

Students Knowledge about Handling Sport Injuries

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Abstract: Sport students are at risk of injury during physical activity such as physical education, sports achievement and fitness sports. According to the data of U.S., the number of sports injuries reached 1.5 million times per year. Each student is expected to have the ability to prevent and deal with injuries that occur. The purpose of this research is to know how the knowledge's of students of Faculty of Sport about handling sports injuries. The design of the research is descriptive quantitative. The number of samples is 115 student using purposive sampling technique with certain criteria. Based on the analysis research shows that mean of student's knowledge about handling sports injuries is 61.8. The mean of internal handling sports injuries of knowledge is 56.14 and external handling sports injuries of knowledge is 64.91. It is mean that the knowledge of student have not been optimize, so it can be effect to their ability handling sports injuries as during their activity.

1 INTRODUCTION

Sports has great benefits in terms of physical, mental and psychosocial. It is known that students who participate in sports have good emotional and intellectual abilities throughout their academic and life processes. But exercise is also at risk in health problems.

The major negative consequences of participation in sport is the risk of injury. Sport injuries represent a substantial burden on society and constitute a major public health problem among student in high school and college age (Weaver, 2002). The high incidence of sport injuries applies particularly to the physical education at Universities, an examples about 750 of 7,000 students of Germany Sport University Cologne make use of medical care due to an injury every year (Kleinert, 2002). Research at Massachusetts University for ages 13-19, shows that sport injury is the most common cause in emergency room and hospitalization referrals (Weaver, 2002)

Injuries in the world of sports that is damaged body tissues (soft or hard) either muscles, bones or joints caused by a collision or activity that exceeds the limit of training (overtraining), overload, so muscles and joints are no longer in anatomical state (dislocation) (G.La Cava, 1995). Factors that cause sport injury can be due to intrinsic factors; age, injury history, body size, local anatomy and biomechanics,

aerobic fitness, muscle strength, imbalance and tightness, ligamentous laxity, central motor control, psychological and psychosocial, mental abilities (Taimela, 2016; Bahr, 2005), extrinsic factors; accidents, poor practice, unsuitable equipment, lack of preparation, physical condition and inadequate heating and stretching (Dunkin, 2004, Bahr, 2005)

Research on the impact of sports injury on sports students in the Netherlands shows that the impact of sport injury during lectures, among others, difficulties during sport (23%), reduced sport activity (21%) and reduced sport performance (24%) (Goossens, 2014). In addition, Abernethy's (2017) study explains that deficiencies in sports injury care in schools in all aspects studied: immediate care, first aid training staff, and injury scenario performance.

In the implementation of learning and games students are very vulnerable to experience accidents or injuries. Therefore, injuries that occur at the time of exercise should get more attention, to provide appropriate treatment and appropriate injuries experienced. Various studies show how to prevent from sports injuries. The preventive act that covers: Primary prevention; the target is the pre-injury phase that includes the requirements of the physical pre-season and the effort to properly train the trainer and athlete. (2). Secondary strategies aim to reduce the effects of injury events. Encourage early research that noted the ability to perform, for example athletes

can practice conditioning drills that incorporate proprioception to teach them how to recover from fall. (3). Post injury phase or tertiary prevention, the goal is to minimize the long term detrimental effects of an injury event. Using medical services, adherence to rehabilitation is a strategy in post-injury (Weaver, 2002).

In addition, according to Andun Sudijandoko (2000) one of the prevention of injury is skill prevention; in the prevention of injury because preparations and risks are thought out earlier. In improving skills is not enough skills about physical ability alone but including the ability of mind power, reading the situation, know the dangers that can occur and reduce the risk. Adequate knowledge can assist in the realization of appropriate rehabilitation and becomes very important to improve recovery and prevent further injury. But in practice, not all sports participants with injuries actually adhere to the treatment prescribed by the doctor. Various cases have been reported in the form of bad behavior and non-adherence to treatment protocols among sports participants undergoing clinical or home based physical therapy due to inadequate knowledge. Some research results suggest that improving training is basic life support training for sports students can reduce the incidence of sports injury, but no systematic review results show the results (Albernethy, 2017).

