Universal Screening & Intervention for Formula Need in Pediatric Primary Care Clinics during the COVID-19 Pandemic

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Background

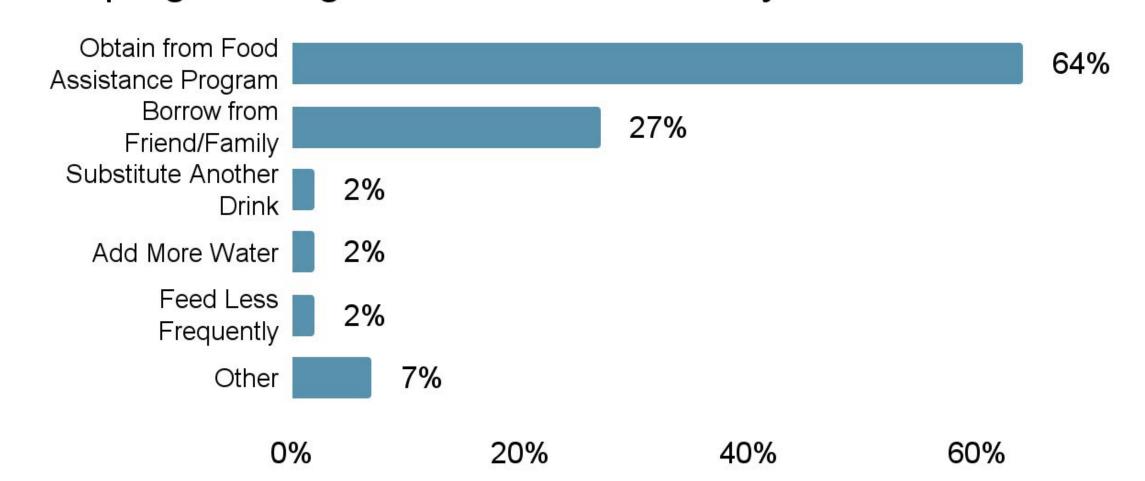
Affording infant supplies, such as formula, has been a challenge for many families in Chicago, which the COVID-19 pandemic exacerbated. Childhood food insecurity, estimated at 12% in Cook County, is associated with unfavorable health outcomes such as anemia, hypercholesterolemia, and overall morbidity. Social influencers of health screening has proven effective in pediatric clinics, and may be utilized to alleviate a family's burden in obtaining necessary infant formula.

Objective / Methods

The purpose of this study was to assess the feasibility and impact of universal screening and onsite intervention for formula need in families seeking primary care during the COVID-19 pandemic.

Caregivers of patients 0-3 years old presenting to 2 pediatric academic primary care clinics received a 4-question screen for formula and diaper need. As formula is only recommended for <1 year, the rate of positive formula screens was calculated using that population as the denominator. Positive screens were referred to social workers for connection to community resources and public benefits programs plus onsite infant supplies distribution. Caregivers were surveyed about the pandemic's impact, behaviors in response to resource shortages, demographics, and program satisfaction. Providers encouraged breastfeeding and counseled caregivers on safe, age-appropriate feeding practices when applicable.

Coping Strategies: Formula Insecurity

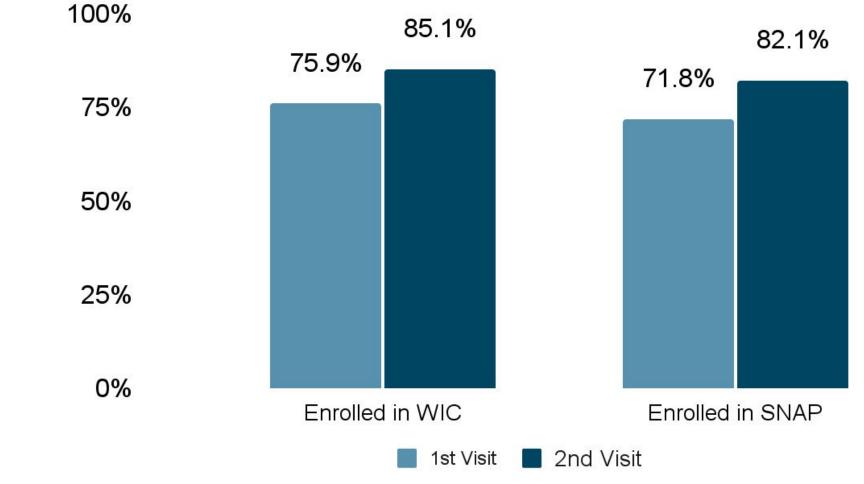


| Race/Ethnicity | N | % |
|--------------------|-----|------|
| Non-Hispanic Black | 117 | 45.3 |
| Hispanic | 98 | 38.0 |
| Non-Hispanic White | 11 | 4.3 |
| Other | 32 | 12.4 |
| Missing | 12 | |

| Primary Language | N | % |
|------------------|-----|------|
| English | 216 | 82.4 |
| Spanish | 24 | 9.2 |
| Other | 22 | 8.4 |
| Missing | 8 | |

Results

Benefits Enrollment, Change Over Time



^{*} Results above reflect families who screened positive for formula need

Of 1,769 eligible families of children seen June 2020 - February 2022, 15.3% (270) screened positive for formula need. 79% of families referred more than once indicated that the pandemic made it more difficult to get infant supplies. At first visit, 2% of families fed their child less often, 2% substituted a different liquid, and 2% diluted the formula. Between the first and second visits, WIC enrollment increased 9.2 percentage points; SNAP enrollment increased 10.3 percentage points; differences were statistically significant (Chi square). At follow-up visits, 99% of families were satisfied with the formula they received.

Conclusions

This universal screening program was feasible in our pediatric clinic setting and identified an unmet formula need in our communities. Beyond the immediate relief provided by supply distribution, the program helped families secure enrollment in public benefits programs, which can provide more sustainable sources of formula. Surveying caregivers also provided the opportunity to engage in counseling about infant nutrition best practices. Additional research is needed to further understand the program's impact and potential for replication.

References

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