EDUCATIONAL INFLUENCE WITH ROLE PLAY ABOUT FIRST AID RICE IN SPORTS INJURY ANKLE SPRAIN ON STUDENT KNOWLEDGE SCHOOL

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ABSTRACT
Background: Injuries are damage to the body which results in pain, heat, redness, swelling and unable to function properly. Injuries often occur in school-age children due to excessive activity so they tend to experience ankle sprain problems. Sprains or ankle sprains are types of injuries that occur as much as 36.1% of other injuries. RICE first aid knowledge is very much needed in the initial management of injuries so that no more serious injuries occur. Selection of media with role play so as to help students improve their understanding of RICE first aid.

Research Objectives: To know the effect of education with role play about RICE first aid sports injuries to ankle sprains on the knowledge of school students.

Research Method: Type of quantitative research with Pre-Experimental One Group Pre-Test and post-Test Design, taking samples using a total sampling technique of 40 respondents. Providing knowledge using the role play method results in knowledge using a questionnaire. The results of the analysis using the Wilcoxon test.

Research Results: Obtained the value of knowledge before being given education 13.00 and after being given education 20.00 with a p-value <0.05.

Conclusion: There is an effect of education with role play about RICE first aid for sports injuries to ankle sprains on the knowledge of school students.

Keywords: Ankle Sprain, Education, Knowledge, First Aid RICE, Role Play
INTRODUCTION

Injury is damage to the body which results in pain, heat, redness, swelling, and unable to function properly in ligaments, joints or bones due to excessive movement activities or accidents (Andriyana, 2020). Injury is the main cause of death that often occurs in children and adolescents, especially at the age of 10 to 22 years and reaches 830,000 deaths annually in children and adolescents (Cao et al., 2014).

The World Health Organization (WHO) in 2020 explained that accidental injury is still the main cause of death and disability among adolescents. Approximately 72% of all deaths among adolescents with an age range of 10 years to 24 years of age are often injured due to 4 causes, namely motor vehicle accidents (30%), accidental injuries (15%), homicide (15%), and suicide (12%). Then more than 1 million sports-related serious injuries occur in schools every year among adolescents with an age range of 10 to 17 years (Widiastuti & Adiputra, 2022). Sprains or ankle sprains are the type of injury that occurs as much as 36.1% (Ministry of Health, 2018).

Basic Health Research in 2018 showed that injuries that occurred among the community had increased every year, starting from 2013 to 2018, injuries were recorded at 9.2% in Indonesia. The order of the highest proportion for the place where the injury occurred was at home and its environment (44.7%), highway (31.4%), workplace (9.1%), others (8.3%), school and its environment (6.5%) (Kurnia et al., 2022).

Ankle sprain is a condition where there is excessive stretching or tearing of the ankle ligaments. Ligament injuries can occur due to sudden sprains during physical activity. An ankle sprain injury causes pain due to inflammation that increases due to weakness ligaments and muscle imbalance (Azzahra & Supartono, 2021). What if the initial handling is not done properly it will cause the injury to take longer to recover (Anam, 2020).

Based on the data, ankle sprains occur a lot in sports, basketball is in the first place which is prone to injury, while football, volleyball and running are also athletic activities that often experience ankle sprain injuries. Symptoms that appear after the occurrence of an ankle sprain at 30-40% of patients reported that they had chronic pain, muscle weakness, joint inflammation, nerve damage and joint instability (Sudaryanto et al., 2022).

Ankle injury incident Sprains most often occur in high school aged children, namely 58.3% (Sakti et al., 2021). School-age children (SMA) are most susceptible to injury due to a lack of vigilance during activities and caution in physical sports activities (Widagdo & Anggraeni, 2022). Ankle sprains often occur when the ankle bends suddenly. The location of the pain is on the outer side under the ankle in the ankle area (Wiharja & Nilawati, 2017).

