

College of Public Health Research Day Poster Presentation Abstracts

#211 Abstract Title: Characteristics of Having Community Health Workers in Local Health Departments

Author(s): Q. Chen, Dept of Health Management and Policy

Abstract: Background: Community health workers (CHWs) are considered as frontline public health workers who have a close understanding of the community they serve. They have been identified as a strong force dealing with health disparities in community. Their inputs have the potential to address imperatives for improving health care in US. The 2010 Standard Occupational Classifications (SOC) includes a unique occupational classification for Community Health Worker. In 2013, NACCHO's profile and ASTHO's profile added CHWs as new occupation. Therefore to analysis the influence of having them as public health workforce is important. Research Objective: To estimate the characteristics difference of local health department (LHD) on having CHWs as full time equivalents (FTEs) and to examine the impacts and relationships of LHDs' characteristics on having CHWs in LHDs. Data Sets and Sources: Local public health department characteristics were obtained from the National Association of City and County Health Officials' 2013 National Profile of Local Public Health Departments. Whether LHD had CHW was also calculated from this profile data. Analysis: LHD's governance, population size, finance performance, staffing cut, using Community Guide, other occupations and activities provided were included in to descriptive analyses. Binomial analysis and multivariate regression were conducted after adjusted population size and governance type to assess the impacts of LHD's characteristics on having CHWs. Principal Findings: Compare to small population, LHD which services large population have more chance to have CHWs. LHD under state government and more likely to have CHW than local and shared governments. LHD that using Community guide to support decision making and provide more services in their activities have more chance to have CHW. Binomial analysis found that population size, governance type, finance performance, whether using Community Guide, and numbers of activities provided were found statistical significant with having CHW in LHD ($P < 0.05$). The results of multivariate regression showed that LHDs have large population size serviced, have more revenue from clinical source, use Community Guide and provides services in screening, maternal and children health, prevention, epidemiology and surveillance activities tend to have more odds to have community health workers as FTEs. Conclusion: This study provides evidence that population size, the amount of LHD's revenue from clinical sources, whether using Community Guide and provide certain activities are important impacts on having CHWs in LHD. LHDs that serve small population, usually in rural area, tend less to have CHWs in their institutions.

Supported by:

Primary Presenter / email: Chen, Q. / quan.chen@uky.edu

Degree being pursued: DrPH

Mentor / e-mail: Borders, T. / ty.borders@uky.edu

College of Public Health Research Day

Poster Presentation Abstracts

#212 Abstract Title: Prevalence and Comorbidities of Chronic Obstructive Pulmonary Disease Among Adults In Kentucky Across gender and Area Development Districts, 2011

Author(s): A. Kamour, Dept of Epidemiology, U of Kentucky
D. Mannino, Dept of Preventive Medicine & Environmental Health, U of Kentucky
S. Kanotra, KY Dept for Public Health, Frankfort, KY

Abstract: Background: Chronic obstructive pulmonary disease (COPD) is a major cause of morbidity and mortality in Kentucky, and precise estimates of the prevalence of this disease and its comorbidities are needed. This study aimed to determine the prevalence of both COPD and its comorbidities and risk differences of COPD comorbidities across Area Development Districts (ADDs) and gender. Methods: The demographic characteristics, prevalence of self-reported COPD and its comorbidities were determined by using data from the 2011 Kentucky Behavioral Risk Factor Survey (KyBRFS). Logistic regression was used to estimate adjusted odds ratios (ORs) for COPD and comorbidities. Results: The overall prevalence of age adjusted COPD was 10.09 % (8.85% for men, and 10.78% for women). The odds ratios for risk of angina or coronary heart disease (CHD), and arthritis among patients with COPD, by sex and ADDs varied significantly (pooled overall OR= 3.43, 95% CI 1.15–1.42, p=0.0001) and (pooled overall OR= 2.16, 95% CI 1.75 –2.67, p=0.0001), respectively. Odds ratios for risk of depression (pooled OR=2.61, 95% CI 1.78–3.70, p=0.028) and hypertension (pooled OR=1.67, 95% CI 1.16–2.42, p=0.006) only varied significantly in men. The odds ratios for risk of diabetes was not significant across ADDs and for both women and men (pooled overall OR =2.02, 95% CI 1.61–2.53, p= 0.709). Conclusion: Gender differences account for the discrepancy in the risk of comorbidities in patients with COPD across Kentucky's Area Development Districts. This should guide public health officials and physicians to create gender-based prevention interventions.

