

# For the Health of Our Children: An Assessment of Obesity and Weight Management Among Youth

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## Introduction

### Childhood Obesity

- Approximately 13.7 million children and adolescents are obese (Centers for Disease Control and Prevention, 2019)
- 21,000 children between the ages of 10 and 17 in North Dakota are classified as overweight or obese (Child and Adolescent Health Measurements Initiative, 2018)

### Weight Management

- Techniques and processes that are used to assist a person in achieving and maintaining a healthy weight

## Purpose

To determine:

- What/if current weight management resources available to children 18 years and younger are used by healthcare providers
- What concerns healthcare providers have regarding weight management in children
- If a need exists for additional weight management resources

## Materials and Methods

### Participants

- Healthcare providers at local hospitals

### Inclusion criteria:

- Agreement to participate
- Have at least five percent of patients as pediatric patients

### Survey

- Developed using Qualtrics Survey Software

### Consisted of:

- Demographics
- 18 assessment questions
  - Three questions about prevalence of overweight and obesity among children
  - Two questions about the age of children when weight status concerns develop
  - Six questions about current weight management resources
  - Two questions about health concerns related to overweight and obese status
  - One free text response about weight management concerns
  - Four questions about lifestyle modification education

### Procedures

- Approved by Concordia College Institutional Review Board, Sanford Health, and Essentia Health
- Survey distributed to 141 healthcare providers via email by healthcare organization sponsors
  - 14 participants from Essentia Health and 127 participants from Sanford Health
- Survey remained open for 33 days
- Final sample: 50 healthcare providers responded; 15 excluded due to surveys being < 85% complete; N = 35
  - Doctors (12), Nurses (12), Registered Dietitians (9), Physician Assistants (1), Psychologists (1)

## Results

### Prevalence of Child Overweight and Obesity Status

#### Overweight prevalence

- *Always, most of the time, or half the time* 60% (n = 21)
- *Sometimes or never* 40% (n = 14)

#### Obesity prevalence

- *Always, most of the time, or half the time* 26% (n = 9)
- *Sometimes or never* 74% (n = 26)

#### Highest prevalence by age

- 2 – 4 years 3% (n = 1)
- 5 – 7 years 0% (n = 0)
- 8 – 10 years 26% (n = 8)
- 11 – 13 years 21% (n = 19)
- 14 + years 50% (n = 5)

### Development of Weight Status Concerns

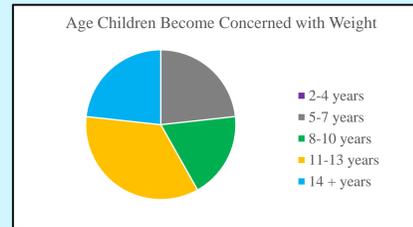


Figure 1. Providers' observations of the age at which children become concerned with their weight status.

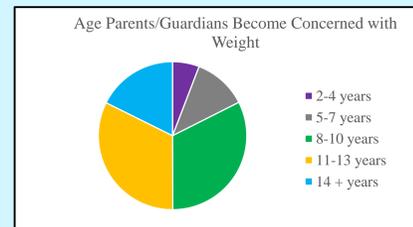


Figure 2. Providers' observation of the age of the child at which parents/guardians become concerned with their children's weight status.

### Concerns Related to Weight Management Programs

- Treatment options 47% (n = 17)
- Health concerns 3% (n = 1)
- Food insecurity 3% (n = 1)
- Environmental factors 30.5% (n = 11)
- Disordered eating 11% (n = 4)
- Economics 5.5% (n = 2)

### Concerns Related to Weight Status

#### Top 3 major health concerns among providers

- Mental health
- Diabetes mellitus
- Disordered eating (See Figure 3)

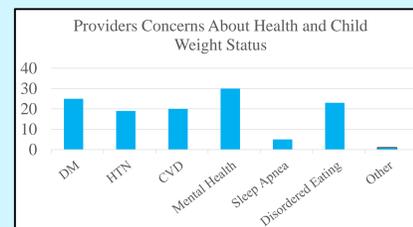


Figure 3. Providers' health concerns surrounding overweight and obese status of children.

## Results

### Top 3 major health concerns among parents

- Diabetes mellitus
- Mental health
- Hypertension (See Figure 4)

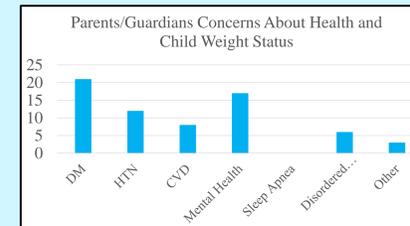


Figure 4. Providers' observations of parents/guardians' health concerns surrounding overweight and obese status of children.

### Current Weight Management Resources

#### Resources provided

- Handouts 32% (n = 25)
- Online resources 25% (n = 19)
- Referral to other healthcare provider 18% (n = 14)
- Referral to weight management program 20% (n = 16)
- Other resource 4% (n = 3)

#### Healthcare provider referral

- Physician 17% (n = 8)
- Psychologist 19% (n = 9)
- Registered Dietitian 32% (n = 15)
- Weight-Management Specialist 11% (n = 5)
- Exercise Physiologist 2% (n = 1)
- Social Worker 4% (n = 2)
- Cardiologist 4% (n = 2)
- Behavioral Therapist 8.5% (n = 4)
- Other 2% (n = 1)

#### Positive results of current resources

- *Always, most of the time, or half the time* 25% (n = 8)
- *Sometimes or never* 75% (n = 24)

### Lifestyle Modification Education

#### Frequency of providing nutrition education

- *Always, most of the time, or half the time* 94% (n = 33)
- *Sometimes or never* 6% (n = 2)

#### Frequency of providing physical activity education

- *Always, most of the time, or half the time* 94% (n = 32)
- *Sometimes or never* 6% (n = 2)

#### Confidence in nutrition education

- *Extremely confident or somewhat confident* 94% (n = 31)
- *Neutral, somewhat unconfident, extremely unconfident* 6% (n = 2)

#### Confidence in physical activity education

- *Extremely confident or somewhat confident* 91% (n = 32)
- *Neutral, somewhat unconfident, or extremely unconfident* 8% (n = 3)

## Discussion

While healthcare providers reported recommending a variety of weight management resource options for patients, providers expressed a need for more resources, which suggests current resources are not designed to address the complex issues that accompany childhood obesity.

Health concerns from both provider and parental viewpoints range from diabetes to disordered eating. Instead of relying on resources that provide only one area of focus, research shows that incorporating a multidisciplinary team may increase success in weight management programs (Wilfley et al., 2017).

Given the diversity of concerns conveyed in the survey, overweight and obese status in children may be best attended to by a weight management program with a multidisciplinary focus.

## Conclusion

Altogether, additional childhood obesity prevention and treatment resources are needed in the Fargo/Moorhead area. Creating a weight management program that can be tailored to the individual child's needs is necessary to address the various factors that impact children's health. The developed curriculum should incorporate evidence-based nutrition education to target the age group with the highest prevalence, identified by provider, to improve weight-related concerns with minimum negative impact.



## References

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