Exercise can cause ankle injuries or ankle sprains. Ankle sprains are injuries that often occur due to overstretching of the ligaments foot and ankle joints, poor balance ability, uneven sports ground surface, inappropriate shoes or footwear and daily activities such as working, exercising, walking etc. (Sebianto et al., 2022). The other causes are lack of warm-up, forcing the body's condition to exceed the threshold of the body's ability before exercising, especially before a match that demands a lot of explosive movements. The most common sports injuries are sprains or sprains (Juliansyah et al., 2022).

Treatment that can be done on ankle sprains is the RICE management. RICE namely Rest, Ice, Compression, Elevation. The benefits of treating ankle sprain injuries with RICE are to help heal injuries, including reducing pain due to the effect of ice packs, reducing movement (immobilization) and using these actions can avoid the risk of more severe injuries, and is quite effective for healing injuries. Because giving action can reduce inflammation that occurs due to injury (Wijaya et al., 2019).

The magnitude of the risk and impact of sports injuries requires education that
Aims to increase knowledge about first aid for victims of injuries so as not to pose a more severe risk. Education that can be done to increase knowledge about first aid for injuries caused by sports is by using RICE treatment, namely Rest, Ice, Compression, Elevation (Fredianto & Noor, 2021).

Knowledge or RICE first aid is very important and needs to be done for high school aged children, especially schools who are active in physical sports activities. So that students can perform first aid on injuries do not occur. Learning activities through education are very important to provide experience and knowledge to school-age children (Nirmalasari, 2020).

Education is a process to improve health. Education for school-age children can increase knowledge and have a positive impact (Astuti, 2022). Given the importance of education for increasing knowledge, the role of nurse can be carried out in this case as educator, namely providing information or education on welfare levels to adolescents or the community to achieve optimal health status (Siregar et al., 2022).

Providing education can be done one way by way of role play. Role play namely carrying out roles according to the scenario that has been achieved with the aim of increasing students’ knowledge in performing RICE first aid sports injuries to ankle sprain (Patonah & Sumartini, 2019). This role play method has also proven effective in helping to learn roles, knowledge, increasing learning and motivation (Samad, 2021).

Role play is often associated with student activities that are carried out directly and in a happy atmosphere. By playing in groups, school-age children will have an assessment of their strengths so that they can help form a positive self-concept, have good emotional management, have a high sense of empathy, have good self-control, and have a high sense of responsibility. Seeing the great benefits of playing for the lives of school-age children, innovations can be made using play as an educational method. Playing can help students understand educational material more deeply by playing games about the material provided (Astuti & Mustakim, 2022).

Based on the results of a preliminary study conducted by researchers in January 2023 with interviews with 16 class X students of Sriwijaya State Sports High School, there were 11 students who said they often experienced ankle sprain injuries during sports and running practice. The results of student interviews said that the way to do it was by just massaging, pulling, and compressing ice. In addition, students have not received education about RICE first aid.

RESEARCH METHODS

The research has received ethical approval with No: 0579/KEPK/Adm2/V/2023. This type of research is qualitative with Pre-Experimental using the One Group Pre-Test and Post-Test Design approach. The sampling technique used was the total sampling technique with a total sample of 40 respondents, namely class X students. The instrument in this study was the Role Play media which contained RICE (Rest, Ice, Compression, Elevation) first aid and used a knowledge questionnaire sheet from Rukmana, (2021) which has been tested for validity and reliability using Cronbach’s Alpha knowledge of 0.968. The results of data analysis using the Wilcoxon test.

RESEARCH RESULT

Characteristics of Respondents

Table 1 Frequency Distribution of Respondents Based on Gender of Sriwijaya State Sports High School Students in 2023
Based on table 1, it is known that the most dominant respondents, namely male sex, amounted to 25 respondents (62.5%).

Table 2: Average Age of Student Respondents at Sriwijaya State Sports High School in 2023

<table>
<thead>
<tr>
<th>Variable</th>
<th>Means</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>15.60</td>
<td>16.00</td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>

Based on Table 2, the mean value is 15.60 with a minimum age of 15 years and a maximum age of 17 years.

Table 3: The Effect of Education with Role Play on RICE First Aid for Sports Injuries to Ankle Sprain on Knowledge of School Students

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>RICE First Aid Knowledge Prior to Education</td>
<td>13.00</td>
<td>10</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>RICE First Aid Knowledge After Education</td>
<td>20.00</td>
<td>17</td>
<td>20</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Based on table 3 the result is that the p-value <0.05, which means that there is an effect of providing education with role play.

