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Sports Injury Survey on Basketball Branch Athletes in Unit Kegiatan Mahasiswa STKIP PGRI Jombang Basketball Club

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Authors' contribution:
A. Conception and design of the study; B. Acquisition of data; C. Analysis and interpretation of data; D. Manuscript preparation; E. Obtaining funding

ABSTRACT
This study aims to identify the types of sports injuries for basketball players in UKM STKIP PGRI Jombang. The survey method is a descriptive method using the survey method. The subjects of this survey were UKM STKIP PGRI Jombang junior basketball players, totaling 35 people, and the survey sample consisted of 21 people with sampling criteria. The location of the survey was conducted at STKIP PGRI Jombang Basketball Club. The survey tool used to collect the data in this survey was a written exam, and interviews and observations of the survey results were presented in tabular form. We collected data using a question-based interview test to get an idea of the results of the survey. Based on data analysis, the results show that the types of injuries most often received by UKM STKIP PGRI Jombang junior athletes in basketball sports are knee injuries, ankle injuries (ankle) shoulder injuries, and up to 21 samples. Showed that they had 100% of these injuries, shoulder injuries 95.2%, hamstring injuries 18 cases, wrist injuries 85.7 cases 61.9%, elbow injuries 13 cases 57.1%, waist injuries 8 cases 38.1-6 finger injuries, 28.6%, heel injuries 5 cases, 23.8%.

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INTRODUCTION

Basketball is a large-ball sport in which the goal is to get as many balls into the opponent's basket as possible while avoiding throwing in as many balls as possible (Sofyan, et al., 2020). Basketball is a fun sport for all ages and abilities. Basketball is a sport that requires a lot of explosive movements. Since basketball requires explosive movements, the physical condition of the basketball player or athlete should be a major concern. In addition, basketball is also a team sport and is primarily a physical contact (physical contact), which can lead to sports injuries.

Sports injuries are all forms of activity that exceed the body's ability through exercise. Sports injuries result physiologically from the imbalance between workload and the ability of body tissues to perform sporting activities. In general, one of the causes of

sports injuries is the lack of warm-up before training, especially before games that require a lot of explosive movements. Bones, muscles, tendons and ligaments are often affected. Therefore, knowing about sports injuries will help you learn how sports injuries occur and how to take treatment / support / treatment (cure) and preventive (preventive) measures. Understanding different types of injuries is usually an effective way to deal with injuries. Understand and recognize how our body works. You can also understand your body so you know what to do to avoid injury. Basketball injuries fall into two general categories: overuse injuries and traumatic injuries. Injuries caused by continuous tension until a part of the body is injured and begins to hurt are called overuse injuries. An example of overuse injury is patella tendonitis. Or, a "jumper knee" characterized by pain in the tendon just below the patella. Other knee injuries result from injuries to the meniscus, the tissue that acts as a cushion between the thigh bones and the lower legs. An arthroscopy may be required to heal or remove the torn meniscus. Surgery is performed by inserting a camera and instruments into the knee joint through a small incision in the skin. This device can be used to identify and treat a damaged meniscus.

A more serious injury is a rupture of one or more ligaments that support the knee. The anterior cruciate ligament (ACL) is one of the most commonly torn knee ligaments. These ligaments connect the bones of the thighs and lower extremities and help keep the knee in place. Damage to the ACL can severely injury the knee and leave the player away from the basketball. After ACL injury, some players can continue playing basketball without surgery. However, they had to strengthen their thigh muscles and do special exercise to use the knee braces. The strong muscles of the thigh provide knee stability that the damaged cruciate ligament can no longer provide.

College sports have a significant impact on sport development (Sofyan & Abdullah, 2022). Unit Kegiatan Mahasiswa (UKM) STKIP PGRI Jombang is a basketball club that trains young athletes by conducting programmed basketball training activities and training trusted athletes. Of course, when viewed from the appearance of UKM STKIP PGRI Jombang Basketball Club, the club experienced technical problems in every exercise and game that was carried out and caused various injuries among athletes. After the researchers observed the athletes, the main injuries experienced by the UKM STKIP PGRI Jombang Basketball Club athletes were ankle injuries, knee injuries, wrist injuries, hamstring injuries, shoulder injuries, elbow joint injuries, and patella injuries. Wounded.