The results of the curriculum data obtained by sixth semester students at the Faculty of Sport and Health Education have received a sports fitness course which includes learning about sports injuries. We explore issues related to how sports students handle sport injury that occurs in their daily sporting activities. There is no significant action they take when they get sport injury. Sports students tend to rely on coaches or healthcare workers to cope with sport injury, whereas the speed, precision of first handling of injuries in sports injury becomes important in the process of subsequent sports injury care.

Therefore it is important to know how the knowledge of sports students in handling injuries. This will be the basis for the development of health education for sports athletes and advanced research on the needs of health education especially the handling of injuries.

2 METHOD

The research design was descriptive analytic. Sample of this study consist 115 sport student from Indonesia

University of Education. The technique sampling using purposive sampling with certain criteria. The criteria cover such aspects as the sixth semester students and has taken sport health subject. Data were collected using questionnaires in April 2017 respectively. Students obtain a questionnaire after the course and they must directly complete it. They were given 30 minutes to complete the questionnaire. The questionnaire was then rechecked to prevent data missing. From 161 questionnaires distributed to 3rd graders, 115 questionnaires were eligible for data analysis process.

The data obtained was analyzed in univariate analysis to explain descriptively how the average knowledge of sports students about handling injuries. The data was further analyzed based on the knowledge on the causal factors of injury resulting from contact based on Arikunto (2013) categorization; Good (76-100%), Moderate (56-75%) and bad (lower than 55%).

3 RESULTS AND DISCUSSION

The research was conducted to 115 sports students of Indonesia University of Education. The sample consists of 36 female, 79 male; mean of age = 20.4 yo. The result of descriptive analysis shows that most of the students' knowledge level is still in the medium category, with the average knowledge of sports students is 61.8 (min-max: 56.14- 64.91). In addition, students' knowledge on the types of injury is illustrated in table 1.

Table 1: Frequency distribution of students' knowledge based on the cause and the treatment of injury.

Subvariables	Good		Moderate		Bad	
	n	f	n	f	n	f
Contributing factors	12	10,5	59	51,3	44	38,2
Contact Injury treatment	29	25,2	48	41,7	38	33,1

It was discovered that the students' knowledge on injury treatment or handling is insufficient. FPOK students generally receive training in the treatment of sports injuries in one sport fitness course with 2 credits for a semester through classroom learning, without any field practice. The minimal learning credit and the lack of field practice learning can be expected to be one of the factors affecting the low level of knowledge in the students

This research specifically indicated that the students' knowledge on the cause of sports injury is

sufficient. The same thing about the knowledge handling of injury due to the contact of some respondents in the category “enough”.

These have proven that the learning objectives were not achieved optimally. 2 credit in curriculum must be increased because to form someone attitude needs sufficient knowledge to change their attitude and behavior. (Sulastri, 2015) Sufficient knowledge is expected to be a provision in anticipating the incidence of sports injuries

Integrative learning together with other courses in the form of field practice related to each branch of sport may be an alternative solution that can accommodate the lack of credits to achieve the expected competencies. As explained by learning theories that learning process may occur as a result of conditioning through stimulus and or habituation. In this case, the factor of exercise or habituation and provision of positive stimulus and continuous and consistent control system is one of the keys that can lead to the formation of attitudes and behaviors Griffin (2011) argues that the perception of knowledge about safety and motivation to perform safely can affect individual safety performance and also mediate the relationship between safety and safety climate (Griffin and Neal, 2000)

The injury prevention study has been described by van Mechelen et al in four stages. First, identifying the incidents and severity of the injury that might happen. Second, identifying the injury risk factors and mechanism. The third step is for the second step And lastly is to evaluate each stage to study the pattern of injury based on time trends (Bahr, 2005).

