

food insecurity, early childhood feeding, and weight outcomes in hispanic children and their mothers

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methods
rct/dyad/mom/baby
enrollment = 150
75/intervention
75/control
inclusion criteria:
WIC enrollee
staying in Houston, TX area
Mexican-American
mom = age 18-40
3rd trimester
no diseases/
complications
baby = 38-42
wks. gestation
=/> 2500 gm.
discharged w/ mom
no birth complications
able to receive home visits
control visits: prenatal, 1, 6,
12, 18, 24, 30 & 36 mos.
intervention visits:
prenatal, 2 weeks,
2, 4, 6, 9, 12, 18, & 24 months

measures included: anthropometrics for mom and baby, 24 hour diet history; breastfeeding history, Edinburgh Postpartum Depression Survey (EPDS), Brief Infant Sleep Questionnaire (BISQ), Home Observation for Measurement of the Environment (HOME), Brief Acculturation Rating Scale for Mexican Americans (ARSMA), Mexican American Cultural Values Scale (MACVS), demographics

purpose

early growth associated w/ early obesity

17% u.s. kids ages 2-19

8.1% infants and toddlers

risk factors:

low-income, minority

food insecurity = risk factor/obesity

16 million u.s. kids/food insecure

more likely to have:

e.r. visits, asthma, overweight/obesity



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conclusion

social issues frequently create a lot of stress in the families w/ interest in child feeding taking lesser importance than securing food for family
prolonged breastfeeding in conjunction w/ counseling by promotoras may promote healthy weight status
delivery status, C-section vs. vaginal, didn't appear associated with W/L status @ most recent visit
in a subgroup of engaged mothers, targeted counseling appeared to reverse unhealthy weight gain trends

further analysis

needed to determine if engagement is a result of education provided only or if positive outcome is result of effective working relationship established by promotora w/ the families
any bf @ 6 mos. provided significantly lower mean wt. among participants than did no bf - early & sustained bf for at least 6 months may reduce chance of women entering next pregnancy w/ retained weight from previous pregnancy
although bf didn't show significant effect on occurrence of postpartum depression, trend to significance occurred @ 6 mos. between moms who continued to bf & those who did not - we found the low level of depressive symptoms in population **surprising**, given studies estimating nearly 20% of u.s. moms experience depressive episode
In 1st 3 mos. postpartum during early postpartum period, studies found significantly increased rates of postpartum depression (21-53%) in the Mexican-American population
several studies indicated symptoms of depression are associated w/ level of acculturation in Hispanic & specifically Mexican American mothers, it may be that majority of moms in our sample were more acculturated to Mexican culture than to mainstream culture, their Mexican cultural value of **familia** (close family support) contributed to low levels of depressive symptoms observed in sample

results: mean age/moms 29.72 (SD = 5.87); +17% = income/ \$10K or less; 62.7% = income 10-30K; 18% = income 30-40K 2% = income above 40K; 5.2 people in avg. household avg. household = 2.67 kids; +42% moms born in u.s. 56% moms born in Mexico; 2% moms born elsewhere 100% use WIC/50% use SNAP; 15% use food banks
5% skip meals; 89% running out of \$ for food weekly/biweekly
38% caesarian delivery; 8% moms/gestational diabetes
moms' mean postpartum BMI/33; normal weight infants have longer duration of bf than overweight/obese children
moms' weight linked to bf across time points
moms who reported **no breastfeeding** at either assessment were consistently **heavier** than those reporting either exclusive bf or non-exclusive bf - association between bf/weight significantly pronounced @ 6 months than 1 month (p = .014)
moms reporting no bf @ either point were heaviest (p = .017)
@ 1 mo. 23.9% of moms exclusively bf, 35.5% non-exclusively bf, & 40.6% did not bf - @ 6 mos. 17.4% of moms exclusively bf, 17.4% non-exclusively bf, and 65.2% did not bf