

# Socialization of Sports Massage for Rehabilitation and Prevention of Sports Injuries in STOK Bina Guna Students

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## Socialization of Sports Massage for Rehabilitation and Prevention of Sports Injuries in STOK Bina Guna Students

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### Abstract.

#### Background

This community service activity was conducted by the STOK Bina Guna Campus. The seminar focused on managing sports injuries through sports massage. Injuries during sports activities are still common among STOK Bina Guna students, prompting the author to provide information on sports massage, which can be used to prevent sports injuries and even for rehabilitation if injured during sports activities.

#### Objectives

<sup>3</sup> The purpose of this community service is to provide students with scientific knowledge in the field of sports injury management through sports massage theoretically and practically to improve their knowledge of sports injury management on campus or in the field.

#### Methods

<sup>9</sup> The method used in this community service was a socialization activity. This outreach was part of an effort to provide understanding on preventing and rehabilitating sports injuries using sports massage. The activity attracted 30 participants.

#### Results

The results of implementing this community service activity are producing students who can carry out prevention and rehabilitation through sports massage for the needs of student recovery and rehabilitation after sports injuries.

#### Conclusion

Many students were enthusiastic about participating in this training because they believed that knowledge about managing sports injuries on the field was essential. Until now, many students have not understood how to manage sports injuries on the field, either for themselves or others.

**Keywords:** Sport massage, prevention, rehabilitation.

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## INTRODUCTION

From kids to adults, sports have now been ingrained in Indonesian and global culture. Sports are an essential part of life because they can enhance fitness and health. As an illustration, consider educational sports, where students receive instruction that might help them become better athletes. This includes physical conditioning training, which is always beneficial for preserving muscle mass. Every human endeavor that aims to fulfill one's life's purpose and ideals—national, political, social, economic, cultural, and so forth—is included in sports. Through games, sports are a methodical process that can support the growth and development of an individual's physical and spiritual potential as a member of society or as an individual (Enik et al., 2012). Because sports require physical exertion, they frequently result in issues with the human musculoskeletal system. Certain methods can cause the bodily parts being used to become fatigued. Inappropriate movement methods frequently result in possible issues with joint mobility and even organ immobility.

Among college students, physical education is one of the most popular sports courses. But not every kid knows how to practice the proper motions and methods for sports. The organs involved may experience issues as a result. It has been acknowledged that the Indonesian word "sport" refers to both "sport" and "physical education." The terms "sport" and "physical education" have been defined in a variety of ways. The issue is whether "sport" and "physical education" are sufficiently covered by these definitions (Bangun, 2016). College students often experience issues similar to the ones mentioned above. In the end, pupils just ignore the situation and fail to take appropriate action.

These days, researchers are creating a wide range of infrastructure and health technologies. This is done to make things easier and safeguard pupils' safety when they are exercising. Every physical activity, but particularly sports, whether done for fitness, training, or education, has the risk of injury, which can eventually impair performance, mental health, and physical activity. Sports injuries can have deadly consequences for sportsmen, forcing them to completely cease training. Trauma may develop for students and members of the public who sustain sports-related injuries if the injury interferes with their regular activities and routines (Simatupang, 2016). Sports injuries include overuse syndrome, which is a chronic consequence of training sessions involving repetitive and monotonous movements or postures that result in clinical manifestations, in addition to acute damage that happens during sports, such as sprains and cuts in the soft tissues of the musculoskeletal system (Setyia Ningrum, 2019). Sports injuries are typically brought on by trauma, direct impact, or prolonged, repetitive training (Setiawan, 2011). According to Ali and Bambang in Meikahani, R., & Kriswanto, E. S. (2015), injuries are anomalies that arise in the body that cause pain, heat, redness, swelling, and malfunctioning of muscles, tendons, ligaments, joints, or bones as a result of excessive activity or accidents.

One of the things that keeps athletes from reaching their full potential in sports is injury. A history of prior injuries, muscle exhaustion, and inefficient leg movements brought on by skipping warm-up and stretching during exercise are some of the factors that contribute to injuries suffered by athletes (McCall, 2015). Sports massage is one therapy that students frequently employ to ease the tense muscles brought on by practice or competition. Lactic acid in the blood is a result of the body's energy expenditure mechanism, which affects muscle tension.

Students of STOK Bina Guna participate actively in athletics. Students commonly sustain a variety of injuries, including cramping and exhaustion. The lack of knowledge among students and people in their immediate vicinity regarding sports massage, its application, and its use is regrettable. Sports massage, however, can help with these issues. There aren't many genuinely qualified masseurs in STOK Bina Guna that are capable of providing sports massage at the moment. This is perhaps one of the reasons why students have lost to other schools and never won overall titles in any athletic competition.