Basketball training consists of various factors that are tailored to the training category (Sofyan & Budiman, 2022). In addition, UKM Club STKIP PGRI Jombang Basketball Club does not yet have a special team to treat injury problems, but there is one masseuse responsible for all athletes in UKM STKIP PGRI Jombang Basketball Club, according to a survey by this club. The author exists not only from junior clubs but also from senior clubs.

Based on the above study, the author observed the types of sports injuries suffered by youth athletes of the UKM STKIP PGRI Jombang Basketball Club during training and competition, "UKM club STKIP PGRI Jombang, " The purpose of this study is the above problem. According to, before training or the game, it was to identify the type of sports injury of the basketball player of the UKM STKIP PGRI Jombang Basketball Club.

LITERUTE REVIEW

Basketball

According to Oliver (2007) basketball is a group ball sport consisting of two teams of 5 people, each of which competes to get points by putting the ball into the opponent's

basket. Also, basketball is a popular game in the world. According to Subroto (2001) "To be able to play basketball one must be able to master the basic techniques of playing basketball, the basic techniques are ballkeeping, ball handling, foot movement, passing (pass), dribbling (dribbling), shoot (shot)". In addition to the basic techniques mastered by athletes, they must also have good physical condition.

Physical conditions that support good mastery of basic techniques are arm and shoulder muscle strength, back muscle strength, leg muscle strength, endurance, abdominal, arm and shoulder muscular endurance, leg muscular endurance, speed, agility, flexibility and overall endurance (VO2 Max) Da Fitness is a component of integral that cannot easily be separated, both repair and maintenance Basic techniques What really needs good physical condition is when shooting or jumping to put the ball into the basket.

Sports injury

In general, the cause of sports injuries is associated with a lack of pre-training warm-up. Especially for games that require a lot of explosive movements (volleyball, basketball, soccer, etc.), especially in relatively cold or hot summer weather in preparation for unsupported environments.

The first consideration to prevent injuries is to accept that in practice, the occurrence of these injuries cannot be prevented. Wibowo (1995) states that the risk of injury is even greater. Sports injuries can be categorized into the following causes based on the type of injury: External violence, that is, an injury that occurs / occurs as a result of an external influence or cause, a tendon / bruise, or a fracture. Internal Violence (Causes Originating) This injury is caused by imperfect coordination of muscles and joints, causing erroneous movements and injuries.

The type of injury can be in the form of damage to muscles, tendons, and ligaments. Overuse (users are always / too tired) This injury is caused by excessive muscle tension. Overuse injuries usually occur gradually (chronically). Symptoms are mild: muscle stiffness, tension, sprains, and the most severe are stress fractures. In general, sports injuries are caused by an imbalance between workload and the performance of connected tissues such as muscle tissue, joints, tendons, and skin. Types of Sports Injuries: a) Bruises = Bruises and Hematomas in sports; b) Torn muscle (strain); c) sprain; d) Dislocation (joint divorce); e) Tendinitis (injury to the tendon); and f) Fracture (broken bone).

Basketball injury

Basketball injuries fall into two general categories. Abuse and trauma. Injuries caused by continuous tension until a part of the body is injured and begins to hurt are called overuse injuries. An example of overuse injury is patella tendonitis. Or, a "jumper knee" characterized by pain in the tendon just below the patella. Some basketball players overuse their shoulder tendons.

The shoulder rotator is made up of four muscles. The tendons that attach these muscles to the scapula can become inflamed and cause pain, especially during overhead work such as walking. A. Overhead tasks. B. Shooting (Paul, 2002). Trauma is caused by very strong sudden movements. Some of the most common traumas in basketball are finger injuries. The severity of finger injuries can range from mild injuries to the ligaments that connect bones to finger fractures. Another example is a pulled or torn muscle. In basketball players, this type of injury usually occurs in the large leg muscles. To avoid this, stretch your thighs and calves and always start with a warm-up.

