Mexican-American Mothers’ Perceptions of their Children’s Weight and Eating Habits: A Crosssectional Study

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Introduction
The prevalence of overweight children and adolescents has continued to increase, with the highest rates (estimated at > 34%) noted among Mexican Americans. Preventive programs directed towards this minority group need to consider cultural barriers related to mothers’ perceptions of their children’s weight and eating habits. However, few studies exist regarding Mexican-American mothers’ perceptions that consider child weight or overeating individually, but limited research has been conducted to evaluate the combination of both.

Materials and Methods
In this study, we retrospectively collected the written responses of 413 Mexican-American mothers, as part of their consultation, to the following questions: 1) Do you consider your child overweight? and 2) Do you believe that your child is overeating? The possible responses were 0 = not true (as far as you know) and 1 = somewhat/very true. Height and weight measurements were collected the same day from the child’s respective medical records. The children’s body mass index was categorized into three classes: average weight (15th to 85th percentile), overweight (> 85th to 95th percentile), and obese (> 95th percentile).

Results
We found that the mothers’ perceptions about their children’s average weight status were 100%, 11.8%, and 70.4% accurate in the average weight, overweight, and obese categories, respectively. Mothers’ perceptions of their children’s overeating were 6.8%, 26.5%, and 53.6% accurate in the average weight, overweight, and obese categories, respectively.

Conclusions
The results of this study indicate that Mexican-American mothers in this sample were not able to correctly identify their child as overweight or obese. As previously reported in other studies, they perceived their children to be obese more accurately than to be overweight. Overeating was not highly perceived in either overweight or obese children.

Cardiac Changes Associated with Metabolic Syndrome and its Components in a Community with a Predominantly Hispanic Population


Metabolic syndrome (MeS) is a constellation of risk factors that have been linked with an increased risk for cardiovascular disease. The Hispanic population has a higher prevalence in cardiovascular disease compared with other population groups. There is limited data comparing the components of MeS and their im-

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Impact on left ventricular mass (LVM). A retrospective analysis was conducted on subjects with MeS (N=1089) and without MeS (control-group, N=118), who had an echocardiography. MeS was defined based on the updated Adult-Treatment-Panel III definition. LVM was compared with the presence or absence of MeS components. LVM was higher in the group with ≥3 components vs. 1-2 components and the control group (198.78 g, 192.47 g and 122.71 g respectively. P <0.0001). Lower high-density-lipoprotein, increased systolic and diastolic blood pressure, increased fasting serum glucose and obesity were associated with increase in LVM, however hypertriglyceridemia was not. No significant difference was noted in Hispanics vs. other population groups. Individuals with ≥3 components were found to have more impact on increases in LVM compared to those with 1-2 components (P 0.0034). While having similar risk factors Caucasian had less increase in the LVM-Index compared with Hispanics (P 0.0289). The results of this report demonstrate a clear association between MeS components and LVM in predominantly Hispanic population community. This link of higher LVM and LVM-Index is strong among males. Hypertension, dyslipidemia, higher body-mass index, diabetes, and advanced age tended to have a strong influence on LVM. The prognostic significance of LVM in subjects with MeS requires further investigation, particularly in ethnic minority groups.

Enterra System at TTUHSC and University Medical Center in El Paso, TX- 4 Year Experience with Gastric Electrical Stimulation Therapy

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Introduction
Enterra therapy utilizing a high frequency and low energy gastric electrical stimulation (GES) is an FDA approved treatment option for patients diagnosed with severe symptoms of drug-refractory gastroparesis (GP) related to Diabetes mellitus (DM) and unknown, called idiopathic (ID) etiologies. Since February 2010 GES has been available as the latest treatment option for GP patients at University Medical Center of El Paso (UMCEP). Our Aims was: To evaluate the clinical outcomes of patients undergoing GES at UMC-El Paso Materials and Methods: A total of 26 (20 female, 6 Hispanic; Mean age 38 (range 24-58); 18-DM, 8-ID) patients with a documented delayed 4 h scintigraphy gastric emptying test (GET) were implanted with GES. GP cardinal symptoms including nausea, vomiting, bloating, fullness, and early satiety were assessed by PAGI-SYM scale. Hemoglobin A1C, nutrition status, use of prokinetic and antiemetic medications, and number of days of hospitalization, were also evaluated before and during follow up visits.

