

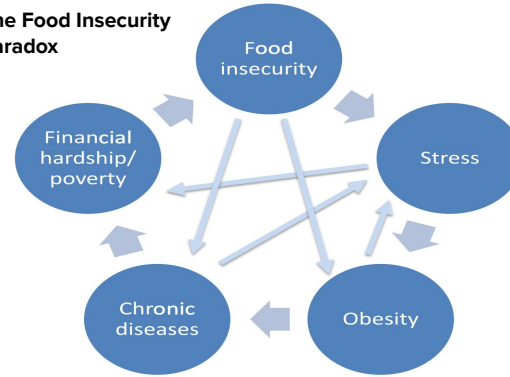
Pediatric Diabetes in Food Deserts

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Introduction and Background

- Food deserts can be defined as an area with limited access to affordable and nutritious food, and can be considered a form of a food insecurity (Owens-Gary, 2016).
- Food deserts may present themselves as areas with food options, but the quality of these options is important (Owens-Gary, 2016).
- The cause of food deserts can be linked back to what kind of area it is, rural or urban, as well as the socioeconomic status of that area (Luo, 2020).
- In recent years, there has been a dramatic rise in children with Type 2 Diabetes (T2D) (Liese et al., 2018).
- Understanding both the rise in food deserts and T2D in children, we researched the relationship between T2D and food deserts.

The Food Insecurity Paradox



Results

- In addition to T2D, children in food deserts are also more vulnerable to malnutrition, obesity, hypertension, and decreased cognitive abilities.
- According to Darling et al. (2018), Descriptive statistics indicated that the average parent-reported BMI percentile of children was 66, with a mean parent BMI of 28.09). Approximately 41.7% of the parents reported some level of food insecurity within the family.
- Although the meaning of food desert may be different in rural areas than in urban, it does not negate the fact that low-income rural families are struggling living in food deserts as well (Hansen et al., 2011).
- Childhood obesity rates appear to be more pronounced among youth in rural areas of the United States (Hansen et al., 2011).
- Food insecurity...is experienced as a fluctuating pattern that occurs occasionally or episodically . This pattern may lead to over- or under-eating, depending upon food availability (Darling et al., 2018).
- Schauder et al. (2020) found that early exposure to food stimuli has a more potent effect on food habits than later exposure.

PICO question

What is the effect of food deserts on the development of diabetes among the pediatric population?

Possible Solutions

- Implement a Fresh Fruit and Vegetable Program (FFVP) as it may offset the disadvantages of poor food environments and combat disparities in diet and health (Schauder et al., 2020).
- Implement a points-based reward system for families that are low income.
- Community-based food and nutrition assistance include food pantries, food banks, churches, and soup kitchens.

References

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Summary

Food deserts, which are areas of limited access to affordable and nutritious food, have been shown to have a negative impact on the health of the pediatric population. Specifically, food deserts have been linked to childhood obesity and the future development of T2D. Some possible solutions to this issue include implementing nutrition programs and community-based development of food options.