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Understanding academic clinicians' varying attitudes toward the treatment of childhood obesity in Canada: A descriptive qualitative approach

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Abstract

Background: This qualitative study aims to understand academic physicians' attitudes towards the treatment of pediatric obesity in Canada.

Methods: A stratified sample of 24 participants (surgeons, pediatricians, family practitioners) were recruited from 4 Canadian regions. Semi-structured interviews were conducted and transcribed. A codebook was developed through iterative data reduction and conceptual saturation ensured. Validity was ensured through triangulation, audit trail, and member-checking.

Results: This study revealed 45 themes with regional, specialty, and experiential differences. Quebec and Ontario emphasized education of physicians and parents to improve treatment and favored surgical intervention. Half of surgeons felt surgery was the only successful treatment option, while non-surgeons favored behavioral interventions. Experienced physicians in Western Canada desired more evidence to improve patient care, while inexperienced physicians focused on early detection and home environments. Across Canada participants advocated for program development and system change. Respondents expressed family involvement as integral to treatment success and shifting away from blame and moving towards a healthy lifestyles approach.

Conclusions: Canadian regional differences in physicians' attitudes towards pediatric obesity treatment exist, influenced by experience and specialty. We will understand how themes identified in this study influence real life clinical decision making by applying these results to create a discrete choice-based conjoint survey.

The rapid rise in obesity among children and adults has reached epidemic proportions in Canada. According to the 2006 Canadian clinical practice guidelines, obesity has become "the most prevalent nutritional problem in the world, eclipsing undernutrition and infectious disease as the most significant contributor to ill health and mortality." It is identified as the key risk factor for many chronic and non-communicable diseases [1]. The Canadian Community Health Survey estimates 1 in 4 (26%) children and adolescents between the ages of 2 and 17 are overweight, with the national

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obesity rate rising from 2% to 10% in boys and 2% to 9% in girls. In Canada, 55% of First Nations children living on reserves and 41% living off of reserves are overweight or obese [1,2]. Pediatric health care professionals are struggling to meet the clinical and educational demands required to care for obese patients and their families [3]. Improved understanding of physicians' views and challenges in current practice will enable the development of effective intervention and educational programs. In order to facilitate change, current attitudes and behaviors need to be described and understood.

Our aim was to use qualitative interviews to explore physicians' current attitudes, knowledge acquisition, and perceived barriers in care with regard to treating childhood obesity. The results of this study are being used to create a rigorous discrete choice-based conjoint (CBC) survey for the "*ACT NOW*" quantitative study.

1. Methods

This study was conducted from May to August 2011 at the McMaster Children's Hospital and was approved by the Hamilton Health Sciences Research Ethics Board (REB Approval #: 11-167).

1.1. Study sample

The study sample consisted of 24 health care providers affiliated with academic institutions across Canada. Stratified purposeful sampling and snowball sampling were used. Key stakeholders were contacted and used to identify additional individuals, to ensure maximum variation and to locate key information-rich participants [4]. Equal representation from across the country was obtained through stratification across each region of Canada (Eastern Canada, Quebec, Ontario, and Western Canada), and within the following disciplines: family medicine, pediatrics, and pediatric surgery. Within each discipline we recruited one non-experienced and one experienced clinician. Experienced clinicians were defined as those with additional training or research experience specifically in pediatric obesity. In consultation with a leading pediatric obesity researcher and Canadian Obesity Network executive members, a list of experienced clinicians was developed. Non-experienced clinicians were selected from each region based on interest in the study.

1.2. Data collection and analysis

After exploring the multiple facets of pediatric obesity [5], an interview guide consisting of seven semi-structured questions were developed, piloted, and refined. Once the interview guide was finalized, we contacted potential participants through email and a follow-up telephone call. All participants provided written or verbal consent, and a single research assistant conducted all telephone interviews using Bell teleconferencing services. Participants received a gift card as a token of appreciation.

Qualitative analysis using NVivo® software (version 8.0, QSR International, Melbourne) was conducted by two independent reviewers following the completion of the interviews including a qualitative methodologist (JP). A descriptive thematic analysis approach was used [6,7]. Through an iterative process, the interviews were read and re-read until a whole sense of the interview was reached. Codes were then developed, sorted into emergent categories, and grouped to form themes. Once data saturation was attained, three independent reviewers achieved data reduction through a series of consensus meetings. Disagreements were resolved through discussion and review of the interview transcripts at these meetings.

Finally, member checking was conducted through an online survey, using Lime Survey® software. Each interviewee was asked to indicate their level of agreement with each theme using a 7-point Likert scale. Interviewees could provide other comments regarding the results through an open text field section on the survey. Once the thematic analysis was finalized, the data were stratified based on three *a priori* comparisons: by region, discipline, and level of experience in treating childhood obesity.

1.3. Rigor

This study was conducted according to the four standard principal criteria guiding qualitative research: credibility, dependability, transferability, and conformability [8]. To ensure credibility, member-checking, a consistent interview guide, and quotes to support results were utilized. Through the establishment of an acceptable intercoder agreement during the coding process, dependability was attained. Conformability was integrated into the study design by reviewing coding as a team and holding consensus meetings. Lastly, by providing a detailed description of the sampling strategy and research methods, the transferability of the elements of this study is upheld.

2. Results

A total of 24 interviews were completed with 12 male and 12 female participants. The participants included 9 (37.5%) pediatric endocrinologists, 8 (33.3%) pediatric surgeons, 4 (16.7%) family physicians, and 3 (12.5%) pediatricians. Interviews were recorded and transcribed verbatim, and lasted a mean time of 16.3 min (SD ± 9.1). The participants' viewpoints were explored in detail, clarifying any ambiguous answers and prompting elaboration on simple replies. The use of a pre-piloted interview guide allowed for targeted discussion and a reduction in overall interview times. Forty-five emerging themes were identified under nine categories;