

Children's Mercy Kansas City

SHARE @ Children's Mercy

Research Month 2024

Research at Children's Mercy Month

5-2024

The Impact of COVID-19 on the Effectiveness of a Home-based Family Support Program

Danielle Chiang

Stephen Gardner

Emily Siedlik

Emma Sexton

Donna M. O'Malley

Let us know how access to this publication benefits you

Follow this and additional works at: https://scholarlyexchange.childrensmercy.org/research_month2024



The Impact of COVID-19 on the Effectiveness of a Home-based Family Support Program



Danielle Chiang, PhD; Stephen Gardner, MBA, MS; Emily Siedlik, MPH; Emma Sexton, LMSW, MPH; Donna O'Malley, RN, PhD, FAAN

Children's Mercy Kansas City

Introduction

The Team for Infants Exposed to Substance use (TIES) Program is a home-based family support program providing a multi-disciplinary, community-based approach to address the complex needs of families with young children affected by maternal substance use. The TIES Program focuses on six goal areas: maternal drug and/or alcohol use, parenting skills, child health, parent health, income stability, and housing stability. This study examines the effectiveness of this home-based program during the peak COVID-19 period of April 1, 2020 – March 31, 2021.

Methods

Data was collected from 2016 to September 2023. Given the nested structure of the data, we used generalized estimating equations (GEE) to estimate the impact of the COVID-19 period on parenting practices and child health goal attainment after controlling for other covariates.

Measures:

Individualized Family Service Plan (IFSP) Goal Attainment Scale: A validated goal attainment scale assessing the six TIES goal areas. This study includes select scales: parenting skills and child health.

Adult-Adolescent Parenting Inventory-2 (AAPI-2) : A validated 40-item inventory that assesses 5 parenting constructs: inappropriate expectations of children, empathy towards children, corporal punishment, parent-child role reversal, and oppression of children's power and independence.

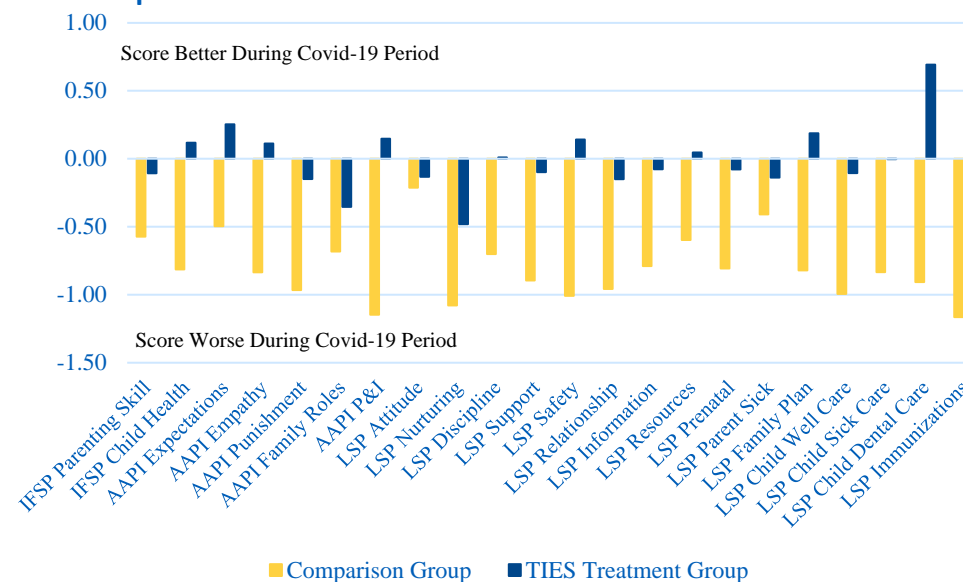
Life Skills Progression Scales (LSP): A validated tool to evaluate parent skills in key categories. This study includes a subset of the full LSP, namely, relationships with children, relationship with supportive resources and health/medical care.

Results

We found little impact of the COVID-19 period on TIES participants, but a pervasive and statistically significant negative impact on parenting practices and child health goal attainment from the comparison group.

	Comparison (N=70)		Treatment (N=273)	
Age (mean, SD)	27.6	5.1	28.8	5
# of Children (mean, SD)	1.9	1.6	1.8	1.5
Pregnant at Intake (N, %)				
Yes	22	31%	116	42%
No	45	64%	157	58%
Race (N, %)				
Black	33	47%	82	30%
White	30	43%	158	58%
Other	4	6%	19	7%
Ethnicity (N, %)				
Hispanic/Latino	1	1%	30	11%
Non-Hispanic/Latino	66	94%	229	84%
Marital Status (N, %)				
Single	49	70%	207	76%
Not Single	18	26%	51	19%
Education (N, %)				
HS Diploma or More	42	60%	148	54%
Less than HS Diploma	25	36%	110	40%
Housing Status (N, %)				
Stable	63	90%	195	71%
Unstable	3	4%	54	20%
Employment (N, %)				
Employed	28	40%	37	14%
Not Employed	39	56%	222	81%
State (N, %)				
KS	13	19%	124	45%
MO	56	80%	149	55%

Impact of COVID Period on Outcome Variables from GEE Model



Results (cont.)

GEE output indicated that for the comparison group, the COVID-19 period tended to decrease parenting goal scores by 0.57 units ($p < 0.001$), and child health goal scores by 0.81 units ($p < 0.001$) on scales of 1-5 yet had no statistically significant impact on these two goal areas for the TIES participants.

Of 22 outcome variables analyzed using GEE, 22 (100%) were negatively impacted during the COVID-19 period in the comparison group, with scores from the comparison group being 5% to 20% lower than those from the TIES Program. We find no statistically significant impact from the COVID-19 period on any of the 22 outcome variables from the TIES group.

Conclusions

The TIES program and its dedicated staff pivoted to provide virtual home visits and employed creative problem-solving to support families during the COVID-19 pandemic. Participation in TIES provided a protective effect for families when compared to those who did not have intensive home-based family support.

Home-based family support programs provide vital supportive services in the best of times. Disruption of normal home visiting activities during the pandemic forced programs to think creatively to continue to provide critical services to families that may have otherwise lost access to resources, delayed physical and behavioral healthcare, and experienced severe isolation. The TIES Program demonstrated that virtual modifications in times of emergency can keep families engaged and supported.

