

THE RELATIONSHIP BETWEEN KNOWLEDGE, ATTITUDES AND
PRACTICES OF UNIVERSITY FEMALE BASKETBALL
ATHLETES IN MALAYSIA ON ANTERIOR
CRUCIATE LIGAMENT INJURY

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Declaration

I hereby declared that all the writings, works and the ideas in this Final Year Project report is my own idea except for quotation and references which have been fully acknowledged.

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ABSTRACT

Introduction: Basketball was the first women's team sport, and early supporters were associated with YMCAs and universities around the country, and the sport swiftly expanded across the country. However, female basketball athletes are more likely to get an ACL injury since the majority of leaping, non-contact ACL injuries happen between 0 and 30 degrees of knee flexion. **Aim:** The goal of this study was to determine the level of knowledge, attitudes, and behaviours of public university female basketball athletes on ACL injury risks and prevention. **Methodology:** A descriptive study was done among female basketball around public universities in Malaysia. N= 101, female basketball athletes and must represent university clubs at least once are the criteria of respondents. All qualified respondents were asked to answer KAP questionnaire by Iversen, M.D., & Friden, C. (2009). All collected data then analysed using SPSS software. **Result:** The result shows majority respondents do not have a good knowledge which no more than 40% answered half of the given questions right. It shows a low level of knowledge among the respondents. Result found out that respondent have a good awareness (>80%) on attitudes and practices towards ACL injury awareness. Correlation relationship between respondent knowledge and attitudes, knowledge & practice and attitude and practice are $r=-0.142$, $p=0.157$; $r=-0.248$, $p=0.013$ and $r=0.686$, $p<0.001$ accordingly. **Conclusion:** Female basketball athletes of public university in Malaysia have a low knowledge on anterior cruciate ligament injury. The attitudes and practices on ACL injury awareness and prevention are still very high.



ABSTRAK

Pengenalan: Bola keranjang adalah sukan berpasukan wanita pertama, dan penyokong awal dikaitkan dengan YMCA dan universiti di seluruh negara, dan sukan ini berkembang pesat di seluruh negara. Walau bagaimanapun, atlet bola keranjang wanita lebih cenderung mendapat kecederaan ACL kerana majoriti kecederaan ACL melompat dan tidak bersentuhan berlaku antara 0 dan 30 darjah lenturan lutut.

Matlamat: Kajian ini adalah untuk menentukan tahap pengetahuan, sikap, dan tingkah laku atlet bola keranjang wanita universiti awam mengenai risiko dan pencegahan kecederaan ACL. **Metodologi:** Satu kajian deskriptif telah dilakukan di kalangan bola keranjang wanita di sekitar universiti-universiti awam di Malaysia. N= 101, atlet bola keranjang wanita dan mesti mewakili kelab universiti sekurang-kurangnya sekali

adalah kriteria responden. Semua responden yang berkecukupan diminta menjawab soal selidik KAP oleh Iversen, MD, & Friden, C. (2009). Semua data yang dikumpul kemudian dianalisis menggunakan perisian SPSS. **Hasil:** Kajian menunjukkan responden majoriti tidak mempunyai pengetahuan yang baik yang tidak lebih daripada 40% menjawab separuh daripada soalan yang diberikan dengan betul. Ia menunjukkan tahap pengetahuan yang rendah di kalangan responden. Hasil kajian mendapati bahawa responden mempunyai kesedaran yang baik (>80%) mengenai sikap dan amalan terhadap kesedaran kecederaan ACL. Hubungan hubungan kait antara pengetahuan dan sikap responden, pengetahuan & amalan dan sikap serta amalan ialah $r=-0.142$, $p=0.157$; $r=-0.248$, $p=0.013$ dan $r=0.686$, $p<0.001$ sewajarnya.