Thus, the Community Service Team will host a sports massage socialization at STOK Bina Guna on this occasion in the hopes that this campus will be interested in and motivated to become masseurs who are knowledgeable and skilled in sports massage, which should benefit STOK Bina Guna's athletic accomplishments. Since neither the instructors nor the pupils have ever attended official schooling, they perform massages without any guidance from a true massage specialist or scientific theories based on book references. As a result, the team will host a sports massage socialization aimed at students and instructors of physical education, sports, and health. These individuals will receive instruction from professional masseurs in the hopes that they will gain the knowledge and abilities necessary to become masseurs and base their work on the science of proper massage.

A type of injury treatment called massage employs touch to encourage the immune system to produce specific chemicals that aid in healing. In addition to relaxing muscles, massage helps improve blood and lymph circulation, stretch joints, relieve discomfort, and break down lactic acid accumulation that occurs following exercise (Kozier, 2018). Frirage massage manipulation, which combines friction and efflux, is intended to increase blood flow, promote relaxation of muscle nerve fibers, lessen discomfort, and hasten the healing process (Graha, 2012).

In contrast to pressure signals carried by more myelinated nerve fibers, which can transmit pressure stimuli more quickly than pain stimuli, pain is believed to stimulate shorter, less isolated nerve fibers, which prevents pain signals from reaching the brain (Berman, 2015). This is the mechanism by which massage reduces pain. By activating large-diameter fibers (A $\beta$ ), massage prevents the brain from receiving pain signals from smaller fibers (A $\delta$  and C fibers) (Champaneri, 2014). Pain signals are obscured by the faster transmission of pressure signals during massage (Kamali, 2014).

The problem of injuries during sports activities still often occurs among STOK Bina Guna students, this is what inspired the author to provide socialization of Sport Massage which can be used to prevent sports injuries or can even be done to rehabilitate if injured while doing sports activities.

## METHOD

### Research Design

The issues that partners confront are addressed through a socialization activity that is part of the community service method. This socialization is an attempt to impart knowledge about how to prevent and treat sports injuries with Sport Massage. Students and instructors at STOK Bina Guna were the activity's target audience, and the socialization was implemented at the STOK Bina Guna Hall. There are multiple sub-activities included in this activity. Giving students at STOK Bina Guna an awareness of the meaning, goals, and advantages of sport massage through socializing exercises, 2) supplying information on fundamental Sport Massage techniques; 3) facilitating hands-on tutorial exercises that involve applying elastic bandages to the ankles using the figure eight (number 8) bandage technique; 4) offering individual assignments that each participant must complete in order to develop and master Sport Massage movements for their own performance.

### Participant

The number of participants in this activity was 30 participants, all of whom were STOK Bina Guna students.

### Data Analysis

The results of the development of this sports massage must be reported for evaluation so that it can truly be used as a guide for carrying out correct and ideal sports massage.

## RESULTS AND DISCUSSION

### Results

The following elements show the total outcomes of the community service activities that were implemented: 1. Thirty STOK Bina Guna students have participated in the socializing or target audience, meeting the target number of participation. Thirty students participated in the implementation of this exercise. Therefore, 100% of the goal number of training participants was reached, which is excellent. 2. Since up to 27 pupils (90%) have mastered sports massage moves, the socializing goals can be deemed successfully met. Because they were not accustomed to performing sports massage movements, the participants' challenges in putting the instruction into practice were still stiff. The community service team made an effort to help students complete the practices such that 3. The planned material targets in this community service activity were achieved, and this achievement may be rated as good (80%). Participants can receive all scheduled sports massage materials; however, some elements are only provided in outline form because of time limits. 4. Based on their understanding of the topic, participants' abilities can be evaluated as good (80%).

### Discussion

Based on the four aforementioned criteria, the community service projects completed by STOK Bina Guna students can be rated as good overall. Many people have contributed to this, particularly the professors and campus administrators at STOK Bina Guna. The interaction between the community service participants and the implementers demonstrates that the implementation of this service went well overall. The students were so excited about this activity that they asked questions about anything they didn't know about sports massage. Additionally, they wanted the activities to go on.

## CONCLUSION

According to the findings of this community service project, a large number of students were eager to take part in the training because they believed that understanding how to manage sports injuries in the workplace was crucial. Many students are still unaware of how to treat injuries sustained in sports, both to themselves and to others. The following are the findings from the application of this training: producing high-quality masseurs. educating students on the management of sports injuries using sports massage, both theoretically and practically. establishing a research group for massage with the goal of improving and

expanding on scientific understanding of sports massage. It is anticipated that participants will grow into pupils who comprehend how to treat sports injuries on the field, especially when it comes to sports massage. It is hoped that this outreach initiative would raise the level of massage therapists' understanding.

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#### AUTHOR CONTRIBUTION STATEMENT

All authors contributed equally to the planning, implementation, and reporting of this community service program. Muhammad Aji Gumelar served as project coordinator and corresponding author. Muhammad Abizan Hakim and Mechrimdo Christian Zebua were responsible for site coordination and data collection. Mikael Tarigan led the educational activities. Dekati Harefa contributed to the design of the community service program participants. All authors reviewed and approved the final manuscript.

#### CONFLICT OF INTEREST AND FUNDING

The authors declare no conflict of interest related to the conduct, authorship, or publication of this study.

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