

IMPROVING THE DEVELOPMENT OF CHILDREN WITH NEURODEVELOPMENT DISORDER BY EMPOWERING THE OCCUPATIONAL THERAPISTS IN AQUATIC PROGRAM

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ABSTRACT

Background: There are different therapies that can be used to help the development of children with neurodevelopmental disorder, one of which is aquatic therapy. This therapy was a recreational therapy that involves the use of water and it plays an important role in enhancing the child's quality of life and improving productivity. Therapists use specifically-designed water activities to help children restore, improve, and enhance their functions. This study aimed to analyze the effectiveness of occupational therapist empowerment training in aquatic program on the knowledge, attitude, and competence of occupational therapists, and the effectiveness aquatic therapy on improving the development of children with neurodevelopment disorder.

Subjects and Method: This was a quasi experiment study with pre and post test design. A sample of 88 occupational therapists were selected for this experiment. Knowledge, attitude, and competence of the therapists before and after empowerment training were measured and compared. Likewise, 78 children with neurodevelopmental disorder in Central Java who were under treatment by the occupational therapists were measured and compared before and after the occupational therapist empowerment training, in terms of motoric and sensoric development. The data were analyzed by linear regression analysis model.

Results: Empowerment training significantly increased knowledge ($b=3.95$; 95% CI= 3.55 to 4.34; $p<0.001$), attitude ($b=3.49$; 95% CI= 2.84 to 4.14; $p<0.001$), and competence ($b=2.73$; 95% CI= 1.93 to 3.53; $p<0.001$) of the occupational therapists. Aquatic therapy resulting from empowerment training significantly increased motoric ($b=1.39$; 95% CI= 1.04 to 1.74; $p<0.001$), and sensoric ($b=2.79$; 95% CI= 2.13 to 3.45; $p<0.001$) development of children with neurodevelopment disorder.

Conclusion: Empowerment training effectively increases knowledge, attitude, and competence of occupational therapists. In turn, aquatic therapy conducted by the occupational therapists effectively increases motoric and sensoric development of children with neurodevelopment disorder.

Keywords: Occupational therapist, aquatic program, empowerment training, competence, motoric development, sensoric development, neurodevelopment disorder, children

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