Kesimpulan: Atlet bola keranjang wanita universiti awam di Malaysia mempunyai pengetahuan yang rendah mengenai kecederaan ligamen anterior cruciate. Sikap dan amalan mengenai kesedaran dan pencegahan kecederaan ACL masih sangat ting



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CHAPTER 1

INTRODUCTION

1.1 Introduction

The anterior cruciate ligament is the band of tissue that holds the femur and tibia together (ACL). The anterior cruciate ligament is one of the most important ligaments that maintains the knee joint. An anterior cruciate ligament (ACL) injury is one of the most frequent sports injuries (Dai et. al, 2011). ACL sprains are categorised as "sprains" and are rated as Grade 1, Grade 2, and Grade 3 sprains, depending on the severity of the injury. Less than 50% of the ligament's substance has been changed, and the ligament is only partially torn, according to a grade 1 sprain. A grade 2 sprain indicates that just a portion of the ligament is torn since more than half of the ligament's substance has been disrupted. Grade 3 sprains signify a complete tear of the ligament (Hong et al. 2003).

Anterior cruciate ligament sprain usually caused by acute injury. Changing direction rapidly, stopping in a very sudden way, making an incorrect landing are likely contributors of ACL sprains. Not only that collision and contact sport athletes are most



likely to be reported on ligament injuries (Howell et. al, 2020). Besides, there might be a “popping” sound coming from the ankle when ACL sprain occurred. The symptoms of ACL sprain such as pain with swelling, immobilization, tenderness around the affected ankle can be feel and observed. Sign and symptoms will be different regarding of the severity of injury.

An analysis of the prior publication by Diermeier et al. (2021) on learning the consensus statements on surgical vs nonsurgical management of ACL injuries created at the ACL Consensus Meeting Panther Symposium 2019 is presented here. Early anatomic ACL repair is recommended for people who are very active since there is a large risk of further meniscal and cartilage degeneration with delayed surgery. For patients who desire to resume straight-plane activities, nonoperative therapy combined with planned, gradual rehabilitation is a viable therapeutic choice.

1.2 Problem Statement

According to health.uconn.edu, “Football, basketball, lacrosse, soccer, and skiing are some sports known to have high ACL injury rates.” Basketball requires athletes to master multiple movements such as jumping, change of direction, turning, running and deceleration in order to perform basketball skills. These movements are a very highly risk for its athletes get into ACL sprains. The most common injuries faced among basketball players are lower extremity injuries (Drakos et al., 2020). This statement supported by Rishiraj N et al. (2018), ACL tears are particularly prevalent in pivoting and cutting sports such as basketball, accounting for up to 64% of all knee injuries.

Female athletes are more likely to get an ACL injury since the majority of leaping, non-contact ACL injuries happen between 0 and 30 degrees of knee flexion (McNair et al., 1990; Boden et al., 2000; Cerulli et al., 2001). This study aims to determine the awareness of activities that may increase an athlete's risk of suffering an ACL injury among Malaysian university-level female basketball players.

1.3 Objective

The goal of this study was to determine the level of knowledge, attitudes, and behaviours of public university female basketball athletes on ACL injury risks and prevention.

1.4 Research Question

Research question in this study is listed below:

1. What is the knowledge level of university female basketball athletes in Malaysia towards anterior cruciate ligament injury?
2. What is the attitude of university female basketball athletes in Malaysia towards anterior cruciate ligament injury?
3. What are the practices of university female basketball athletes in Malaysia towards anterior cruciate ligament?

4. Does it have significant relationship between the knowledge, attitudes and practices of university female basketball athletes in Malaysia towards awareness of anterior cruciate ligament injury.

1.5 Research Hypothesis

HO1: There is no significant relationship between knowledge, attitudes and practices of university female basketball athletes in Malaysia towards awareness of anterior cruciate ligament sprains.

HA1: There is significant relationship between knowledge, attitudes and practices of university female basketball athletes in Malaysia towards awareness of anterior cruciate ligament sprains.

