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Yanda A. Emmanuel
Editorial

Journal of Research and Contemporary Issues in Kinetics and Health education is a publication domiciled in the Department of Human Kinetics and Health Education, University of Lagos, Akoka, Lagos.

In addition to being a continuation of the journal's first volume, this edition is mainly a collection of the research findings and reports presented during the 2014 International Conference held from July 14th to 17th, 2014 at the University of Lagos, Akoka, Lagos, Nigeria. This edition therefore reflects the most current global trends in health promotion. The authors have proposed insightful and important perspectives that researchers can explore with a view to further propagating the benefits of adopting healthier lifestyles, particularly through exercise. These include: evaluation and surveillance of the correlates of physical activity in health promotion; compliance and sustenance, analysis of the psychological and managerial factors inhibiting decisions on health promotion, and the inability of most people to see a relationship between physical exercise and good health.

Recommendations include provision of an enabling environment for health promotion and longevity. In all, the various articles reflect collaboration between authors with different institutional affiliations and specialisations in human performance and health. Papers were peer-reviewed by experts across national and international boundaries. The editors are indeed grateful to all of them.

Special thanks are however due to Gregory Soukup of the University of the Incarnate World, San Antonio, Texas, USA for his presence and academic contributions to the theme of the conference.

Grace Otinwa, Ph.D
June 2015
Editor-in-Chief
SPORT INJURIES: CAUSES AND SAFETY MEASURES

ADEMIJU Pauline U., Ph.D

Abstract
The paper reviewed sport injury: causes of sport injuries and safety measures to prevent injuries during leisure and competitive physical activities. Recommendations were made based on the review of injuries and safety measures.

Introduction
The human life is full of activities that involve formal or informal movements and they are known as sports or physical activity. Sport according to the United Nations (2003), are all forms of physical activity that contribute to physical fitness, mental well-being and social interaction. It includes play, recreation, organised competitive sport and indigenous sport and games.

Physical activities are bodily movements that are produced by skeletal muscles that results in energy expenditure (Otinwa, 2010). Sports and physical activities are far more than a luxury or a form of entertainment; they are also associated with many physical, emotional, social and economic benefits.

UPDATEPLUS (2008), reported that physical activities reduce the risk of early death associated with coronary heart disease, stroke, high blood pressure, type 2 diabetes, colon and breast cancer, and depression in adults. It also improves thinking ability and the ability to engage in activities needed for daily living in older adults.

Physical activity in children and adolescents improves cardiorespiratory and muscular fitness as well as bone health, and contributes favorably to body composition. In the same vein, Strecker (2010), reported that youth sports creates fun activity that improves the physical, cognitive, and social skills of children and youths. Sports participation can increase physical activity and may improve physical fitness, combat and prevent childhood obesity and its associated health risks. Sport provides a forum that teaches core social skills such as tolerance, cooperation, respect, value for victory as well as defeat.

Sport enhances physical health, provides employment and income to sports men and women, and business avenue to people and companies, thereby, contributing to economic and social development within the locality. Recently, sport has gone on to serves as a conflict resolution tool through which peace is enhanced among ethnic groups (UNOSDP 2012, United Nations, 2003).

However, increase in sports participation according to Strecker (2010), has also led to more sport-related injuries among children and youths. Due to this, Youth Sport Safety Alliance (YSSA) released a “Call to Action” to address the youth sports safety crisis in America” The YSSA’s (2009) call for Action highlighted the following statistics to illustrate the seriousness of the crisis:

- In 2008 – 2009, there were 120 sport-related death in 33 states.
• An approximate of 800 children are treated in emergency rooms for sport-related injuries everyday.
• In high school athletics 400,000 concussions occurred during the 2008-2009 school year.
• CDC reported that high school athletes suffer 2 million injuries (leading to 500,000 doctors’ visit and 30 being hospitalised) each year.

Bahr and Holme (2003), reported that the study of Scandinavian documented that sports injuries constitute 10-19% of all acute injuries seen in an emergency room; Howe, Brewer and Shane (2013), equally report that injury occurrence in sports and physical activity setting is on the rise.

