement

The computed F-value of 2.398756 which is lower than ($<$) the F-Critical value of 3.422132 at 0.05 Alpha Level of Significance, therefore the Null Hypothesis is Accepted, hence there is no significant difference on the assessment towards injuries experienced during, before and after sports engagement.

4.8 Analysis of Variance to Test Differences in the Assessment towards Safety Awareness, Practices and Injury Prevention Applies for Athletes

The computed F-value of 7.215251 which is greater than ($>$) the F-Critical value of 4.413873 at 0.05 Alpha Level of Significance, therefore the Null Hypothesis is Accepted, hence there is no significant difference in the assessment towards safety awareness, practices and injury prevention applies for athletes.

CONCLUSIONS AND RECOMMENDATIONS

The samples were composed of 181 respondents, typically male volleyball athletes from the age group of 11-15 years old. The data were collected by the used of questionnaires. The findings revealed that the athlete-respondents never experienced severe injuries before, during and after sports engagement. It was also revealed that they were aware of safety practices to be performed before, during, and after sports engagement. The data further revealed that they always practice safety and first aid and follows healthy diet and proper nutrition. It was revealed that there is no significant difference on the assessment of athlete-respondents on the level of injuries before, during and after sports engagement. Based on the findings of the study, the researcher recommended that the coaches and sports officials should maintain lectures and orientation among athletes to avoid injury and casualty before, during and after sports engagement. It was also recommended that the sports officials should include in their strategic planning the training in first aid and medical team assistance in case of injury, to conduct seminars and lectures about healthy diet and proper nutrition in regular basis and to constantly conduct intensive training on first aid for athlete, medical team and sports coaches and other sports officials. Taking limitations and delimitations of the study, the researcher suggested conducting a parallel study with in-depth and wider in scope to validate the findings obtained in this study.

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