

Maternal-infant Child Health and Environment Research Symposium:
“How Local Research can Influence Policy and Practice”

Thursday, February 26th, 2009, 08:00-17:00 hrs
Maple Leaf Room, Lister Conference Centre, University of Alberta

Poster Presentation:

The link between infant size and later obesity: A pilot study of mothers' understandings of this link in relation to received guidance

Background: Adult and childhood obesity in Canada^(1, 2) and worldwide has reached epidemic proportions^(3, 4) – a sobering thought when we know that obesity gives rise to many associated co-morbidities that place demands on quality of life, homecare and acute hospital beds. It occurs in a complex multidimensional environment affected by social determinants of health⁽⁵⁻⁸⁾. This disease burden contributes to mortality at an earlier age. It is well documented that obesity in adults and children^(9, 10) has some of its origins during gestation⁽¹¹⁾ and in early infancy,⁽¹²⁻¹⁶⁾ particularly in those infants whose birth weight is either less than 2500 grams or over 4000 grams.

The **purpose of this research project** was to hear mothers' experience with healthcare professionals' advice⁽¹⁷⁾ about diet, exercise and possible obesity. Qualitative conversations were carried out from October, 2007 to October 2008 with patients from the Misericordia Hospital with generous funding from Covenant Health (formerly Caritas Health).

Methodology: After receiving ethics approvals, mothers were recruited at the Misericordia Hospital through information letters handed out thanks to Janet Wass, RN on 4E or posted in the Child Health Clinic to potential recruits whose infants met the above criteria. Successful recruitment required initial personal contact on 4E with the researcher. Posters about the study were placed in the Child Health Clinic and in various places throughout the hospital. Of the 19 mothers approached, 9 mothers whose infants weighed between 4000 grams to 4900 grams agreed to an unstructured conversation in their homes with the researcher about their experience with professionals' advice during pregnancy and early infancy of their child.

Results: Statistics: Infants - 6 males: 3 females

Term birth weight: 2 X 4000 grams; 3 X 4010- 4020 grams; 1 X 4435 grams; 1 X 4240 grams; 1 X 4500grams; 1 X 5400grams.

Two mothers had well controlled gestational diabetes with no history of diabetes before or after gestation.

Income level: Mothers alone - \$0- 30,000; \$35,000- 70,000; Family incomes \$10,000 – 200,000.

Maternal ages: 26-34 years;

Maternal educational level achieved: ≥ grade eight (1) – high school (1) -College (4); University (3)

Maternal pre-pregnant self reported BMI: according to CDC⁽¹⁸⁾ acceptable range 19.1-27.3 range - (women) – 5 mothers (mean = 23.2 BMI); overweight CDC range ≥ 27.3 – (2 - mean = 28.95 BMI); (severe overweight ≥ 32.3) – 1 mother @ BMI of 40; 1 unavailable

Consistently, these mothers shared that no health professionals had spoken with them during pregnancy or in the first eight months of their infants' lives specifically about diet and exercise or about possible links with infant size to later obesity. This is of great concern if health professionals are serious about obesity