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The Effectiveness of Culturally Relevant Obesity Programs on Decreasing BMI of Hispanic Children

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The Effectiveness of Culturally Relevant Obesity Programs on Decreasing BMI of Hispanic Children

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Background

- Obesity epidemic a public health concern in the United States
 - significantly increases health burden in affected individuals¹
 - linked to increased risk of diabetes, cardiovascular disease and cancer
 - childhood obesity linked to earlier onset or presence in adulthood of the same diseases²
 - crucial to address this disease at the preventative level³
- Centers for Disease Control and Prevention reports obesity affects **19.3%** of children and adolescents in the United States
 - affects all ethnicities, but increased burden on minority populations of low socioeconomic status⁴
- 1 in 5 Hispanic children considered obese⁵
- Latinos one of the fastest growing minority populations
 - comprise approximately **17%** of the US population
 - development of obesity prevention programs tailored to target needs of Latino populations crucial⁵
- This literature review examines effectiveness of obesity prevention programs that incorporate a cultural approach in decreasing BMI of Latino children

Methods

Purpose: To examine whether a correlation exists between BMI and inclusion of a cultural component in prevention programs

Databases: PubMed and Embase

Search Terms: (obesity prevention program) AND (Latino OR Latina OR Hispanic), ages 1-18, child, clinical trials

Inclusion Criteria: obesity prevention programs intended to reduce BMI of Hispanic children by the use of interventional methods that include a cultural component

Results

Summary of intervention programs evaluated.^{3, 6, 7, 8, 9}

Intervention Group	Control Group	Intervention Components	Sample Size	Length of Intervention	Desirable intervention Effect
Luces De Cambio (Lights of Change)	Usual Care	<ul style="list-style-type: none"> Parent training Child behavior Clinical 	297	1 year	no
Intensive Behavioral Weight Management Program	Self-Help	<ul style="list-style-type: none"> Nutrition Exercise 	60	12 weeks	yes
Pediatric Overweight Prevention through Parent Training	Waitlist	<ul style="list-style-type: none"> Parent training Physical activity Nutrition 	160	15-17 weeks	yes
Low Glycemic Diet	Low fat diet	<ul style="list-style-type: none"> Nutrition Education 	113	12 weeks	no
GOALS community based multi-level, multi-setting, multi-component (MMM)	Health education	<ul style="list-style-type: none"> Education Behavior Environment Health care 	241	3 years	yes

- Of evaluated studies/programs, the most successful at decreasing BMI of Hispanic children employed a comprehensive and rigorous approach
- Studies yielding the most significant changes in BMI incorporated:
 - Latino cultural values
 - physical activity
 - nutrition
 - multiple settings
 - parent and family involvement
- All obesity prevention programs evaluated incorporated cultural component, but not all achieved the desired outcome of decreasing BMI
- MMM the most successful intervention program
 - most multifaceted approach
 - longest duration

Conclusion

- No clear correlation exists between the success of obesity prevention programs tailored to Hispanic children and using a culturally sensitive approach.
- Although not all programs achieved the desired decrease in BMI, use of multifaceted approach including components such as nutrition, physical activity, education and culture yielded the most positive results.
- Special efforts needed to address high obesity rates in Hispanic children
 - these prevention methods should be among those considered
- Limitations
 - Most participants in the studies of Mexican origin, cannot be clearly determined that these interventions generalizable to other Hispanic groups
 - Further research needed to assess high dropout rates of intervention programs determine methods to increase retention rates

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