Faculty and Student Presentations
The Mare Island Health and Fitness Academy Study is a multi-year assessment of students (K-8) and family healthy eating /active living attitudes and behaviors and access to healthy food. Participating families are ethnically diverse, low-income and live in “food desert” neighborhoods in Vallejo, California with limited access to healthy food. The focus of this analysis is to assess the association between parents’ self-reported challenges/barriers to purchasing fruits, vegetables and other healthy foods (access), self-efficacy related to preparing healthy foods, and child’s consumption of fruits and vegetables. Data was collected in Fall 2014 (n=300, 76.4% response rate). Approximately 26% of parents reported barriers to purchasing fruits, vegetables and other healthy foods. Parents who reported no barriers were more likely to report daily consumption of vegetables by their children (68.0%) vs. parents who reported they did have barriers (55.8%), (p=0.027). Parent’s self-efficacy in purchasing & preparing healthy foods was assessed by a 7-item scaled variable, measured by responses ranging from 0 (not confident) to 4 (very confident). Barriers to purchasing healthy foods were significantly associated with parent’s self-efficacy for preparing healthy foods; parents with no barriers had significantly higher self-efficacy (mean=3.5, SD=0.7) than parents with barriers (mean=2.9, SD=0.7), (p<0.001). These findings demonstrate the importance of access to healthy foods in determining parental self-efficacy in preparing healthy foods and for children’s healthy food consumption. Schools should partner with families and other community groups to advocate for improved access to healthy foods in the important settings of home and neighborhood.
The North Vallejo School-Based Oral Health Project is an intervention conducted for ethnically diverse individuals with limited access to oral care. The purpose of this descriptive study is to investigate perceptions of oral health knowledge, attitudes and beliefs among children in a low socioeconomic community. This study is a cross-sectional study performed from 2012 to 2014. A sample of 204 child participants, who visited the school-based clinic with their caregivers, were given self-administered surveys after their dental service visit. The target population is children of 7 to 17 (mean age 12) years of age residing in Vallejo, California. Overall, approximately two-thirds of students maintained healthy nutritional habits as evident by the weekly number of sugary drinks reported; with 11% and 55% reporting none and 1-2 per week, respectively. To determine children’s perceptions of access to dental care, they were asked how often they had visited the dentist. Many (44%) reported regular visits (about once per year), one-half (51%) reported having only visited a dentist one to three times ever. Of respondents who had ever visited the dentist, approximately three-quarters (71%) reported a “check-up” as the primary reason. Findings show that we need to continue to provide programs that help maintain oral health care services in trying to achieve better oral health behavior and more access to oral health care in the underserved communities, like Vallejo, California.
The purpose of this study is to investigate socioeconomic characteristics, oral health related attitudes and behaviors, and access to oral health services among participants in a school-based oral health services project funded by HRSA. A sample (n=260) of caregivers of children in Vallejo, California receiving oral health services were enrolled in the study and were administered a survey to assess attitudes, beliefs, and behaviors concerning oral health and access to dental care from 2012 to 2014. Most participants (68%) have a total family income of less than $40,000, do not have dental insurance (65%), and have not been to a dentist in more than a year (61%) and about one-half (57%) of the participants are Hispanic/Latino. Some participants (27%) reported poor mouth conditions and do not brush their teeth at least twice a day every day. Few participants (10%) report confidence that they can keep themselves from getting cavities. Results suggest a lack of access to dental services among these families, many of whom do not have dental insurance resulting to the low frequency of dental visits. Participants also have poor brushing behaviors and poor perceptions of their oral health and few believe that they can maintain healthy teeth. Implementing community-based oral health programs that provide better access to dental services and promote healthy oral habits may significantly improve oral health related beliefs, behaviors and access to care among underserved families.
Background: As in much of Sub-Saharan Africa, Ethiopia has persistently high levels of maternal mortality (676 deaths/100,000 live births) and low levels of skilled birth attendance at delivery (<15%). There is increasing recognition that one of the reasons women are reluctant to use maternal health services is poor service quality, and in particular fears of provider mistreatment. This qualitative research project studies patient’s perceptions of the quality of midwifery care and experiences of disrespect and abuse in maternal and child health services.

