Pilot: Water Aerobics Benefits Mobility and Flexibility

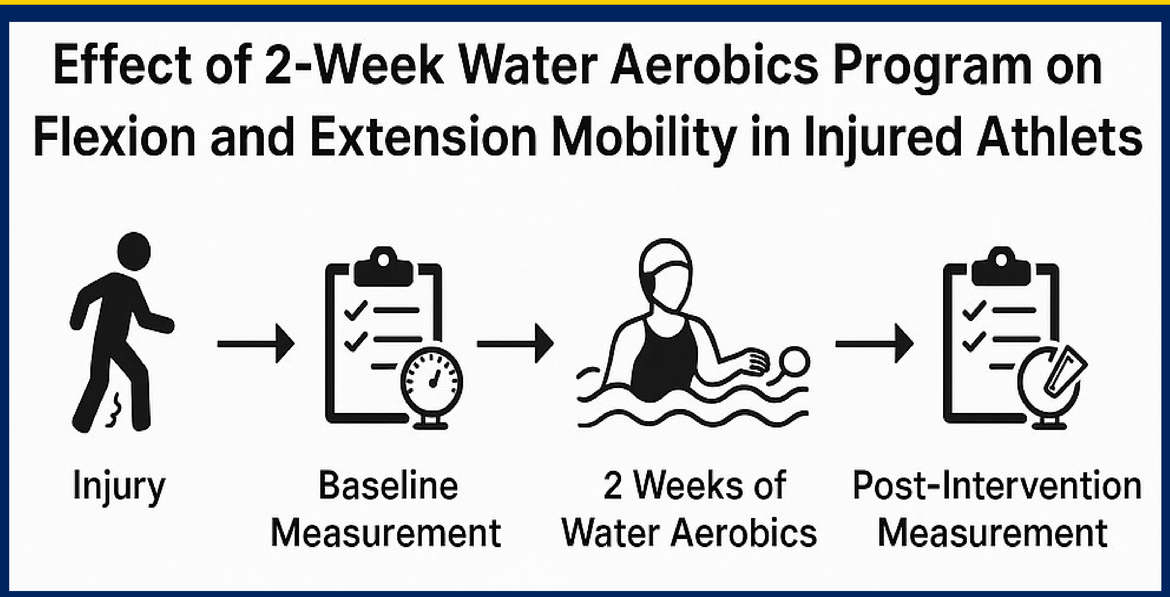
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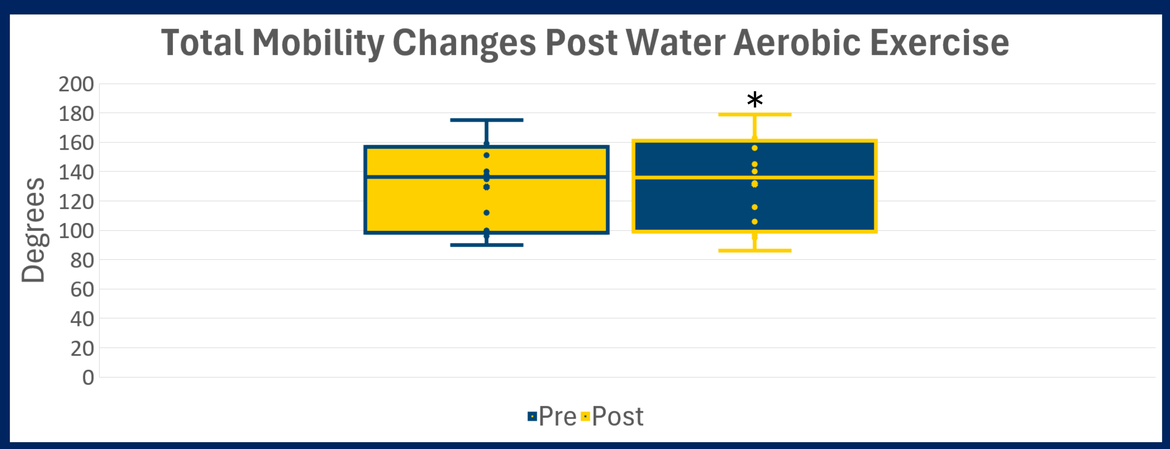
Introduction

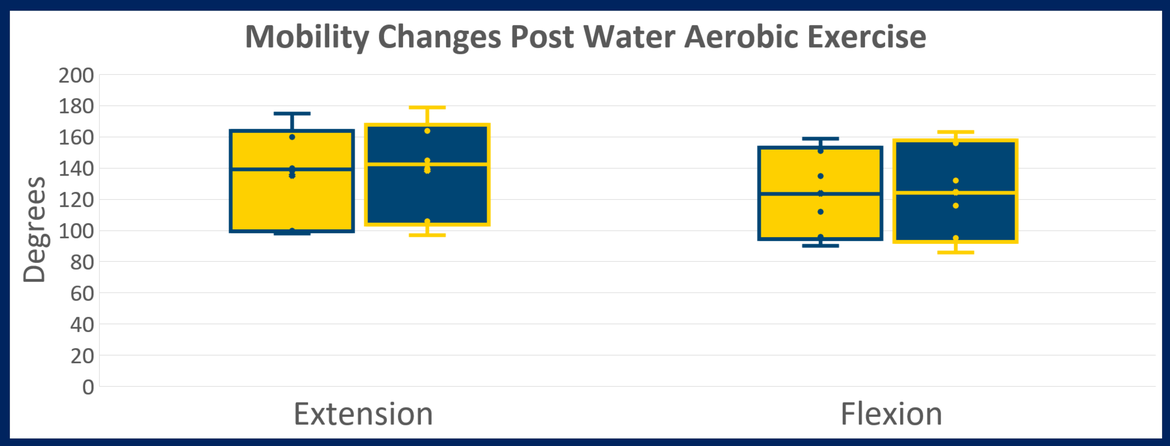
Every year, athletes are injured in sport-related activities and seek help from health care professionals. In each case their treatment options vary based on injury and care available which means that not every individual will respond positively to the therapy approach**. This project is designed to show the amount of time it takes to show specific results in mobility and flexibility for individuals conducting water aerobic exercises.**

Methodology

Five student athletes ranging from the ages of 20-22 who had recently been injured and cleared to play in a sport-related setting were recruited. A customized water aerobics plan was set up to accommodate everyone's specific mobility issue. Twice a week for two weeks for about 30-45 minutes, athletes conducted water aerobics. Example exercises were as follows: athletes with upper-limb mobility issues performed freestyle breast strokes/back strokes, arm circles and arm extensions. The athletes with an ankle mobility focus, walked on their toes underwater and performed underwater feet kicks while holding the side of the pool. Finally, wrist mobility placed a pool buoy in between her legs and swam only using the arms. A goniometer was also used before and after to measure how far the injured sites could be flexed and extended.







Results

Through observation, the athlete with an ankle mobility issue performed his exercises well and benefited from walking on his toes in the water, which took body weight off the feet. All participants experienced some discomfort during their first session, but it eased as the sessions continued. There was a significant increase in mobility for the joints affected. (2.08±3.42 degrees p=0.03). Even though there was high variability and low sample size, these results suggest that water-based aerobics improves mobility.

Conclusion

Water-based aerobics increased mobility and flexibility. This was a small sample size over a short therapeutic duration but showed promise as an effective therapy. In the future, we would like to retry this experiment by extending the session and changing the time-period to 2 months to determine whether mobility would increase further.

References

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