

**IDENTIFIKASI CEDERA OLAHRAGA DI MASYARAKAT KOTA SEMARANG
BERDASARKAN GENDER**

**IDENTIFICATION OF SPORTS INJURIES IN SEMARANG CITY COMMUNITIES
BASED ON GENDER**

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Abstrak

The study aims to determine the type of injury and location of sports injuries experienced by the people of Semarang City based on gender. The survey method used in this study. The population of this study was the people of Semarang who became patients of Seger Waras Massage Clinic. The samples in this study used total sampling techniques. Collect data using questionnaires. Data analysis using frequency statistics. The results showed that sports injuries that occurred in Semarang city people consisted of 1.12% male and 3.06% female neck injuries, 10.82% male shoulders and 15.31% female, male outer elbows 0.87% and 1.02% female, 0.37% male inner elbows and 0% female, 1.99% male and female wrists 12.24%, 0.25% male and female palms 1.02%, male fingers 0.75% and female 2.04%, Back male 5.72% and female 6.12%, waist male 10.07% and female 19.39%, periformis syndrome male 2.74% and female 2.04%, hamstring male 2.99% and female 3.06%, knee male 41.04% and female 21.43%, calf male 1.12% and female 1.02% and ankle male 20.15% and female 12.24%. In conclusion, sports injuries experienced by the people of Semarang City are 14 types of sports injuries and those often experienced by men and women are knee injuries, 330 men (41.04%) have knee injuries and 21 women have knee injuries (21.43%).

Keywords: cedera olahraga, massage, gender

Abstract

The study aims to determine the type of injury and location of sports injuries experienced by the people of Semarang City based on gender. The survey method used in this study. The population of this study was the people of Semarang who became patients of Seger Waras Massage Clinic. The samples in this study used total sampling techniques. Collect data using questionnaires. Data analysis using frequency statistics. The results showed that sports injuries that occurred in Semarang city people consisted of 1.12% male and 3.06% female neck injuries, 10.82% male shoulders and 15.31% female, male outer elbows 0.87% and 1.02% female, 0.37% male inner elbows and 0% female, 1.99% male and female wrists 12.24%, 0.25% male and female palms 1.02%, male fingers 0.75% and female 2.04%, Back male 5.72% and female 6.12%, waist male 10.07% and female 19.39%, periformis syndrome male 2.74% and female 2.04%, hamstring male 2.99% and female 3.06%, knee male 41.04% and female 21.43%, calf male 1.12% and female 1.02% and ankle male 20.15% and female 12.24%. In conclusion, sports injuries experienced by the people of Semarang City are 14 types of sports injuries and those often experienced by men and women are knee injuries, 330 men (41.04%) have knee injuries and 21 women have knee injuries (21.43%).

Keywords: sports injuries, massage, gender

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INTRODUCTION

Sport is an activity that has the aim of improving a person's quality of life. People who actively participate in sports and recreation have important positive implications for health throughout the lifespan (Emery, 2019). Someone who exercises regularly will get health benefits for their body and can reduce stress levels in themselves (Pane, 2015), osteoporosis in the sternum, improving the condition of the respiratory muscles can be prevented through good sports activities (Kurnianto, 2015). However, if exercise is not done as it should, it will result in the exerciser getting the opposite of the benefits of the sport itself, the exerciser will get injuries to parts of the body shortly or after doing exercise. Sports injuries are the consequence of a complex interaction of several risk factors and events (Bittencourt et al., 2016). Sports Injuries are pain caused by sports, which can cause defects, injuries and damage to muscles or joints and other parts of the body (Artanayasa & Putra, 2014). A person who carries out sports activities or physical exercise and then has an injury to a part of his body is defined as a sports injury.

Sports injuries are not only sudden damage that occurs during exercise, such as strains and lacerations in the soft tissue of the musculoskeletal system, but are the result of long-term exercise with monotonous movements carried out repeatedly, resulting in clinical manifestations such as overuse syndrome (Setyaningrum, 2019). Sports injuries can occur to anyone, anytime, and anywhere and are characterized by damage to the structure and function of the body due to force or physical or chemical pressure during exercise (Siregar et al., 2022). A sports injury is someone who plays a sports game or a training session at which time they experience an injury to their physical part (Rofik & Kafrawi, 2022). Sports injuries can also occur due to collisions or overtraining by someone. The causes of sports injuries can be divided into two categories, namely external factors such as body contact, the equipment used and the condition of the sports field. Internal factors such as body anatomy, inappropriate exercise movements, muscle fatigue and low fitness levels (Setiawan, 2011). Good physical condition can minimize the occurrence of injuries when carrying out sports activities (Ismunandar, 2020; Puspitasari, 2019).