Methodology: This retrospective pilot study is conducted in Debre Markos town, in Ethiopia’s Amhara region. We conduct 25 in-depth interviews with women who have given birth within the last 6-12 months at health facilities (~20) or at home (~5). Women are recruited at local clinics or through health extension workers. Interview questions cover provider-patient interactions, factors associated with patient satisfaction, experiences of mistreatment while receiving care and patient’s beliefs about how services should be delivered. Data are triangulated with information from interviews with third-year midwifery students and local midwives.

Findings: Forthcoming: interviews are being conducted in February and March 2015.

Implications: Results will inform the construction of the next National Census of Ethiopian Midwives, and in turn can help strengthen Ethiopian midwives’ training and provision of respectful patient-centered care.
Cardiovascular Disease and Access to Healthy Food among Highland Hospital Patients

Tuesday, November 3, 2015

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Background: Cardiovascular diseases (CVD) are the leading cause of death in Alameda County (AC). The association between socioeconomic characteristics and CVD can be partially explained by neighborhood factors, such as healthful food access. Highland Hospital (HH), in Oakland, CA, is a safety-net hospital serving low-income residents of AC. This study assessed the association between the modified retail food environment index (mRFEI) and the proportion of HH patients with CVD.

Methods: All patients seen at HH between July 1, 2013 and June 30, 2014 who lived in AC and for whom a geocoded address match was available (n=39,533) were included. Data was matched with US Census data and the USDA’s mRFEI, representing the percentage of retailers within a 0.5 mile buffer of a given census tract that are more likely to sell healthful food. CVD diagnosis was based on ICD-9 codes. Census tracts were divided into the top and bottom two quartiles with the largest and smallest proportion of patients with a CVD diagnosis. Bivariate analyses examined the association between tracts with the highest and lowest proportions of CVD diagnosed patients and patient demographics (age, race/ethnicity, and sex) and the mRFEI. Logistic regressions modeled the CVD-mRFEI association, controlling for covariates.

Results: Tracts with higher proportions of CVD-diagnosed patients were more likely to have lower mRFEI scores (mean=7.80; SD=6.21 vs. mean=8.68; SD=5.98, p<0.001). This association persisted after controlling for covariates (OR=0.99; 95% CI: 0.98 - 0.99).

Conclusions: AC tracts with the highest versus lower proportion of patients with CVD have fewer healthful retail food outlets, providing evidence of the CVD-food environment link. Neighborhoods with a higher proportion of patients with CVD may be due to limited access to healthful food. Public health programs focused on health promotion and CVD prevention should consider the accessibility of healthful food options within low-income communities.
The Oral Health Project at Elsa Widenmann School in Vallejo, CA serves low-income families, with children ages 1-18, lacking access to oral health services. This study's aim is to assess changes in oral health behaviors and access/utilization of oral health services among the children utilizing parental report data. Parents reported on their child's access to oral health care, insurance status and oral health behaviors. They completed a baseline questionnaire and a one-year follow-up questionnaire (n=100). Participating children received an initial oral health exam, follow-up visits every three months, and oral health education both at the clinic and schools. The sample population is composed of 70% Latinos, 78% of parents are married and have an annual income of $20,000-$29,000. Preliminary results demonstrate that children with reported insurance status increased from 48% at baseline to 63% at one-year follow-up, with 55% being governmental insurance. At baseline, 63% of parents report they had not seen a dentist in more than a year whereas at follow-up only 43% had not seen a dentist in the same time frame. At follow-up, 70% of parents reported that they plan to take their child to the dentist within 6-months, indicating positive behavioral intention. At baseline, 51% of parents report that their child brushed their teeth twice a day, everyday, which significantly increased to 63% at follow-up. Oral health programs offered as part of school-based health services are an important strategy to address health disparities by increasing access to oral health services for low-income, underinsured children and families.
Background: Unsafe abortion is one of the top three causes of maternal deaths in Ethiopia. In 2005, the Ethiopian government liberalized laws on abortion to address this problem. There is much to learn about how patients and providers have responded to this new access. To that end, this study examines the characteristics of patients seeking abortion services and the types of care offered to them at a tertiary public facility in Ethiopia.

