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INTRODUCTION

The benefits of aquatic physical therapy have been demonstrated in scientific studies on various disorders. Methodological and ethical issues are nevertheless reflected in the scant existing research in Pediatrics.

PURPOSE

The aim of this review was to assess the evidence produced in the last twelve years, highlighting new trends and outlining guidelines for physiotherapists working with children through aquatic therapy.

METHOD

The target population included children with all type of disorders, aged one month to 21 years. The following databases were searched for English language studies from 2000 to 2012: PUBmed, Physiotherapy Evidence Database (PEDro), IBECS, Cochrane Library, LILACS, SciELO. Search terms included 'aquatic physiotherapy', 'aquatic physical therapy', 'hydrotherapy', 'children', 'pediatrics'. Inclusion criteria included: randomized and quasi-randomized clinical trials, case studies and systematic reviews on children doing aquatic physical therapy. Nineteen articles met the criteria for inclusion (11 clinical trials, 5 case studies and 3 systematic reviews). Analysis and interpretation of the results was discussed at the level of main objectives, populations and samples studied, the measured variables, methods selected as well as the instruments used to collect data.

REFERENCES

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RESULTS

The results suggest that most studies tried to determine the effectiveness of the aquatic programs. The population most studied was between 5-12 years old with small samples. Descriptions of the programs are not rigorously given. Most of the studies report improvements in the measured variables, but not all of them present data or statistical test results. Studies did not often make conclusions on the effectiveness of programs in general, but only on the effectiveness of certain variables.

CONCLUSION

Due to the large number of case studies, no extrapolations can be made. Starting in 2010 there was a significant increase of published evidence in aquatic therapy, however further investigation concerning randomized clinical trials need to be performed to examine the effectiveness of aquatic training programs and strategies for children.

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