

Evaluation of a Special Olympics Funded Community-based Health Promotion Program for Individuals with Developmental Disabilities in Two African Countries



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Introduction

Background. The study evaluated the efficacy and feasibility of a Special Olympics funded one-year community-based health promotion program focusing on hygiene, nutrition, and physical activity for individuals with developmental disabilities (DD) and their families in Kenya and Mauritius.

Methods. Process evaluation and pre and post data including participant interviews and informant surveys were collected on 182 individuals with DD.

Measures. Measures included weight; exercise knowledge, attitudes, barriers and self-efficacy; hygiene behaviors, nutrition knowledge, and program satisfaction. Also, interviews with 10 administrators and coaches were used in the process evaluation.



Kenya

Special Olympics Kenya implemented a 15-week *Living Well with a Disability* health promotion health education and physical fitness program.

Program description. Each weekend athletes (104 athletes completed the program) and parents had two forty-five minute sessions covering hygiene and nutrition. Real life objects were included in the demonstrations (fruit and cereal eating, tooth brushing, washing skills, etc.) to be more practical. Athletes also had a one hour physical activity session while parents were taught the importance of physical activity and different ways to provide it for their children. Supervised washing of hands before and after lunch was in place together with supervised washing of dishes. Training was conducted in classrooms at Kenyatta University and Mathare primary schools.

Project goals. The aim was to educate persons with intellectual disabilities and their caregivers on good health behaviors in areas of 1) nutrition, 2) general hygiene, and 3) physical fitness.



Results. After the intervention, participants had significant improvement in the following areas:

Athletes

- Improved their **exercise knowledge**.
- Felt more **confident** to engage in physical activity.
- Improved their **hygiene behavior**.

Family Members

- Accompanying family members reported learning about their own fitness, nutrition, and hygiene.
- Families formed an ongoing support group of 40 parents, with a certificate of association from the Ministry of Gender. This helped parents develop social skills, have a voice in their community and improve relationships with their children.

Program Satisfaction

- 90% of athletes were either very happy or happy with the program.
- Majority (90%) of family members and professional respondents were highly satisfied or satisfied.

Athletes' Attitudes	Baseline Mean	Follow-Up Mean
Exercise Knowledge	7.28	8.40*
Nutrition Knowledge	4.60	4.50
Outcome Expectation	25.42	25.85
Barriers to Exercise	26.02	25.14
Confidence to Perform Exercise	8.35	10.17*

* Paired T test, p<.05

*"I used to be ashamed of my son. Now I walk proudly in my community with him."
 (father from parent group)*



Mauritius

Special Olympics Mauritius implemented a 24-week *Improving the Health and Lifestyle of Athletes* health promotion program to athletes and their families.

Program description. A curriculum on nutrition, hydration and physical activity was adopted from the existing University of Illinois at Chicago *Health Matters* curriculum and an instructional video was developed. They provided a 30-minute nutrition class, twice a week; three physical activity sessions per week to athletes; and a 45-60 minute once a week food preparation class including food shopping to athletes and families.

Project goals. The aims were to (1) educate athletes, their families and teachers on the importance of physical activity, good nutritional habits, and good hydration habits; and (2) increase participation in physical activities.



Results. After the intervention, participants had significant improvement in the following areas:

Athletes

- Increased their **exercise knowledge and nutrition knowledge**.
- Felt more **confident** to engage in physical activity.
- Perceived **less barriers** to exercise.
- Improved their **hygiene behavior**.
- Were less likely to be **overweight**.

Athletes' Attitudes	Baseline Mean	Follow-Up Mean
Exercise Knowledge	5.75	7.31*
Nutrition Knowledge	4.12	4.97*
Outcome Expectation	19.34	21.25*
Barriers to Exercise	34.06	29.93*
Confidence to Perform Exercise	5.46	7.63*

* Paired T test, p<.05

Family Members

- Gained knowledge on nutrition and the importance of water consumption.

*"We didn't know about good food and balanced food. We gave anything we had to feed our kids, which was wrong. After the program, we gained knowledge of how to feed them a balanced diet."
 (mother from parent group)*

Athletes' Body Weight Status	Baseline %	Follow-Up %
Underweight	3	2
Normal	63	80
Overweight	31	15
Obese	3	3

Note. McNemar Test, p<.001

Program Satisfaction

- Most athletes (74%) were happy or very happy with the program.
- All coaches and family respondents were highly satisfied with the program.

Sustainability

In both programs desire to continue the program was very high and participants particularly enjoyed playing sports and learning cooking. After funding ended, the programs sustained themselves through developing partnerships with industry (Mauritius) and with a university and by establishing a small business enterprise (Kenya).

Conclusion

Model health education programs focusing on community partnerships can result in improved healthy lifestyles for individuals with DD and can be sustainable through partnerships with other organizations in African countries. The role of families also cannot be underestimated in generalization of skills and health behaviors to promote healthy living of their family member with DD.