Supported by: No sources of support for this abstract

Primary Presenter / email: Kamour, A / ahka222@uky.edu

Degree being pursued: DrPH

Mentor / e-mail: Mannino, D. / dmannino@uky.edu

College of Public Health Research Day

Poster Presentation Abstracts

#213 Abstract Title: **Assessing the Relationship Between Lung Function and Dust Exposure Among Farm Show Participants: A pilot study**

Author(s): C. Holsinger, MPH, CPH, College of Public Health, U of Kentucky
D. Mannino, MD, College of Public Health, U of Kentucky
D. Collins, BS, College of Public Health, U of Kentucky

Abstract: Occupational exposure can help to explain approximately 20 percent of patients with COPD. While smoking remains the primary risk factor for COPD, 20 percent of patients who die from COPD are never smokers. The goal of this research was to evaluate whether there is a correlation between dust exposure and respiratory lung function among participants of two Agricultural Farm Shows utilizing the Vitalograph COPD-6 ®. In 2015, 134 participants were evaluated based on occupation, exposure to dust, smoking history, and other respiratory co-morbidities. Our main outcome measure was lung function, assessed through a Vitalograph COPD screening device. This classified subjects as “Obstructed” (FEV1/FEV6 < 0.70) and “Low lung function” (FEV1 < 80% predicted). We developed regression models to determine correlates of obstruction and low lung function, focusing on reported dust exposure. Of 134 farm show participants, 90 were male (67.7%) with a mean age (SD) of 48.7 (17.1). The majority of the participants were married (74.4%), Caucasian (96.3%), and lived on farms (64.4%) and 63 participants identified agricultural as their primary mode of income (47.0%). 29 were ever smokers (21.80%) and 100 of the participants reported being exposed to dust (74.6%). 16 (11.9%) were obstructed and 33 (24.6%) had low lung function. The logistic regression model show that those with dust exposure had more obstruction (OR 2.6, 95% CI 0.6, 12.1), whereas no affect was seen predicting low lung function (OR 0.72, 95% CI 0.3, 1.7). Preliminary findings suggest that compared to participants who report no dust exposure, those individuals with dust exposure are more likely to have obstruction, but not low lung function.

Supported by: The Central Appalachian Regional Education and Research Center (CARERC) pilot funding project.

Primary Presenter / email: Holsinger, C / caroline.holsinger@uky.edu

Degree being pursued: DrPH

Mentor / e-mail: Mannino, D / dmmann2@email.uky.edu

College of Public Health Research Day Poster Presentation Abstracts

#214 Abstract Title: A Comparison of Group-Based and Individuated Perceptions of Older Adults

Author(s): A. I. Hoogland, Gerontology, U of Kentucky

Abstract: Introduction: While stereotypes of aging adults vary, older adults are often viewed as warm but incompetent compared to their younger counterparts. Research has shown that the provision of specific, individuated information yields more positive views of older adults. Through the lenses of Continuum Theory and Social Role Theory, it was hypothesized that grandparents are perceived more positively than older adults in general. Methods: Ninety-eight students (M age: 19.5 years) enrolled in a 200-level undergraduate course on aging recorded terms that came to mind for “old person” and “grandma/grandpa” within 60 seconds following each verbal prompt. Conventional content analysis employed a multi-stage coding scheme. Results: Participants recorded a total of 1606 terms. For older adults, 42.44% of terms were negative and 18.46% were positive, whereas for grandparents, 16.83% were negative and 49.76% were positive ($p < .001$). Physical characteristics were cited most for older adults, and related terms were more negative for older adults than grandparents ($p = .10$). Personality traits were mentioned more often for grandparents, but there was no grandparent-older adult difference in the emotional valence of these terms ($p = .91$). Conclusion: Group-based assessments for older adults were primarily negative and focused on physical characteristics, whereas individuated perceptions for grandparents were more positive and focused on personality. Findings suggest that there is discordance between perceptions of older adults in general, and grandparents in particular.