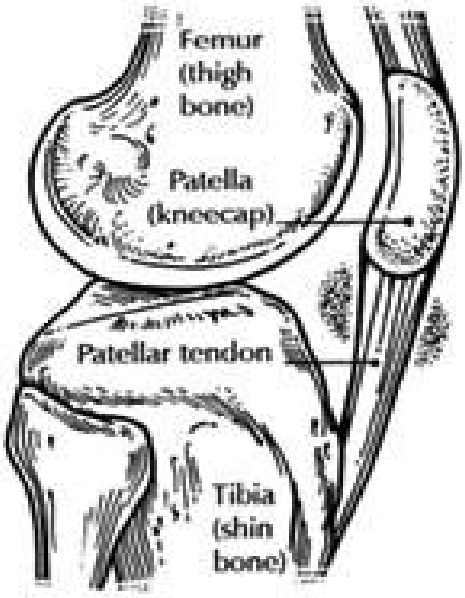

Figure 1. Injury due to overuse

This injury is often experienced by basketball players. This injury occurs when a player lands on another player's foot or stretches his ankle too much. In basketball, ankle injuries are common when the wrong jump shot lands. Unstable jump shots have an incorrect landing position, so the balance of the body at the time of landing causes ankle movement. In this case, the tape can tear partially or completely.

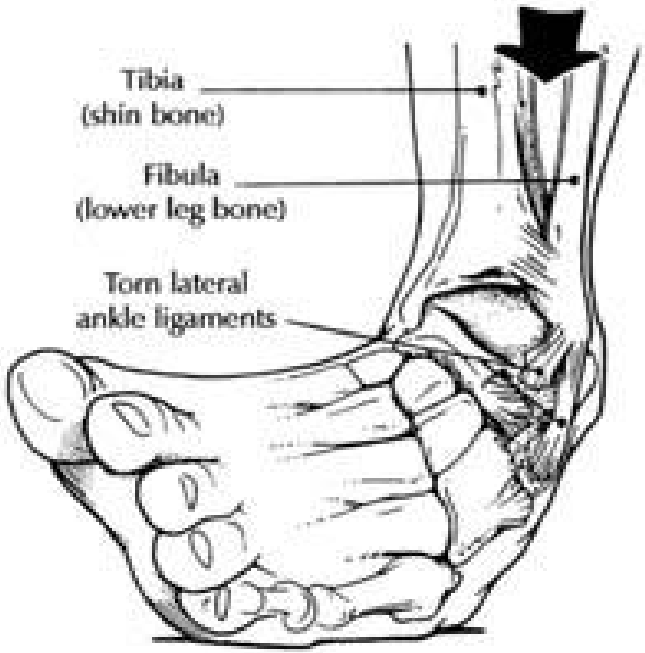

Figure 2. Ankle injury

Knee injuries are among the most serious injuries in basketball. One type of knee injury is a sprain. A knee sprain causes a small tear in the ligaments that may not be considered serious enough to retire a basketball player. The knee needs to rest for a while so that the torn ligaments heal. Once the tears have healed, stretching and strengthening the muscles around the knee will help keep the knee in place. Other knee injuries result

from damage to the meniscus, a tissue that acts as a cushion between the upper and lower femurs of the knee. An arthroscopy may be required to heal or remove the torn meniscus. Surgery is done by inserting a camera and instruments into the knee joint through a small incision in the skin. This device can be used to identify and treat a damaged meniscus.