Methodology: This retrospective study uses secondary data extracted from medical records for women requesting safe abortion services at the Debre Markos Referral Hospital, in the Amhara region for the year 2013.

Results: On average the women (N=415) were 27 years old. The majority sought care because of incomplete abortion (43%) or to terminate a pregnancy due to rape (34.7%). Younger women were more likely than others to cite rape as the reason for seeking care (paired t-test p<0.001). Most women presented in their first trimester. The most common abortion procedures were manual vacuum aspiration (56.57%) and medical abortion (MA) (20%). Unexpectedly, MA was more common in women presenting later rather than earlier in pregnancy (OR=1.23 p<0.001). There were no fatalities and very few (<5%) complications among patients. Use of MA was associated with reduced likelihood of complications after controlling for risk factors. Most women (80%) received both contraception and HIV counseling and the majority (63.83%) said they wanted contraception.

Implications: More intensive contraceptive counseling might be needed to increase uptake and further investigation into the reasons for the relatively low use of MA for the termination of early pregnancies is warranted.
Background: This study investigates associations between the utilization of a community-based health insurance (CBHI) program in Ethiopia and community member’s knowledge of, and attitudes towards the program. Information on these potential relationships, which is largely lacking in current scholarship, is crucial for the planned nation-wide scale-up of the CBHI program.

Methods: This cross-sectional study uses a survey of 328 randomly selected households in Dembecha, a peri-urban town in the Amhara region. Data were analyzed using multivariate linear and logistic regression models.

Findings: Although the majority of residents (67%) had information about CBHI, mostly from health institutions (48%). Most (62%) did not know that there was a CBHI program in Dembecha. Moreover, over half of respondents had incorrect knowledge about policies on monthly premiums and fees. Higher income and education and being a young adult were positively associated with program knowledge (p<0.01). Attitudes about CBHI were generally positive. Low-income individuals, high health spenders, civil servants, and those knowledgeable about the program were all more likely to view CBHI favorably than their counterparts (p<0.01). The vast majority (84%) of respondents had not enrolled in CBHI; mainly because they lacked information about it (70% of non-enrollees). Health service utilization was modest for CBHI enrollees. The main reason for non-utilization was lack of coverage or poor availability of the needed health service. High CBHI knowledge and having experienced a prior death or health problem in the family were positively related to CBHI uptake (p<0.01). These findings suggest that more intensive CBHI education on payments is needed and that services covered should be reviewed.
The North Vallejo School-Based Oral Health Project is in the final year of a 4-year comprehensive oral health services project funded by HRSA whose aim is to provide improved access to oral health services for underinsured children aged 0 to 18 living in Vallejo, California. The project integrates oral health with primary care services at a school-based health center by providing preventive and restorative dental care, community outreach, oral health education, and referrals to community dentists. The aim of this study is to assess issues related to project success and sustainability from the perspectives of principal collaborative partners. In December 2014 open-ended questionnaires were completed by individuals representing six stakeholder organizations to assess principal accomplishments, barriers/challenges to implementation and recommendations for project sustainability. Key components responsible for project success included the quality of staff interactions with ethnically diverse families and the comprehensive services provided including increased access to a wide range of oral health education, preventive services and referrals for more intensive services. Location of the oral health clinic in a school setting increased access to many children. Challenges included sharing information between partners and maintaining partnerships over time, integrating oral health activities into the school program and communicating the importance of oral health with families with little to no experience receiving oral health care. Recommendations related to sustainability included developing strategies for maintaining and enhancing collaboration with school district and community partners and creating sustainable funding mechanisms to allow for continued ability to maintain and expand program services.
333178 Youth Empowerment in Environmental Health through School-Based Hands-on Project Learning

*Tuesday, November 3, 2015*

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**Background:** Despite the fact that both empowerment and self-participation are recognized as critical components of school health promotion, it is rare that the students in the classroom are provided with opportunities to influence their own physical environment. The participation of young people has been documented in community change, but there is little evidence of them actively engaged in making their schools healthier.