DISCUSSION

The Effect of Education with Role Play on RICE First Aid for Sports Injuries to Ankle Sprain on Knowledge of School Students

From the results of the study it was found that there was an effect of educational knowledge with role play about first aid RICE (Rest, Ice, Compression, Elevation) sports injuries to the ankle sprain on the knowledge of school students with a p-value <0.05.

Learning media are all forms of educational tools that are used as intermediaries in the learning process to increase knowledge. The learning process is a change in the ability of the subject to learn and is influenced by several factors, including learning aids, methods and learning techniques used. To gain knowledge, an appropriate educational method is needed for school-age children, namely playing (Role Play) (Saputra et al., 2019).

From several previous studies that support the research conducted, that there is an effect of using role play media on student knowledge (Nugroho, 2019; Hendri et al., 2017; Alfikrie et al., 2019; Indrawati et al., 2021).

Role play media can increase knowledge because it is fun role play involves elements of play and gives students the freedom to move actively. Learning that actively involves students will have a more profound impression on them, thus increasing understanding of the material optimally. The activeness of students in learning activities is none other than to construct their own knowledge. This resulted in an increase in the knowledge of students who experienced mastery of learning outcomes and had a significant influence (Nugroho, 2019; Hendri et al., 2017).

Role playing can motivate and inspire students from the activities of the characters played, can make a passive learning atmosphere active, students become active and cheerful, so students are able to capture more messages or information provided. This method is also fun and not boring, which can increase students' knowledge (Indrawati et al., 2021).

Previous research also explains that media role play provides real experiences for individuals when participating in education. The method used is practicing or demonstrating and playing roles directly to students and students are more active. So it is very effective in increasing
knowledge (Alfikrie et al., 2019). This is reinforced by Edgar Dale's theory which describes the level of abstraction from the media that influences the learning experience. Edgar Dale's experience described the shape of the cone as it went up, the absorption power of students decreased. At the lower level, this learning has the most concrete level of student absorption, namely with role play media, it is obtained 90%, the highest absorption power can be remembered by students and gives effect and is very precise. used to increase knowledge so students can apply it themselves (Devhy et al., 2021).

Based on research conducted, education takes place using role play media so that material enters long-term memory, because stimuli are given repeatedly (Rahman et al., 2016). This is reinforced by memory theory as an impetus for changes in one's behavior arising from experience which are relatively permanent in nature because they are shaped by experience factors (Dewi et al., 2022). Memory / long-term memory is a process that is permanent. The capacity of long-term memory is unlimited, meaning that information stored in the long term lasts for a long time or even forever. The process that occurs repeatedly will cause an immediate reflex understanding of the existence of this memory (Hasanuddin, 2017).

In the event of an injury, good and correct handling is very important because it is a determining factor for how much accelerate injury recovery so that athletes can continue their achievements again (Siregar & Nugroho, 2022). RICE measures taken to prevent further damage (Hardyanto & Nirmalasari, 2020).

Based on the results of the discussion, the researcher assumed that there was an influence before and after being given education on students' knowledge of RICE (Rest, Ice, Compression, Elevation) first aid. This research helps students understand, because with real experience and actively involving students, it is fun so that students can apply the information provided. This can be seen from the significant changes in students regarding RICE (Rest, Ice, Compression, Elevation) first aid indicating an interest in providing education using role play media to

After conducting research on 40 respondents, it can be concluded that there is an effect of providing education with role play about RICE first aid for sports injuries to ankle sprains on the knowledge of school students with p-value < 0.05.

**Suggestion**
For future researchers, this can be used as basic data for further research, it is hoped that they can continue research on RICE (Rest, Ice, Compression, Elevation) and Post-Test design approach, so that there is a comparison group, the number of respondents for the first role play can be reduced, not 10 respondents so that they can repeat the same role play.

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**CONFLICT OF INTEREST**
There is no possibility of conflict of interest.

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**LITERATURE**


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