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Topic: Community health and nutrition programs

Title: Did HealthKick, a randomised controlled trial primary school nutrition intervention, improve dietary quality of children in low income settings in South Africa

Presentation Type: Oral

Background: Numerous studies in schools in the Western Cape Province have shown that children have an unhealthy diet with poor diversity. HealthKick (HK) was a three-year randomised controlled trial aimed at promoting healthy eating habits

Methods: Sixteen schools were selected from two low-income school districts and randomly allocated to intervention (n=8) or control school (n=8) status. The HK intervention comprised numerous activities to improve the school nutrition environment such as making healthier food choices available and providing nutrition education support. Dietary intake was measured by using a 24-hour recall in 2009 in 500 grade 4 learners at intervention schools and 498 at control schools, and repeated in 2010 and 2011. A dietary diversity score (DDS) was calculated from nine food groups and frequency of snack food consumption was determined. A school level analysis was performed.

Results: The mean baseline (2009) DDS was low in both arms 4.55(SD=1.29) and 4.54(1.22) in the intervention and control arms respectively, and 49% of learners in HK intervention schools had a DDS ≤4 (=low diversity). A small increase in DDS was observed in both arms by 2011: mean score 4.91(1.17) and 4.83 (1.29) in the intervention and control arms respectively. The estimated DSS intervention effect over the two years was not significant [0 .04 (95% CI: -0.37 to 0.46)]. Unhealthy snack consumption in terms of frequency of snack items consumed did not improve significantly in intervention or control schools.

Conclusion: The HK intervention did not significantly improve the quality of diet of children.