**Objectives:** By engaging students in primary school (6th-8th grades at the Mare Island Health and Fitness Academy in Vallejo, California) in hands-on learning about their own environment and its role in their health, this study empowers students to identify and take steps that reduce their environmental health risks. The project involves a two-way partnership in learning and teaching between MPH students and faculty and MIHFA students and teachers.

**Methods:** The final curriculum content incorporates feedback from focus groups with the youth leadership team and the middle-school science teachers. Surveys before and after students participate in classroom workshops provides information regarding changes in student interest, knowledge, behavior, empowerment and attitudes regarding environmental health concepts and the one’s potential in both risk generation and exposure mitigation.

**Results:** Surveys are being conducted following the classroom workshops each year, and comparisons will look at overall change for students’ attitudes after three years of participation.

**Implications:** Children rarely have the control over factors in their environment that affect their health. This project involves them directly in thinking about potential environmental risks in their lives, identifying them, and contributing ideas that may help to reduce or eliminate those risks.
Background: There is lively scholarly debate about the impact of development assistance on corruption; however, few studies have systematically examined the subject sub-nationally or in the health sector specifically. This study addresses this gap by estimating the association between development assistance for health and reported bribe payments in Malawi’s health sector.

Methods: Data on bribe payments are drawn from individual responses (N=3600) to questions asked in nationally representative Afrobarometer surveys in 2002, 2005 and 2012. District-level per capita aid disbursements for health and HIV/AIDS are measured using geo-coded data from the AidData. Multi-level logistic regression models are then fit with demographic and socioeconomic control variables.

Results: The prevalence of bribe paying for health services is low (3.89%) and declines over time (from 4.67% in 2005 to 3.49% in 2012). There is no association between health aid and reported bribe payment for health services. Payments are disproportionately concentrated among young (OR=0.41 p<0.00), poor (OR=1.04 p=0.05), and rural (OR=1.48 p<0.05) respondents. Those who have paid bribes are also more likely to have used other informal means, such as contacting local leaders, to get help for problems (OR=1.46 p<0.05). Reported payments were strongly and positively related to feelings of ethnic discrimination (OR=1.57 p<0.00).

Conclusion & Implications: The study finds no evidence that aid activity has either increased or decreased bribe payments in Malawi’s health sector. The importance of containing even low levels of bribe payments is underscored by the finding that it affects the poor disproportionately and may intensify feelings of unfairness and discrimination.
Deaf sign language users experience poor health outcomes as a result of inequalities in accessing health care (Barnett et al, 2011). For the approximately 500,000 Deaf people in the United States who use American Sign Language, accessing quality healthcare is challenging (McKee, et al., 2011) and they are often excluded from public health interventions such as health surveillance projects, outreach programs and mass media healthcare messages (Pick, 2013). Clear and efficient communication between physician and patient is critical to achieving quality patient-centered care and reducing health disparities between the hearing and Deaf communities (Lezzoni et al, 2014). Few studies examine the role of medical interpreters in bridging the communication gap between providers and Deaf patients and recuing health disparities. American Sign Language (ASL) Medical interpreters have a unique perspective on how Deaf and hard of hearing patients experience healthcare.

This study aims to explore the experiences of ASL medical interpreters in assisting the communication between Deaf patients and hearing health care providers. 10 ASL interpreters will be interviewed in one-on-one in person interviews and asked about their experience interpreting in a medical setting. Transcripts will be coded and grouped into common themes based on experiences of medical ASL interpreters.