Semarang City is the capital of Central Java province which has a population of 1,653,524 people consisting of 818,441 men and 835,083 women (BPS, 2022). The people of Semarang city are very fond of doing sports activities, both performance sports and recreational sports, such as jogging, cycling, badminton, basketball, weight lifting, football, futsal, aerobics (Pranata, 2020). Based on the results of interviews, researchers with residents of the city of Semarang who came to the Segar Waras Massage clinic concluded that injuries to sports practitioners, both men and women in the city of Semarang, were caused by a lack of warm-up before doing sports or physical activity as well as poor physical activity and physical condition. This happens because people's understanding of the importance of warming up before sports activities is still relatively low. If someone does not do a serious warm-up before doing sports activities, they will easily get injured (Setiawan et al., 2018). Based on this problem, it is necessary to conduct a research study on the identification of sports injuries in Semarang city residents based on gender.

The urgency of this research is that conducting research on the identification of sports injuries based on gender can help identify differences in injury risk between men and women in the city of Semarang. With a better understanding of these differences, a more effective prevention strategy can later be developed. to reduce the risk of injury to the general public who are active in sports activities for both men and women and this can improve the health and safety of society as a whole. Based on existing problems, researchers are interested in

identifying sports injuries in Semarang city residents based on gender.

METHOD

The method used in this research is the survey method. According to (Sugiyono, 2022), the survey method is used to obtain data from certain natural (not artificial) places, but researchers carry out treatments in collecting data, for example by distributing questionnaires and structured interviews. This type of research is quantitative descriptive research. The population of this study is the people of Semarang city who are patients of the Seger Waras Massage Clinic. The sampling technique in this study used a total sampling technique so that all patients were sampled, namely 902 people consisting of 804 men and 98 women.

The research instrument uses a questionnaire with a closed method, a closed questionnaire is a question or statement that expects a short answer or expects the respondent to choose one alternative answer for each question or statement that is available (Sugiyono, 2022). Respondents are asked to answer questions or choose statements given according to the circumstances they feel or of their own free will based on their thoughts and opinions (Darwin et al., 2021). Instrument validity tests carried out in relation to content validity are based on logical considerations, namely through expert judgment.

The data analysis technique used is descriptive statistics. Descriptive statistics are statistics used to analyze data that has been collected by describing or illustrating the data that has been collected as it is without the intention of making conclusions, which are applicable to the general public. The descriptive calculations use percentage descriptive statistics, because descriptive statistics include, among other things, presentation of data through tables, graphs, pie charts, pictograms, calculation of mode, median, mean (measurement of central tendency), calculation of deciles, percentiles, calculation of data distribution through average calculations, standard deviation, and percentage calculation (Sugiyono, 2022).

Data analysis uses a percentage formula based on the frequency percentage formula used is as follows:

$$P=f/N \times 100\% \quad (1)$$

Information:

P = Percentage

F = Frequency

N = Number of Respondents

(Ajat Rukajat, 2018).

RESULTS

Based on the research results obtained from 902 respondents, the following data was obtained:

Table 1. Location of Sports Injuries by Gender

No	Type of Injury	Male	Female	Total
1	Neck	9	3	12
2	Shoulder	87	15	102
3	outer elbow	7	1	8
4	inner elbow	3	0	3
5	Wrist	16	12	28
6	Palm	2	1	3
7	fingers	6	2	8
8	back	46	6	52

No	Type of Injury	Male	Female	Total
9	waist	81	19	100
10	Periformis syndrome	22	2	24
11	Hamstrings	24	3	27
12	Knee	330	21	351
13	Calf	9	1	10
14	Ankles	162	12	174
	Total	804	98	902

Based on table 1, answers were obtained from 902 respondents, namely 12 cases of neck injuries, 9 cases in men and 3 cases in women, 102 cases of shoulder injuries, 87 cases in men and 15 cases in women, elbow injuries. externally there were 8 cases consisting of 7 cases in men and 1 case in women, internal elbow injuries were 3 cases and all occurred in men, wrist injuries were 28 cases consisting of 16 cases in men and 12 cases in women, palm injuries as many as 3 cases consisting of 2 cases in men and 1 case in women, injuries to the fingers as many as 8 cases consisting of 6 cases in men and 2 cases in women, injuries to the 52 back cases consisting of 46 cases in men and 6 cases in women, 100 cases of injuries to the waist consisting of 81 cases in men and 19 cases in women, periformis syndrome injuries in 24 cases consisting of 22 cases occurred in men and 2 cases in women, hamstring injuries were 27 cases consisting of 24 cases occurring in men and 3 cases occurring in women, knee injuries were 351 cases consisting of 330 cases occurring in men and 21 cases occurred in women, injuries to the calf were 10 cases consisting of 9 cases occurring in men and 1 case in women, ankle injuries were 174 cases consisting of 162 cases occurring in men and 12 cases occurring in women.

