

A Pediatrician's Strategy for Obesity Prevention and Intervention in Latino Population

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BACKGROUND

- The population of Santa Ana, California is 80% Latino.
- Santa Ana is one of the top 10 cities in California with the highest percentage of overweight/obese children (40%).
- Overweight/obese children often have co-morbidities that are undiagnosed by their primary healthcare providers.

AIMS

- To assess the prevalence of co-morbidities among children who participated in PowerPlayMD-OC a program offered at the Wellness Center in Santa Ana, CA, created and directed by a pediatrician.
- To evaluate the program with respect to changes in BMI measurements, waist circumference, and participant satisfaction.

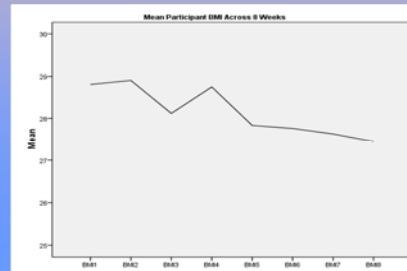
METHODS

- A total of 553 children that participated in the PowerPlayMD-OC program in 2007 and 2008 were evaluated.
- The target population included:
 - *Latinos
 - *Ages 5-18 years old
 - *Body Mass Index (BMI) at the 95th percentile or higher
 - *No previously diagnosed co-morbidity
- All of these clients were enrolled in the largest County Managed Care Organization, CalOptima California Kids Healthy Families.
- Participants were referred primarily by their pediatric health care providers.
- The initial portion of the program lasted 8 weeks, followed by maintenance and conditioning for an additional 10 months providing a medical home.
- Clinical exams were performed at baseline and on a quarterly basis throughout the rest of the year.
- PowerPlayMD-OC is a health, fitness, nutrition and behavioral program designed to help children, adolescents and their families to manage weight, overall well being and permanent lifestyle changes.
- The program includes the following components for referred youth and their families:

- Medical evaluation and supervision
- Nutritional counseling
- Healthy eating and lifestyle education
- Exercise
- Fitness
- Psychosocial counseling

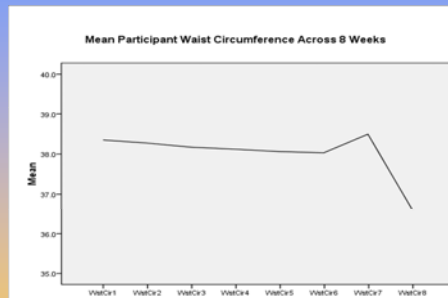
RESULTS: BMI

Repeated Measures ANOVA results indicated that decreases in BMI across the 8-week intervention was significant at the .10 level ($F = 2.64, p = .07$). Changes in BMI did not vary by gender ($p = .73$) or age at referral ($p = .99$).

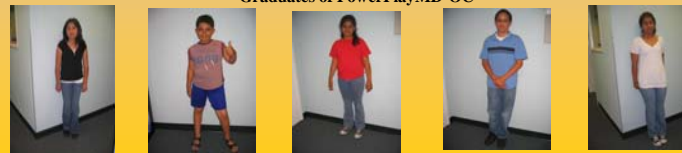


RESULTS: WAIST CIRCUMFERENCE

Repeated Measures ANOVA results indicated that decreases in waist circumference across the 8-week intervention was significant at the .10 level ($F = 6.35, p = .01$). Changes in waist circumference did not vary by gender ($p = .50$) or age at referral ($p = .80$).



Graduates of PowerPlayMD-OC



RESULTS: ADDITIONAL COMORBIDITIES DIAGNOSED

The majority of PowerPlay MD-OC clients (including Cal Optima and non-Cal Optima referrals) were diagnosed with various obesity-related co-morbidities.



RESULTS: PARTICIPANT ATTENDANCE AND SATISFACTION

- The following results pertain to both Cal Optima and non-Cal Optima referrals:
- 92% of all respondents stated that they were "Very Satisfied."
- 100% of all respondents would recommend the program to others and rated the instructors as "excellent" or "good."
- At least 92% of all respondents reported that the information provided about nutrition and exercise was "Very Useful."
- 92% of enrolled patient completed 8 weeks

CONCLUSIONS

- A multi-faceted approach to obesity prevention approach that incorporates the patient, the family, and the provider is successful in reducing BMI and waist circumference among Latino overweight/obese youth. Decreases on these variables were most apparent by the 7th and 8th week of the program.
- Medically based obesity prevention and treatment may detect previously undiagnosed co-morbidities and promotes early treatment of such comorbidities.
- Youth obesity treatment programs should be designed to be culturally sensitive and long term.
- Health Care Plans must eliminate barriers to reimbursement and treat pediatric obesity as a chronic condition requiring long term early and comprehensive medically based treatment to prevent the development of obesity related comorbidities.

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