Effectiveness of Interventional Food Based Activity in Preschool on Changing the Food Choosing Behaviour of Preschool Children of Age 2-5 Years in Panadura Urban Council Area

UDSM Abeyrathna^{1#}, KHP Perera², WVN De Mel³, DC Madushan⁴, GWNK Chandrasiri⁵, MN Priyadarshanie⁶ and GDI Rodrigo⁷

^{1,2,3,4,5,6}Department of Nursing and midwifery, Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Sri Lanka ⁷Department of Clinical Sciences, Faculty of Medicine, General Sir John Kotelawala Defence University, Sri Lanka *sithushiabeyrathna@gmail.com

Teaching preschool children to practice healthy food habits is an important and lifelong investment for healthy life. The aim of the current study was to examine the possibility of changing the food choosing behavior in preschool children through an interventional food-based activity. An interventional study was conducted in 2 geographically distant preschools (study group 1, study group 2) in Panadura Urban Council area. A food day was conducted before the beginning of the activity using real food to determine the food choosing behaviors of children. The children were asked to serve their meal from the food provided, and their plates were photographed. An activity using color cutouts of different foods and paper plates aided by a poster depicting the "My plate" method was conducted for the study group (1) by the preschool teacher on a weekly basis for 4 weeks. Each child was given a paper model witch depicted "my plate". The food day was repeated after the conclusion of this activity (week 5). Photographs of the food plates on the two food days were scored out of 10 based on a pretested scheme by an independent observer after the 6^{th} week of the study. The total number of children were 70 (study group 1 n = 35; study group 2-control n = 35). The mean scores for the food plate in intervention and control groups were 7.8 and 7.1 prior to the study and 9.7 and 7.2 after the study (p=0000). There was a significant improvement in choosing appropriate amounts of different food types (carbohydrate, vegetable, protein) in the study group 1 (p = 0000), while this was only seen for carbohydrates in the study group 2. According to current study findings, it is possible to change food choosing behaviors of preschool children though a paper based food activity in the preschool showing the pictures of the "my plate" concept, and the aid of the preschool teachers is a meaningful attempt to change their behavior. Ethical approval was obtained from the ethical review committee (ERC) of the Faculty of Medicine, General Sir John Kotelawala Defense University.

Keywords: Food based activity, Preschool, Food choosing behavior