

ABSTRACT

The Influence of Arm Muscle Strength and Abdominal Muscle Strength on the Upper Serve in Female Volleyball Players Assisted by the Sumenep PBVSI District Government 2023. Tri Martdi, M. Ifan

Keywords: Arm muscle strength, Abdominal muscle strength, Volleyball top serve.

This study aims to determine whether there is a significant influence on the strength of the arm muscles and abdominal muscles on the upper serve after and before training.

This type of research uses quantitative methods in the form of trials (experiments). The data collection technique uses a test in the form of a top serve using a pre-test and Post-test sample which I use at the women's volleyball team under the guidance of the Sumenep PBVSI district government. The data analysis that I used used the SPSS statics 26 application.

The results of this research are (1). The arm muscles have an effect, with the results of the data analysis that has been explained in the push-up group, the pre-test average was 5.00 while the Post-test was 7.67. (2) the abdominal muscles have an influence. The results of the data analysis that have been explained in the sit-up group obtained a pre-test average of 4.75 while the Post-test was 6.88. (3) control influences the results of the data analysis that has been explained in the sit-up group, the pre-test average was 4.75 while the Post-test was 6.88.

The conclusions of this research are (1). Arm muscle strength has an effect on improving the upper serve, meaning that after being given treatment in the form of push-ups, female athletes assisted by the PBVSI Sumenep district government experienced an increase in performing the upper serve. (2). The strength of the abdominal muscles influences the improvement of the upper serve, meaning that after being given treatment in the form of sit-ups, the female athletes assisted by the PBVSI Sumenep district government experienced an increase in performing the upper serve. (3). From the results of the Pre-test and Post-test that have been carried out, arm muscle strength has the greatest influence on the upper serve.