Supported by:

Primary Presenter / email: Hoogland, A. I. / aasha.anderson@uky.edu

Degree being pursued: PhD

Mentor / e-mail: Watkins, J. F. / john.watkins@uky.edu

College of Public Health Research Day Poster Presentation Abstracts

#215 Abstract Title: Social and Self Image of Aging

Author(s): M. Schuier, Graduate Center for Gerontology, U of Kentucky

Abstract: My current research centers on social and self-image over time. I am looking at how one's beliefs of self change over time and how they project these beliefs to others. I am also looking at how social-image is perceived when projected by others. My research covers communication, social beliefs, decision-making, body image, and remminance. I will be looking beliefs of self during participant's formative years, high school, and comparing them to current beliefs. I will better understand how self-image and beliefs change over time and how people reconcile the differences when in social situations. This will be most evident when meeting people they haven't seen in since high school but time has passed, class reunions. I will conduct a two-part research project. The first stage will be participant observation where I will gain a better understanding of social influences on reunions and how adults who have had little communication in years interact with each other. The second stage will be interviews with participants of the study concerning their beliefs, ideas, and experiences. As a result I expect to gain a better understanding of social and self image, how remminance plays a part in communication between peers, how remminance plays a part in decision making, how social media has had an impact on social groups, and how beliefs from childhood to adulthood are reconciled.

Supported by: .

Primary Presenter / email: Schuier, M. / mwsc225@g.uky.edu

Degree being pursued: PhD

Mentor / e-mail: Watkins, J. / john.watkins@uky.edu

College of Public Health Research Day

Poster Presentation Abstracts

#216 Abstract Title: A Review of Methodology for analyzing Transitional Care data

Author(s): F. Appiah, College of Public Health, U of Kentucky
A. Stromberg, Dept of Statistics, U of Kentucky

Abstract: The reduction of 30 day readmission or re-hospitalization rates of Medicare patients has received a lot of attention in recent years due to the impact on the patient, the government and the society at large. As a result many statistical models have been implemented in the transitional care literature to help identify, explain and predict factors that affect patient readmission after discharge from the hospital to another health center, nursing home or patients home. This poster reviews common statistical methods used in 46 selected articles and their effectiveness in measuring the factors that influence hospital readmission from a total of 266 articles published between 2010 and 2015. Furthermore, it highlights the appropriateness of these methods and what can be done to improve identification, explanation and prediction of factors related to patient readmission in future studies.

Supported by: The articles used for this abstract was provided by the UK Center for Health Services Research.

Primary Presenter / email: Appiah, F. / frank.appiah@uky.edu**Degree being pursued:** PhD

Mentor / e-mail: Stromberg, A. / astro11@uky.edu

College of Public Health Research Day

Poster Presentation Abstracts

#217 Abstract Title: **Assessing Discriminant Ability, Reliability, and Comparability of Multiple Short Forms of the Boston Naming Test**

Author(s): Y. Katsumat, Dept of Biostatistics, U of Kentucky
 M. Mathew, Sanders-Brown Center on Aging, U of Kentucky
 E.L. Abner, Dept of Epidemiology, U of Kentucky
 G.A. Jicha, Dept of Neurology, U of Kentucky
 A. Caban-Holt, Dept of Behavioral Sciences, U of Kentucky
 C.D. Smith, Dept of Neurology, U of Kentucky
 P.T. Nelson, Dept of Pathology, U of Kentucky
 R.J. Kryscio, Dept of Biostatistics and Statistics, U of Kentucky
 F.A. Schmitt, Dept of Neurology and Behavioral Sciences, U of Kentucky
 D.W. Fardo, Dept of Biostatistics, U of Kentucky

Abstract: Objectives: The Boston Naming Test (BNT) is a commonly-used neuropsychological test of confrontation naming that aids in determining the presence and severity of dysnomia. Many short versions of the original 60-item test have been developed and are routinely administered in clinical/research settings. Because of the common need to translate similar measures within and across studies, it is important to evaluate the operating characteristics and agreement of BNT versions. Methods: We analyzed longitudinal data of research volunteers (n = 681) from the University of Kentucky Alzheimer's Disease Center longitudinal cohort. Results: Other than the Consortium to Establish a Registry for Alzheimer's disease (CERAD) BNT-15, Spearman correlation coefficients between each of the short versions and the 60-item BNT were high for all diagnostic groups. Compared with other versions, the CERAD BNT-15 had poorer ability to discriminate between cognitively normal participants and participants with MCI and dementia. Conclusions: With the notable exception of the CERAD 15-item BNT, short forms were internally consistent and highly correlated with the full version. Short form scores varied by diagnosis and generally improved from normal to MCI to dementia. All short forms retained ability to discriminate between normal subjects and those with dementia. The ability to discriminate between normal and MCI was less strong for the short forms than the full BNT but exhibited similar patterns. These results have important implications for researchers designing longitudinal studies, who must consider that the statistical properties of even closely-related test forms may be quite different.

Supported by: This research was partially supported by the National Institute on Aging: R01 AG038651, P30 AG028383, and K25 AG043546.