Table 2. Percentage of Sports Injuries Based on Type and Gender

No	Type of Injury	Percentage of Men	Percentage of Women
1	Neck	1,12%	3,06%
2	Shoulder	10,82%	15,31%
3	outer elbow	0,87%	1,02%
4	inner elbow	0,37%	0,00%
5	Wrist	1,99%	12,24%
6	Palm	0,25%	1,02%
7	fingers	0,75%	2,04%
8	back	5,72%	6,12%
9	waist	10,07%	19,39%
10	Periformis syndrome	2,74%	2,04%
11	Hamstrings	2,99%	3,06%
12	Knee	41,04%	21,43%
13	Calf	1,12%	1,02%
14	Ankles	20,15%	12,24%
	Total	100%	100%

In table 2 it can be seen that of the 14 types of sports injuries based on gender, the type of sports injury experienced by men is ranked 1st, namely knee injuries at 41.04%, 2nd ankle injuries at 20.15% and 3rd injuries. on the shoulder as much as 10.82%. Meanwhile, for the female gender, 1st place was knee injuries at 21.43%, 2nd at the waist was 19.39% and 15.31% was at 15.31% for shoulder injuries.

DISCUSSION

Based on the research results, there are 14 types of sports injuries that are often experienced by people in the city of Semarang and the types of sports injuries are Neck, Shoulder, Outer Elbow, Inner Elbow, Wrist, Palm, Finger, Back, Waist, Periformis Syndrome, Back of Thigh, Knee, Calves and Ankles. Injuries like this can occur due to instability of the joint muscles so that when carrying out sports activities the body structure cannot move in accordance with good movements resulting in injuries that occur very easily (Setiawan, 2011), but of the 14 types of injuries the most dominant ones are experienced by men and women are similar in terms of knee injuries. Men had knee injuries, namely 41.04% or 330 people out of 804 people, while among women there were 98 people who had knee injuries, 21 people (21.43%). Knee injuries are more common due to age, usually knee injuries are most often suffered by those aged 20 years to 40 years, the cause can be due to impact or obesity (Wijayasurya & Setiadi, 2021). Then, (Soeryadi et al., 2017) stated that knee injuries most often occur because the knee joint is the most susceptible to impact and knee movements are very dominant in all physical activities. Sports injuries can happen to anyone, both men and women who are doing or regularly doing sports activities or physical training (Abdullah et al., 2020). Anterior cruciate ligament (ACL) injuries in men and women are more often experienced when they engage in body contact sports activities such as football, basketball, judo and others (Takahashi et al., 2019). Injuries to women often occur due to facilities and infrastructure that do not suit women's body anatomy and incorrect movements when carrying out sports or physical activities (Al-Asasfeh, 2022). Sports injuries that are often experienced by female are knee, waist, thigh and wrist injuries (Herdiandanu & Djawa, 2020). Sports injuries that are often experienced by women are knee, waist, thigh and wrist injuries (Santosa & Safinatunnajah, 2023). When women engage in sports activities that involve direct contact, the risk of injury to the knee is very high (Yuliana & Kushartanti, 2020). However, in this study, the percentage of sports injuries in men was greater than in women because the sports activities carried out by men involved more body contact sports. Men are susceptible to injury because men do more often and more challenging sports and body contec so the risk of injury is higher, and the injuries that are often experienced are knee and ankle injuries (Rosi Marcelia Yuliza et al., 2022). Men are twice as likely to suffer injuries as women, this is because sports that often involve direct contact such as football, basketball and martial arts (Ismunandar, 2020). The sports that contribute the most injuries are football 43%, basketball 32%, gymnastics 15% and physical fitness activities 10% (Emery, C. A., & Pasanen, 2019).

Sports injuries can be treated by applying sports massage to patients who have sports injuries. One way to treat injuries in sports is sports massage. Sports massage can cure mild to moderate sports injuries (Riyan Hidayatullah & Yaka Saputra, 2021). Providing massage treatment to sports injuries reduces pain, because several massage manipulations such as efflurage and friction destroy the burning residue in the joint muscles which will later be repositioned to return the injured joint to its original position (Sa'roni & Graha, 2019). Sports injuries can be alleviated by providing massage treatment to the injured person using both hands and positioning the person in a relaxed and passive condition (Ayu Tri Widhiyanti et al., 2022; Tama et al., 2021). The recovery process will be faster by providing massage therapy because blood circulation will become smoother, thereby increasing the function and strength of the tissue around the joints (Utomo et al., 2022).

Sports injuries can be prevented or minimized by warming up before doing sports or physical activities and cooling down after doing sports activities (Simatupang et al., 2022). Warming up, or warm-up, is useful for increasing muscle temperature, increasing blood flow, and providing oxygen to the body. in the body, which can improve muscle contractions and prevent muscles from becoming tense (Sudarna, 2011), so that the warm-up can be done well,

it must be varied to make exercisers not feel bored (Sumartiningsih et al., 2023), besides that if someone wants to avoid the When carrying out sports activities, you must ensure that your body is truly healthy and capable of carrying out sports activities, you must understand the characteristics of the type of sport you will be doing and pay attention to whether the sports facilities and infrastructure are safe or not (Stracciolini, A., Sugimoto, D., Howell, D. R, 2017).

CONCLUSION

Sports injuries experienced by people in the city of Semarang based on data from the Seger Waras Massage Clinic are 14 types of sports injuries and the sports injuries that are often experienced by men and women are knee injuries, of which 804 people are injured in the male gender. 330 people (41.04%) had knees and 98 people had knee injuries (21.43%).

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