Results
The mean follow up was 19.2 months (range 1-48). The total and individual PAGI-SYM index improved by a mean of 40%, from 68 to 42 (p=0.093).52% of patients remained on prokinetic and/or antiemetic medications. Hospitalizations decreased from an average of 31 days before to 4 days after GES/patient. Interestingly, Hispanic patients had more frequent and longer hospital stays before and after surgery. GET results did not show significant decrease in retention of the study meal. Hemoglobin A1c decreased from a mean 9 before to 7.9 after GES. Weight remained stable with a mean of 62 kg (range 38-103). Two patients have required repositioning of the dislodged electrodes secondary to trauma. One fatal SAE took place 1 month after implantation of GES due to the aspiration of food during vomiting episode.

Conclusions
1) Gastric electrical neuromodulation is an effective treatment option for patients with gastroparesis whose symptoms do not respond to medical therapies;
2) Approximately 16% of GP patients referred to a tertiary care center required GES;
3) Further observations will focus on changes in the gastric emptying test, adjustments of GES parameters as well as improvement in the quality of life and social- economic benefits.

Investigation of MRI Functional and Anatomical Measurements as Biomarkers of Bipolar Disorder

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Introduction
The objectives of this study were to search for potential differences in brain morphometry and function between Bipolar Type I (BP-I) patients and healthy controls and to assess whether these differences, if present, are also found among unaffected first-degree relatives of BP-I patients.

Materials and Methods
Magnetic Resonance Imaging (MRI) was utilized to assess the brain structure and function in BP-I. Voxel Based Morphometry was performed to study possible differences in the volume of brain structures among BP-I, BP-I unaffected first-degree relatives (UFR), and healthy controls (HC). Voxel Based Morphometry was also applied to identify anatomical differences associated with psychosis in the BP-I. Resting state functional Magnetic Resonance Imaging was conducted to identify functional differences between BP-I and healthy controls (HC).

Results
Bipolar patients displayed smaller right prefrontal cortex total volume (as well as sub regions: dorsolateral prefrontal cortex, right superior frontal, and right rostral middle frontal) when compared with healthy controls. These same regions were found to be smaller in unaffected first-degree relatives of BP-I subjects compared to controls. Smaller dorsolateral prefrontal cortex volumes were observed in BP-I with psychosis when compared to healthy

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controls. These volume reductions were not observed in the BP-I without psychosis.

Clinical and Pathological Characteristics of Hereditary Breast and Ovarian Cancer (BRCA)-Associated Breast Cancer in Hispanics in El Paso, TX

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Introduction
Limited genetic related cancer research has been conducted in Hispanic individuals in the U.S and most studies include unevenly distributed patients and from different countries of origin. The relative homogeneity of the Hispanic population in El Paso lends a unique opportunity to study breast cancer characteristics in BRCA mutations carriers among patients of predominantly Mexican origin.

Materials and Methods
Hispanic women with a personal history of breast cancer, who presented consecutively for genetic cancer risk assessment and treated at the Garbar Breast Care Cancer Center, were included. The patients were tested if they meet criteria based on NCCN (National Comprehensive Cancer Network) guidelines. All genetic testing was done at Myriad Genetic Laboratories, Inc. The characteristics of patients with positive BRCA mutation were analyzed Descriptive statistics were utilized. Comparison between carriers and noncarriers were performed using Fisher’s exact test.

Results
76 patients were screened; 18 patients (24%) tested positive for germline mutations, 13 tested positive for BRCA1 and 5 for BRCA2. 72% of BRCA mutation carriers were diagnosed with breast cancer at age < 50. 72% of these patients had a high BMI > 30 (compared to 37% in noncarriers, P=0.014). 89% had invasive ductal ca. Majority of BRCA carriers had Triple negative breast cancer (61% versus 31% of noncarriers, P= 0.028). None of the carriers had HER2 positive tumors (compared to 24% noncarriers, P=0.032). All carriers (100%) received chemotherapy (compared to 77% for noncarriers, p=0.009) and majority (61%) received mastectomy (compared to 44% noncarriers, p=0.285).

