

The Effect of aerobics on Anxiety in Children with Cancer

Zahra Ebadinejad¹, Maryam Rassouli^{*2}, Abolfazl Payandeh³, Ghazal Zahed⁴, Fatemeh Mohalli⁵

1. MS Pediatric Nursing, Faculty Member, School of Qaen Nursing and Midwifery, Birjand University of Medical Sciences, Birjand, Iran
2. Associate Professor, Department of Pediatrics, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran
3. PhD in Biostatistics, Health Promotion Research Center, Zahedan University of Medical Sciences, Zahedan, Iran
4. Associate Professor, Department of Child and Adolescent Psychiatry, Pediatric Congenital Hematological Disorders Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran
5. MS of Nursing, Instructor of School of Qaen Nursing and Midwifery, Birjand University of Medical Sciences, Birjand, Iran

***Corresponding Address:** Department of Pediatrics, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Email Address: rassouli.m@gmail.com

Abstract

Background & Aim: Cancer is one of the chronic diseases with increasing prevalence in children that has many psychological outcomes, one of which is anxiety. This study was conducted to determine the effect of aerobics on mild anxiety in children with cancer.

Methods: The current research is a quasi-experimental study. The study population was all of the 7-12 years old children with cancer hospitalized in the oncology ward of one of the hospitals in Tehran in 2014. The anxiety in children was measured through Beck Children Anxiety Inventory and 31 eligible children were selected through convenience sampling. Intervention was done in 6 group sessions of 45 minutes via the implementation of aerobics in the playroom. The anxiety of the children was measured again in the last day of intervention (sixth day) and also three weeks later. The data were analyzed by using the repeated measures ANOVA, independent T-test, Pearson's correlation and one-way ANOVA in the SPSS 18.

Results: The results showed that the mean score of Anxiety in children significantly decreased after the intervention (11.04 ± 1.33) and three weeks later (12.16 ± 1.94) in comparison with the readings taken before the intervention (10.58 ± 2.12) ($P < 0.001$).

Conclusion: The results revealed that as a non-pharmacological intervention aerobics can reduce the mild Anxiety in children with cancer. Therefore, aerobics is recommended in order to restore the health and vitality of hospitalized children.

Keywords: Aerobics, Anxiety, children with cancer