1.6 Limitation of Study

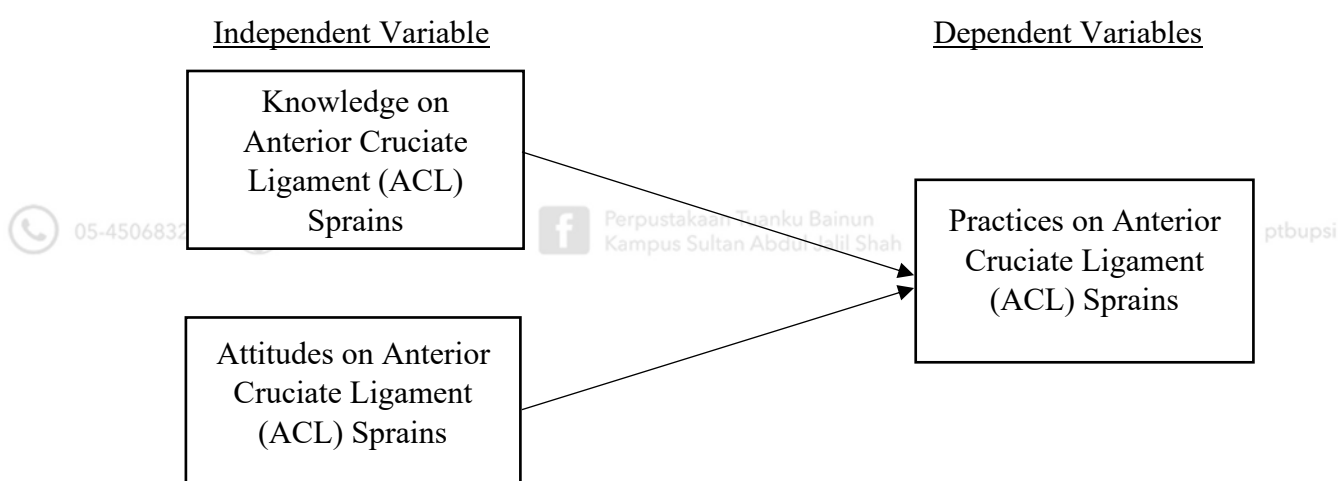
The limitation of this study might affect the finding and results of the research. There are several limitations found in this research including:

- i. The sample taken only limited to female basketball players that are in the basketball club for athletes who represent their university at least once.
- ii. Some experienced players might have stronger conviction about ACL sprains and injury prevention.
- iii. A type II error can be indicated by the KAP's change in attitude and practise components' low power.

1.7 Significant of Study

This research can help in unveil the knowledge, attitudes and practices on university female basketball athletes in Malaysia on anterior cruciate ligament injury, aids in pre-rehabilitation stage and to prevent injury.

1.8 Framework



1.9 Operational Definition

i. Anterior Cruciate Ligament (ACL) Sprains

The ligament that connects the femur to the tibia is known as the anterior cruciate ligament (ACL). ACL sprains are classified as "sprains" and are graded according to the degree of injury: Grade 1 sprains, Grade 2 sprains, and Grade 3 sprains. A grade 1 sprain means that less than half of the ligament's material has been altered, and the ligament is only partially torn. A grade 2 sprain means that more more half of the

ligament's material has been disturbed, indicating that the ligament is only partially torn. Grade 3 sprains signify a complete tear of the ligament (Hong et. al, 2003).

ii. Knowledge

Knowing is frequently defined as having "justified genuine belief" (Nonaka and Takeuchi 1995, p. 87). Some authors consider this formulation to be the three-party clarification of knowledge since it satisfies all three fundamental requirements. the situations are as follows: (Neta and Pritchard 2009). • the reality of the situation. It states that a statement should even be true if someone is aware of it. If the claim is false, the person doesn't understand what he claims to understand. Data and opinion are distinguished by the reality condition. condition of the fundamental cognitive processes. That presumption states that one should believe a notion if they are aware of it. the state of being justified. That demand calls for a reasonable method of proving that one's viewpoint is accurate. Once these conditions are met, it is possible to draw the conclusion that "the necessary and comfortable conditions for knowing that one thing are that the case ar first that what one is meant to understand is true, second that one take care of it, and third that one ought to have the right to be sure" (Ayer 2009, p. 13).

iii. Attitude

Most often, the word "perspective" is defined as a noun. Examples of "advanced states" in psychology include the position or arrangement of the body and its limbs, a dramatic cause intended to have an effect, and the location of a ship or artificial satellite with

respect to a frame of reference (the horizon or direction of travel). WordNet 2.0, released in 2003.

iv. Practices

‘Practice’ belongs to the online of the activity ideas. A observe are some things we tend to perform or have interaction in; it's a temporal structure. However, ‘practice’ shouldn't merely be conflated with the conception of ‘activity’. associate degree activity has ‘genuine duration’: it's a start line associate degreeed an end-point in time (Wittgenstein, 1945).