The Immediate Burden: Childhood Obesity is Associated with Increased Overall Healthcare Use

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BACKGROUND

Childhood obesity affects >25% of youth in high-income countries. While long-term adult risks are known, immediate pediatric healthcare resource utilization (HRU) during school age remains under-documented.

STUDY COHORT

Retrospective EMR study of 238,304 Israeli children aged 6–18 insured by Meuhedet HMO (2021–2024). CDC BMI percentiles stratified into Underweight, Normal, Overweight, Class 1, 2 & 3 Obesity.

KEY FINDINGS

Obesity shows a clear, graded association with higher HRU starting in elementary school. Severe obesity (Class 3) drives dramatic spikes in specialist visits and psychiatric medication.

CONCLUSIONS

Clinical strain is present early in childhood. Urgent multidisciplinary metabolic and psychosocial interventions are required.

Childhood obesity creates an immediate healthcare burden:

Adolescents with severe obesity are over TWICE AS LIKELY (OR 2.1) to regularly use psychiatric and chronic disease medications, while young children face 50% HIGHER ODDS (OR 1.5) of hospitalization.

HOSPITALIZATION STRAIN

Children 6–11 with Class 3 obesity:

- Adjusted OR = 1.5 (95% CI: 1.1–2.2)
- 4% hospitalized vs 3% normal weight.

PSYCHIATRIC MEDICATION

Adolescents 12–18 with Class 3 obesity:

- Adjusted OR = 2.1 (95% CI: 1.5–2.9)
- 16% purchase regular psych meds vs 10% normal weight.

SPECIALIST CONSULTATIONS

Dietitian: 33% Class 3 vs 6% normal.
Endocrinologist: 18% Class 3 vs 5% normal.

ROBUST ADJUSTMENT

Models controlled for Socioeconomic Status (SES 1–10) & Sector (General, Ultra-Orthodox, Arab).