Conclusions
This study confirms that BRCA mutations are relatively common in El Paso. Patients with BRCA 1 and BRCA 2 mutations present at a younger age, have high BMI and have predominantly the aggressive triple negative tumor type. Increasing breast cancer awareness and encouraging healthy lifestyle and genetic counseling among high risk younger patients of Mexican descent is needed. Also, identifying resources to develop BRCA screening and preventive programs is urgently needed for the underinsured Hispanic women at high risk for breast cancer in El Paso.

Enhanced Casualty Care from a Global Military Orthopaedic Teleconsultation Program

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Introduction
Since its advent, telemedicine has facilitated access to subspecialty medical care for the treatment of patients in remote and austere settings. The United States military introduced a formal orthopaedic teleconsultation system in 2007, but few reports have explored its scope of practice and efficacy, particularly in a deployed environment during a time of conflict.

Materials and Methods
All teleconsultations placed to the orthopaedic service between April 2009 and December 2012 were obtained and retrospectively reviewed. Case files were abstracted and anatomical location of injury, type of injury, origin of consult (country or Navy Afloat), branch of service, and treatment recommendations, were recorded for descriptive analysis. The final result of the consult was also determined, with service members transported from the combat theater or deployment location defined as medically evacuated. Instances where teleconsultations averted a medical evacuation were also documented as a separate outcome.

Results
Over a 32-month period, 597 orthopaedic teleconsultations were placed, with the majority derived from Army (46%) and Navy (32%) personnel deployed in Afghanistan, Iraq, or with Navy Afloat. Approximately 51% of consults involved the upper extremity, including 197 hand injuries, followed by lower extremity (37%) and spine (7.8%) complaints. Fractures comprised over half of all injuries, with the hand and foot most commonly affected. The average response time for teleconsultations was 7.54 hours. A total of 56 service members required immediate evacuation for further orthopaedic management, while at least 26 medical evacuations were prevented due to the teleconsultation system.

Conclusions
The teleconsultation system promotes early access to orthopaedic subspecialty care in a resource-limited, deployed military setting. The telemedicine network also appears to mitigate unnecessary aeromedical evacuations, reducing healthcare costs, lost duty time, and treatment delays. These findings have important meaning for the future of telemedicine in both the military and civilian setting.

Outcomes of Laparoscopic versus Open Component Separation in Complex Ventral Hernia Repair

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Introduction
The postoperative recurrence rate of complex ventral hernias has
improved with the advancement in surgical techniques. The use of biologic mesh has lowered the recurrence rate to 32%. Bilateral component separation (BCS) technique further improved recurrence rates using a tension free closure lowering recurrence rates to 7%. Our experience in complex ventral hernias with mesh and bilateral component separation demonstrates a 21% recurrence rate. The use of laparoscopic component separation reduces risks and confers benefit during the postoperative recovery state. The purpose of this study is to examine our experience with both laparoscopic and open component separation technique in the repair of complex ventral hernias and compare factors that affect outcomes.

Materials and Methods
This is a retrospective review of incisional hernia repair with laparoscopic and open BCS repair with and without concomitant procedures. Patient demographics, BMI, hernia characteristics, concomitant procedures, hernia recurrence rate, seroma formation and wound infection rate were documented.

Results
Forty-four patients with incisional hernias that received open BCS were identified and eight received laparoscopic BCS. In our previous study nine of 44 (20%) in the open BCS group had recurrence at the 1-year follow-up. Twenty-nine (66%) had concomitant procedures at the time of open BCS, and 23 of 29 (79%) did not have incisional hernia recurrence at 1-year follow-up. Preliminary data demonstrate a lower infection rate and improved symptomatic pain scores following laparoscopic BCS.

Conclusions
Laparoscopic approaches to fascial component separation are associated with a lower rate of wound infections secondary to preservation of collateral feeder vessels to the skin flaps and reductions in dead space. Laparoscopic component separation has not reduced the recurrence rate that is primarily a function of intra-abdominal hypertension and body mass index.