**Injury and Types of Injury**

Injuries in physical activity setting occur in different forms without notification and warning. Injury is a physical damage to the body resulting from acute exposure to thermal, mechanical, electrical, or chemical energy or from the absence of such essentials such as heat or oxygen (Rice, Mackenzie & Associate, 1989). Sports injury, according to Honeybourne, Hill and Wyse (1998) is categorised into two: impact injuries and overuse injury.

i. Impact injuries occur where there is sudden stress on the body, for example, collision between players in contact sports.

ii. Overuse injuries are developed overtime, for example tennis and golf elbow, or leg injuries to runners. They are associated with sports that demand a lot of training, but they occur in any sport and at any level of performance.

Sport and physical activity are sometimes associated with some injuries. Some injuries that may occur during physical education and physical activities setting are wounds, eye injuries, injuries of the mouth, nose bleeds, concussions and neck injuries, strains and sprain and heat-related illness, Brewer and Shane (2013).

Anterior Cruciate Ligament (ACL) injuries are very commonly found among athletes in pivoting sports such as football, basketball and team handball, and it is 3-5 times higher among women than among men. ACL injury causes lengthy absence from work and sports, and also increases the risk of long term sequelaes-like abnormal joint dynamics and early onset of degenerative joint disease. Other prevalent injury types, such as hamstrings strains or patellar tendinopathy may be a career-ending disability (Bahr and Holme, 2003).

**Causes of Sport Injury:**

**Overuse Injury:** Coming back to take part in sports or physical activity with injury or when the injury is not healed leads to other injuries. Overuse injuries may be the easiest to prevent, and yet they are on the increase because many athletes make the mistake of “playing through the pain” or returning to play before fully recovering from an injury because they want to impress their coach, please their parents, or because they do not want to “miss out.”

Equally youths often push themselves too hard because they want to be the “they can be,” or due to pressure from parents, and coaches who are more interested on the success and
winning of the athlete than on the health risks of ‘overdoing it.’ For instance 16 per cent of football players who sustain a severe concussion that causes loss of consciousness return to play the same day. This situation can lead to further injury and possibly permanent damage. Also, reported instance of 50 per cent of second impact syndrome incident (SIS - brain injury caused by returning to activity too soon after initial concussion) results in death. They further indicated that the American Academy of Pediatrics reported that each year an approximate number of 3.5 million young athletes sought treatment for overuse injuries and chronic fatigue caused by over training (Strecker, 2010).

Specialisation
Specialisation in sports is one of the causes of sports injury. Specialisation in one sport rather than playing a variety of sports throughout the year leads to athletes working on the same muscle too much and too often and that can result in injuries that require long and sometimes pain rehabilitation and sometimes surgery (Bach and Shilling, 2008). Equally, Shedden (2008), reported that the increase in overuse injuries can be attributed in large part to the fact that more young athletes are training year round at a specific sport, playing at a level beyond their physical ability and imitating techniques used by professional athletes that are inappropriate for a developing body.

Overtraining
Overtraining is caused by lack of rest between workouts or by doing the same activity too much. Exercising too much can cause stress fractures and increase the risk of injuries by causing the wear and tear of muscles, tendons, ligaments, bones, and joints. Minor injuries that are not allowed to heal could result in long term or permanent damage. Athletes who overtrain may notice that their regular training sessions suddenly feel much harder than usual or that their performance is actually getting worse rather than better. Other signs of overtraining are insomnia, headaches, muscle and/or joint pain, fatigue or lack of energy, loss of motivation, increased susceptibility to illness, frequent injuries (Strecker, 2008).

Compulsive Exercise
The government's 2005 dietary guidelines, published by the U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (HHS) recommend at least 60 minutes of physical activity for kids and teens on most - if not all - days of the week. However, some athletes take physical activities beyond the recommended amount due to certain reasons that may be internal or external.

