

IIIMPIN - A multidisciplinary initiative to combat childhood obesity in the Caribbean

J.O. Busari [MD,MHPE,PhD, CCPE, FRCPC (hons)] and TEAM [https://jump18.org/team/]

Horacio Oduber

Background:

Patient value is defined as an improved sense of well-being, the experience of easy access to the cycle of care, and reduced healthcare costs by preventing non-communicable diseases. The lifestyle situation in Aruba is alarming. In 2010, the Health Monitor Aruba revealed that 25.6% of girls and 17.8% of boys aged 4-5 years were overweight or obese. Among children ages 10-11 years old, 43% of girls and 42.4% of boys were overweight or obese (Ministry of Public Health and Sport, 2013). Shockingly, in 2020, almost 50% of children younger than 10 years were overweight or obese in Aruba (National NCD MAP Aruba, 2020). These data underscored a pressing need for action!

Rationale:

The Aruba Childhood Obesity Prevention Program JUMP18, established in 2020, addresses the high incidence of overweight in Aruban children. The program employs four strategies: nutritional education, physical activity promotion, and family involvement to reduce the risk of non-communicable diseases like cardiovascular disease, type 2 diabetes mellitus, and psychosocial problems later in life. JUMP18 is a multidisciplinary healthcare program

Participation Criteria:

- Aruban children between the ages of 4-18 years and classified to be Overweight or Obese (BMI- Z score)

- Motivation and commitment from the parents and child

- Parents willingness to attend workshops and carousel consultations

- Participants' absence was permitted only twice during the 6 -month trajectory



Strategy:

A six-month lifestyle intervention started in 2021 and aimed to build Sustainable Healthy Lifestyle Habits in children and their families

Four core pillars:

- I. Physical Activity: Making it fun to work out
- 2. Education: Learning how to form new healthy habits
- 3. Nutrition: Meal plans, tips, and sessions with a dietician
- 4. Research: Monitoring progress and investigating best practices during the program

The Program:

- 90 min Multidisciplinary Carousel consultation 3 Saturdays/ month with a Pediatrician, Dietician, and a Case manager (social worker/nurse)

- Biweekly buddy support
- Group workshops twice a month
- Group workout sessions 3x per week
- Meal plan for different age groups
- Fitness test at the start and end of the program

Results:

Four cohorts of 18 children (n=72)

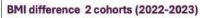
- Average completion rate: 80%
- Average abdominal circumference loss: -5.1 cm
- Average hip circumference loss: -4.5cm
- Average BMI loss: 1.55 kg/m²;
- P =<.0001 (Range: 1.4-1.7 kg/m²)

- Improved stamina and endurance (based on shuttle run & 6-minute walk tests)

- Increased self-esteem
- High satisfaction scores for the program's process and outcome

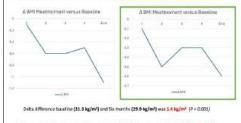
JUMP18 Survey results (2021-2023)

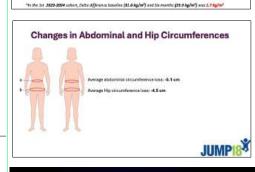
Question/statement	Average Score (1-10)
1. What do you think of the carousel consultations?	9,1
2. How would you rate the JUMP18 program?	8.7
3. The JUMP18 team treated my child and me well.	9.7
4. What do you think about the quality of the workout sessions?	8.8
5. What do you think about the nutrition consultations?	8.9
6. What do you think of the workshops up until now?	8.7



Maastricht

University







Benefits and Threats:

- The Aruban government has adopted JUMP18 as one of the four Pillars of its NCD prevention implementation plan - The program has raised awareness about healthy lifestyles in children and facilitated the adoption of equitable access to care to this category of Service

- Continuity of the program remains vulnerable as funding is solely based on sponsors and a small government subsidy

- Aruba is an obesogenic environment due to high tourism. This constitutes an additional threat to the prevention of childhood obesity on the island