Including Electronic Media Entertainment among Younger Adults as a Strategy for Coping with Stress: A Cross-sectional Study

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Introduction
The Transactional Model of Stress and Coping allows for the creation of a framework for evaluating and coping with stressful events based on person-environment transactions. When confronting a stressor, a person evaluates the potential threat and determines if the event is stressful, controllable, challenging, or irrelevant. This is followed by an appraisal of available coping resources and options to confront the event that include moving away from the problem, pursuing social support, or accepting responsibility. Given the availability of electronic media and its popularity, it seems important to include electronic media entertainment (phones, tablets, internet, etc.) as a coping resource to confront stressful events.

Materials and Methods
A cross-sectional, exploratory, correlational, two-phase study was performed with 424 young adults in a large metropolitan area in Mexico. The first phase tested the original coping questionnaire (N = 286) developed by Bonifacio Sandin and Paloma Charot (2003), while the second phase used a modified version of the questionnaire (N = 138), which included questions related to the use of electronic media outlets to forget about the stressful event.

Results
The results obtained in the first phase differed from the original questionnaire proposed by Sandin and Charot (2003). The responses to the modified questionnaire appeared to consistently demonstrate that younger people considered electronic media as a way to cope with stressful events.

Conclusions
Stress affects people differently, ranging from no or little effect to causing illness. The way a person copes with stress is a mediator that can become an important factor influencing the stress response. Electronic media has not been taken into account as a way to cope with stress even though it is highly relevant today, particularly among younger adults. Thus, coping strategies related to electronic media should be an important consideration, as these strategies are related to how people search for medical care or social support and confront stressful events.

Genetic Determinants of Chronic Kidney Disease Progression in Children: A Genome-wide Association Meta-analysis in the PediGFR Study

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Introduction
Traditional risk factors for chronic kidney disease (CKD) only partially explain the varying rate of glomerular filtration rate (GFR) decline in children with CKD. To investigate the genetic contribution toward CKD progression in children, a meta-analysis of genome-wide association results was performed in the PediGFR study.

Materials and Methods
PediGFR brings together resources of three large international prospective studies: CKiD, ESCAPE and 4C. Each study collected DNA and longitudinal data on GFR. Whole-genome genotyping was performed on the Illumina® Omni 2.5 BeadChip platform. Using PLINK software, the association between SNP markers and GFR slope was examined with linear regression models after adjusting for age, sex, baseline GFR and population stratification.

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Subgroup-specific effect estimates from each of the five populations (white ancestry in CKiD (n = 267), 4C (599) and ESCAPE (286) and Turkish ancestry in 4C (331) and ESCAPE (66)) were then combined by the inverse variance method as implemented in METAL meta-analysis software.

**Results**

Though there were no genome-wide significant findings, 15 markers surpassed nominal statistical significance of \(p = 1 \times 10^{-5}\). Three markers localized to each of three distinct genetic loci, two markers to each of two distinct loci, and one marker to each of two distinct loci.

**Conclusions**

Preliminary meta-analysis revealed several putative markers associated with progression of CKD in children. Replication efforts are underway in the Chronic Renal Insufficiency Cohort (CRIC), an adult CKD progression study.

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**The Impact of Fear of Falling on Functional Independence among Older Adults**

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Falls are the fifth leading cause of death for adults over the age of 65. Several intrinsic and extrinsic fall risk factors have been identified. There is less understanding of the impact of fear of falling on falls. Seventy percent of recent fallers and forty percent of non-fallers report a fear of falling. Therefore, the purpose of this study was to examine the correlation between fear of falling and history of falls as well as the impact on functional independence of community dwelling older adults receiving home health services.

Participants completed the Falls Efficacy Scale, Modified Timed-Up-and-Go test, self-reported fear of falling, and the KATZ ADL-staircase. Participants were primarily Hispanic females. There was not a significant correlation between fear of falling and history of falls. Only participants’ age, gender, and number of diagnoses were predictive of past falls. There was a moderate correlation between impaired functional mobility and dependence with activities of daily living. Additionally, fear of falling was associated with dependence to perform activities of daily living as measured objectively. Future studies need to examine the effectiveness of interventions that include dualtask challenges during therapeutic interventions and ADL retraining to reduce fall risk among older adults.