A more serious injury is a rupture of one or more ligaments that support the knee. The anterior cruciate ligament (ACL) is one of the most commonly torn ligaments in the knee. These ligaments connect the bones of the thighs and lower legs and help keep the knee in place. Damage to the ACL can cause severe knee pain and prevent players from playing basketball again.After ACL injury, some players can continue playing basketball without surgery. However, they had to strengthen their thigh muscles and do special exercise to use the knee braces. The strong muscles of the thigh provide knee stability that the damaged cruciate ligament can no longer provide (Wilson et al., 1992).

Basketball is a game in which hands are often used to catch, dribble, defend, and shoot the ball. Injuries to the knuckles such as sprains, pinched tendons, and even dislocations are common. In some cases, you may be injured by hitting another player's costume basketball backboard or basketball net, or hitting a ball that bounces too much, pinching your fingers (Wilson, 1992). Swelling of the PIP (proximal interphalangeal joint) is the most common injury in basketball, along with serious injuries such as dislocations or fractures of the PIP and DIP (distal interphalangeal joints).

Prompt recognition and treatment of these injuries is essential to prevent further or permanent damage. Many knuckle injuries can be conservatively treated with bandages and physiotherapy. Case study: cracked index finger. Cause: During a training session, the ball was played towards the player and struck the index finger of the player's right hand, causing severe pain (Taller, 2002).

Although many athletes rely on sporting activities, injuries are their greatest enemy as athletes with regular activities, and athletes often endure this extremely harmful disaster. For this reason, there are some things athletes need to be aware of to minimize the confusion of injuries.

UKM Club STKIP PGRI JOMBANG was founded in 1990 and consists of a junior club (14-18 years old), a senior club (19 years old and 35 years old), and a veteran club (35 years old and over). Club UKM STKIP PGRI JOMBANG is one of the clubs in Jombang City that promotes basketball athletes. UKM Club STKIP PGRIJOMBANG is located in Jl. Pattimura III No.20, Sengon. The club was founded by Perangi Wijaya and Toni Onso. The majority of athletes in this club are the majority of STKIP PGRIJOMBANG students.

METHODS

The method used in this research is a survey. In other words, describe injuries at the UKM STKIP PGRI Jomnbang Basketball Club and explain the frequency and treatment of injuries. Researchers will conduct direct observations and interviews with athletes and administrators of UKM STKIP PGRI Jombang Basketball Club. Data obtained from observations were processed using the percentage method.

The subjects of this survey were the junior basketball players of UKM STKIP PGRI Jombang Basketball Club, totaling 35 people, and the survey sample was 21 people with sampling criteria. The location of the survey was carried out at the Basketball Club, STKIP PGRI Jombang. The survey tool used to collect data in this survey is a written test, and

interviews and observations of survey results are presented in tabular form. We collected data using a question-based interview test to get an idea of the survey results.

RESULTS

The data collected during the interview test of this study, such as the observation of the injury, the type of injury, and the treatment taken when the injury occurred, can be found in the appendix.

According to interviews with UKM STKIP PGRI Jombang Basketball Club athletes, the most common injuries were knee injuries, ankle injuries, and shoulder joint injuries, accounting for 21 cases (100%) each, and the smallest injuries were heel injuries in 5 cases. Was (23.8%). The first treatment the club management and UKM STKIP PGRI Jombang Basketball Club athletes took to overcome the injury was to provide REST and ICE in all cases. And continue to manage the athlete's initiative by looking for massage / traditional massage.

Table 1. Types of Injuries Based on Locations Involved by the UKM Club STKIP PGRI Jombang Basketball Club Athletes

NO	Injury Suffered	Amount	Handling	Percentage
1	*Jumper's knee injuries*	21	*Ice*	100
2	Tendo *archilles injuries*	21	*Ice*	100
3	*Artikulus humeri injuries*	21	*Ice*	100
4	*Shoulder injuries*	20	*Ice*	95,2
5	*Hamstring*	18	*Ice*	85,7
6	*Tarsa injuries*	13	*Ice*	61,9
7	*Elbows injuries*	12	*Ice*	57,1
8	*coxa/genuinjuries*	8	*Ice*	38,1
9	*Phalanges injuries*	6	*Ice*	28,6
10	*Heel pain injuries*	5	*Ice*	23,8
11	*Cervical*	-	-	0
12	*Phalanges injuries*	-	-	0