Although injury events themselves may arise as a result of unexpected things, injuries can also result from complex interactions between internal and external risk factors. Internal factors such as age, sex, and body composition as an athlete predisposing factor for injury that may affect the risk of continuing injury. In addition, external environmental factors such as shoe traction and floor friction can alter the risk of injury, even making athletes more vulnerable to injury(Bahr, 2005).

Ignorance knowledge of handling injuries can lead to improper handling of injuries. If this is true, then it will not only cause an athlete to stop, but also increase the likelihood of re-injury (Knowles et al., 2006). Adequate knowledge can assist in the realization of appropriate rehabilitation and becomes very important to improve recovery and prevent further injury. But in practice, not all sports participants with injuries actually adhere to the treatment prescribed by the doctor. Various cases have been reported in the form of bad behavior and

non-adherence to treatment protocols among exercise participants who undergo clinical or home based physical therapy due to inadequate knowledge. Therefore, knowledge of motivation to heal also become one of the influential factors in the rehabilitation process.

On the other hand, the recovery process of injury is also influenced by the internal factors of the individual (knowledge, physical condition, age, emotion, gender etc.) and external factors (environment, trainers, and health workers involved in care). Differences of these factors provide different processes and outcomes for each individual. In athletes with long-term injuries recovery is needed not only physically, but also requiring psychological recovery. Johnson's research suggests that cognitive models should be individually tailored to speed up the recovery process, especially psychically in the event of an injury (Johnson, 1997) Chan et.al proposed a concept of rehabilitation in the form of a Trans-Contextual Model (TCM) which is a social cognitive and integrated motivational theory that explains the transfer of motivation from one context (e.g., physical education context) to other related contexts such as physical activity recreation. This is based on contemporary motivational theory, self-determination theory (SDT) which suggests that a behavior is influenced by the individual's reason for setting or motives, or rules of conduct. When an action is executed because it is perceived to be personally important as self-initiated and coherent with deeply-rooted values the SDT-related action is governed by self-determined autonomous motivation. The motivation to recover can be influenced by the factors of the trainer as well as the health care workers. Chan's study found that in injured athletes, the role of trainers dominates only in terms of achievement motivation to return to competition, while the motivation for compliance during rehabilitation is greatly influenced by the educational role of medical personnel. The positive relationship between achievement motivation and medication motivation demonstrates the importance of an integrated collaboration of both parties, both from the coach's side as well as the caregivers in shaping behavior and motivation to recover from injury (Chan, Hagger, and Spray, 2011)

The importance of the role of knowledge and practice is also expressed by Ettlinger through his studies of professional ski athletes (ski patrollers and ski instructors) and Mandellbaum on female soccer athletes. They divide their professional athletes into two groups where one group follows the training program while the other does not. The results show

that the risk of an ACL injury (anterior cruciate ligament) among experienced ski professionals can be reduced through training programs held (Ettlenger, Johnson, and Shealy, 1995; Mandelbaum et al., 2005). This suggests that education can be one of the most cost-effective means of helping to reduce the risk of injury to athletes, especially about Basic Life Support for students and the entire sports community (athletes, coaches and managers).

Based on this, rehabilitation efforts are not only physically required but also psychologically and cognitively through systematic and specific education in this field and information about injured, emotional and behavioral response during recovery, and appropriate intervention strategies to improve program compliance and rehabilitative performance that will assist in providing the most effective and holistic treatment (Gordon, Potter, and Ford, 1998).

4 CONCLUSIONS

Based on the above description, it can be concluded that the level of knowledge about handling student sports injuries is still not sufficient. This knowledge becomes important because it is proven to reduce the risk and severity of sports injuries. In addition, the provision of knowledge and field practice obtained also can foster motivation to recover which will be very helpful in the rehabilitation process.

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