Health education program at the "happy life, healthy heart" school: a randomized clinical trial

Authors:
M Alievi Mari\textsuperscript{1,}, C Santin Dal Ri\textsuperscript{1,}, P Portal Teixeira\textsuperscript{1,}, L Campos Pellanda\textsuperscript{1,}, \textsuperscript{1}Institute of Cardiology of Rio Grande do Sul - Porto Alegre - Brazil,

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Background - School interventions based on playful activities are good strategies to provide health knowledge to children, impacting on healthy habits and potentiating the prevention of cardiovascular diseases.

Purpose- To verify whether classroom intervention for cardiovascular health prevention increases the health knowledge of schoolchildren and makes behavioral changes in the lifestyle of teachers and students.

Methods - The study was placed in ten public schools of Frederico Westphalen, a city in the south of Brazil, where students from the 1st to 5th grade of elementary school aged 6 to 12 years and 32 teachers were recruited. Randomized clinical trial which examined the effects of an intervention with teachers and students on their health knowledge. Subjects such as cardiovascular health, nutrition and physical activity (PA) were broached with the teachers undergoing training and with students in classroom by the teachers themselves. Nutritional status of schoolchildren was evaluated by weight, height and z-score, level of PA and food consumption by DAFA questionnaire and health knowledge by CARDIOKIDS. Socio-demographic, nutrition and physical activity data of the teachers were evaluated by semi-structured questionnaire.

Results - A total of 473 students were evaluated, 211 (44.6%) in the Control Group (8.8 ± 1.5 years, 57.3% girls) and 262 (55.4%) in the Intervention Group (8.5 ± 1.6 years, 51.1% boys). 32 teachers were also divided into CG (CGt), 43.8% (n = 14, Age 39.2 ± 7.7) and IG (GIt), 56.3% (n = 18, Age 43.4 ± 9.6). CARDIOKIDS demonstrated that there was no interaction effect of time and group on the level of children's knowledge (effect size = 2.293, p = 0.131), indicating an improvement in both groups. In relation to food consumption, IG increased 15.2% and 19.8% the number of students who followed the recommendations of pizza/hamburger (p <0.001) and soft drinks (p <0.001) respectively. In GIt there was an increase of 27.9% in the number of teachers who started practicing PA after the intervention. Conclusions - Both groups of students increased the level of knowledge, but only the IG changed food behavior. This change was observed by greater adherence to the Brazilian Food Guide recommendations of not consuming pizza/hamburger and soft drinks. Teachers of the GIt started to practice more physical activity.