Athletes who feel compelled or obligated to exercise and do so in spite of injuries or exhaustion, may be suffering from an exercise disorder (Strecker, 2008). This situation is called compulsive exercise. Compulsive exercise (also called obligatory exercise and anorexia athletic) is an addicted exercise from the frame of the mind, kidshealth.org http://m.kidshealth.org/parent/emotions/behavior/compulsiveexercisehtm. Retrieved 11/5/2015. The cause of compulsive exercise are pressure from external forces such as parents, coaches and teammates; and internal pressures, spirit of winning at all cost, dysmorphic – a distorted perception or obsession with their appearance may push athletes to go beyond their limit which makes them keep adding more workouts, kidshealth.org http://m.kidshealth.org/parent/emotions/behavior/compulsiveexercisehtm. Retrieved 11/5/2015.
Shortage of Certified Athletic Trainer
Safety before, during and after a sporting event is very important. Strecker (2010), quoted Youth Sports Safety Alliance (2009), stating that less than 50 per cent of high schools have certified athletic trainers available to support their athletic programme, and schools usually have a certified athletic trainer present only for major sporting events and seldom for practices considering that 62 per cent of organised sports-related injuries occur during practices. Also, many schools fall short of the federally recommended nurse-to-student ratio or have no school nurses. So in many cases, no one is available to properly diagnose and treat an injury.

Safety in Sport
Appropriate exercise according to Otinwa (2010), should be chosen for the location in which a person lives. The available facilities and weather conditions are also important and the presence of any physical problems or limitations for which medical advice should be sought, especially when the person has not been exercising at all, or has any health problem.

Sport is a good experience if guidelines in the engagement of physical activity are followed. Most people are not likely to be injured when doing moderate-intensity activities in the amount that meet the physical activity guidelines. Nevertheless, injuries and other adverse events do sometime happen.

Choose Appropriate Types & Amounts of Activity
Risk factors are traditionally divided into two categories: internal (intrinsic) athlete-related risk factors and external (extrinsic) environmental risk factors. People can reduce the risk of injury by choosing appropriate types of activity. The safest activities are moderate intensity and low impact, and don’t involve purposeful collision or context.

Walking for exercise, gardening or yard work, bicycling or exercise cycling, dancing, swimming, and golf are activities with the lowest injury rates. In the amounts commonly done by adults, walking (a moderate-intensity and low-impact activity) has a third or less of the injury risk of running (a vigorous-intensity and higher impact activity) (Rice, Mackenzie & Associate, 1989). It is important that beginners do not overdo working out as they are just starting an exercise routine.

Running several miles in the first run often leads to discouragement and injury. It is best to start with a walking or jogging programme, and to slowly build up running time and speed. For strength training, weekly progression is good, but athletes who are beginners should avoid adding more weight than their body can take (Strecker, 2008).

Rest
The best cure for over exercising is rest. After strength training, muscles need time to recover and grow; hence, it is best to avoid working the same muscle group, two days in a row. Variety keeps a workout interesting and allows some muscles to “recover” while working at others (Strecker, 2008).
Avoidance of Overtraining
To avoid potential risks associated with overtraining, these following safety measures should be observed:

- Warm up before each workout.
- Refuel the body with high energy foods and plenty of water.
- Stretching may help prevent injuries.
- Include low to medium intensity workouts or recovery, or take a few days off from exercising.
- Get plenty of sleep.
- Focus on the health benefits rather than on physical appearance.
- Listen to your body. If it is time to hurt, give it a rest.
- Avoid linking eating and exercise.
- Don’t allow exercise to determine your self-worth.
- Vary the intensity of your workouts. UPDATE (2008).

Warmup
Warm up helps to prepare the body for physical exercise to come. Gently raising the pulse rate, it prepares the heart for more strenuous activity. It also makes the body to transport more oxygen and other fuels to the muscles, which become warm and ready for exercise (Honeybourne, Hill and Wyse, 1998).

Education of Parents, Coaches, and Athlete
Parents, coaches and athletes should be educated on the need not to force or compel the athlete, or the athlete not to compel himself or herself to continue training thereby leading to overtraining that will cause injury.

Conclusion
It is a known fact that participation in sports and physical activity benefits health. On this note, people try to participate in sports and physical activity in order to enjoy the benefits. However, people sometimes tend to engage in too much exercise or continue to play after sustaining injury in order to please their coach, parents or see themselves as champions. These behaviours expose athletes to temporary or permanent injuries, disabilities and sometimes death. In order to avoid health problems that may arise in the process of mismanagement of sports and physical activity, the following should be observed:

i. When injury occurs athletes should stop training or participation in the main activity.

ii. Athletes should not over indulge themselves during training or proper play.

iii. Parents, coaches, teammates and the athlete themselves should be educated on the need to stop activity when injury or exhaustion occurs.

iv. There should be proper warm up before starting training activity.
References