Source: Personal data analysis

DISCUSSION

The results show that, based on the most common injuries suffered by athletes at the UKM STKIP PGRI Jombang Basketball Club:

1. The knee, in this case the knee, has the dual function of mover and weight support, so it accounts for the largest percentage of injuries. Therefore, the risk of injury is even higher with jump-slow movements. Durability, strength, flexibility, the speed at which the ball hits waste and the explosive power of the muscles. Therefore, if you make a jump shot, you may fall or get injured in the wrong position after the jump shot.
2. Ankle, in this case the ankle acts as a carrier and carrier of weight, so the rate of injury is highest, so even jumping movements with high jumping movements increase the risk of injury from the wrong direction. If you fall after a jump, you will be injured.
3. And the shoulder joint. In this case, the shoulder joint damage is due to the repulsion of the ball in either form of a pass, a jump shot with overload, or an incorrect movement.
4. A common type of injury is a shoulder sprain. This injury occurs when making jump shoots and wrong passes when repelling the ball, Fatigue due to over use (continuous wearer/too tired).

The UKM STKIP PGRI Jombang Basketball Club party and the first treatment of the injury that the athlete has done to overcome the injury is to give rest (rest of the injured athlete) and ice (cooling of the injured part). Athletes looking for a traditional massage. As athletes who are always active on a regular basis, many athletes rely on sporting activities, but will be achieved later if there is more consideration and improvement in how these athletes deal with injuries. Hopefully success will be better utilized. And better than the results currently achieved.

The UKM STKIP PGRI JOMBANG Club can become a rating barometer for other basketball clubs in East Java in the future. Injuries are the greatest enemy, and it is not uncommon for athletes to have to accept this very unfortunate misfortune. The first consideration to prevent an injury is to accept that the injury cannot actually be avoided. For this reason, there are some things sports performers need to consider to minimize injury confusion.

1. Heating. Warming up is the beginning or beginning of a sporting activity. The purpose of warming up is to raise body temperature, increase circulation, improve muscle coordination, prepare the body for more intense activity, and prevent injuries. When stretching, it is recommended that you align your stretching movements with your core movements by preparing the muscles involved in your core movements.
2. Technical maturity. The techniques required for all sports need to mature in a progressive sporting process, from easy to difficult, or easy to difficult. Therefore, as the technology matures, injuries can be reduced or avoided.
3. Exercise equipment. Training and competition equipment used in training or competition must support the performance of sporting activities such as basketball. The sportsfield or building must be properly maintained. Personal equipment such as shoes should be suitable for the activity to be performed, should be of the right size, should be comfortable to wear, should be lightweight, and should not put extra strain on the foot. there is. Garment equipment is tailored to the context of the sporting activity being carried out, with particular attention to color, thickness, material and size.
4. Conditioning. Before engaging in sports activities, you need to pay attention to your general physical condition. Therefore, if you are sick, sleep deprived, or hungry, we recommend that you do not play sports. Avoid fatal injuries when general physical conditions are waiting.
5. Fair play. Everyone involved in sports is required to constantly observe the attitude of fair play (for example, accepting the benefits of others or accepting competitors). Not trying to intentionally harm the athlete who is the opponent before or after the game is over (Sudijandoko, 2000).

CONCLUSION

From the results of research and data analysis that has been carried out at the UKM club STKIP PGRI Jombang Basketball Club it can be concluded that; Injuries that are often experienced by athletes of UKM STKIP PGRI Jombang Basketball Club are knee injuries, ankle joint injuries, shoulder joint injuries 21 cases 100%. The cause of sports injuries in athletes of UKM STKIP PGRI Jombang Basketball Club is the lack of warm-up before exercising and frequent physical contact during training and matches.

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CONFLICT OF INTEREST

We have no conflicts of interest to disclose.

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