Primary Presenter / email: Katsumata, Y / katsumata.yuriko@uky.edu

Degree being pursued: PhD

Mentor / e-mail: Fardo, D. W. / david.fardo@uky.edu

College of Public Health Research Day

Poster Presentation Abstracts

#218 Abstract Title: Suicidal Risk, Ideation, and Attempts among Kentucky High School Students

Author(s): D. Slavova, Dept of Biology, U of Kentucky
H. Omar, Dept of Pediatrics, U of Kentucky

Abstract: In 2010, suicide was the second leading cause of death among Kentuckians ages 15 to 19. In response, Kentucky's governor signed Senate Bill 65 and House Bill 51 as suicide prevention education for Kentucky's high school students and staff. This is in addition to the continued and expanding work of the Stop Youth Suicide Campaign and several school based programs in high risk areas by the Adolescent Medicine program. An objective of this study was to assess the changes in prevalence of suicide-related risk behaviors among Kentucky high school students (HSS), from 2009-2013 using the Youth Risk Behavior Surveillance (YRBS) and to identify areas where Kentucky HSS were at a higher risk compared to their U.S. peers. Based on Kentucky YRBS, attempted suicide was significantly lower for Kentucky HSS in 2013 compared to 2011 (2.9% vs. 4.6%). Females were significantly more likely than males to have felt sad or hopeless (31.7% vs. 20.0%), seriously considered attempting suicide (19.2% vs. 10.9%), or made a plan to attempt suicide (14.3% vs. 10.9%). From 2011 to 2013, Kentucky HSS became less likely than U.S. students to feel sad or hopeless (25.7% vs. 29.9% in 2013) and improved from being more likely to attempt suicide to as likely. YRBS can serve as a testament to current Kentucky programs, identify the behaviors of Kentucky's youth that have not been improving, and recognize which population groups are at higher risk and require intervention.

Supported by: N/A**Primary Presenter / email:** Slavova, D. / dksl222@uky.edu**Mentor / e-mail:** Omar,H. / Hatim.Omar@uky.edu

College of Public Health Research Day

Poster Presentation Abstracts

#219 Abstract Title: Association of Alcohol related suicides with alcohol sale status in Kentucky from 2005-2012

Author(s): H.A. Khaleel, Dept of Epidemiology, U of Kentucky
S. Brown, Dept of Epidemiology, U of Kentucky
M.M. Brown, Dept of Epidemiology, U of Kentucky

Abstract: Background: The aim of the current study is to identify the relationship between alcohol related suicides and alcohol sale status in Kentucky from 2005-2012 and possible confounders/effect modifiers. The hypothesis is that there are more alcohol related suicides in wet areas compared to dry areas while controlling for other covariates. Materials and Methods: We used data for suicide decedents from the Kentucky Violent Death Reporting System (KVDRS) from 2005 to 2012. Univariate descriptive statistics and multivariable logistic regression was used to adjust for potential confounders and/ or effect modifiers. Result: A total of (1103) suicides were reported in Kentucky from 2005-2012. The highest percentage occurred in wet counties (60.6%), followed by moist counties (28.7%), and dry counties (10.7%). The unadjusted estimates showed that being in a wet county at the time of injury is associated with a statistically significant increase in the odds of having alcohol related suicides (OR=1.68, 95%CI: 1.05-2.69), which increased to two folds after adjusting for confounders (OR=2.003, 95%CI: 1.2-3.34). The final model showed that wet county of injury (OR=2.025, 95%CI: 1.22-3.35), alcohol only abuse problem (OR=7.87, 95%CI: 4.52-13.69), both substance and alcohol abuse problem (OR=3.84, 95%CI: 2.28-6.45) were associated with a statistically significant increase in the odds of having alcohol related suicides. In contrast, having mental illness was associated with statistically significant 43% reduction in the odds of having alcohol related suicides (OR=0.57, 95%CI: 0.42-0.76). Conclusions: There is a statistically significant association between being in a wet county at the time of suicide and having alcohol related suicides after controlling for mental illness and abuse problems.

Supported by: Kentucky Violent Death Reporting System

Primary Presenter / email: Khaleel, H. A. / hanan.khaleel@uky.edu

Degree being pursued: DrPH

Mentor / e-mail: Brown, S. / sabrina.brown@uky.edu

College of Public Health Research Day Poster Presentation Abstracts

#220 Abstract Title: Rural Healthcare Workers Willingness to Report to Work During Catastrophic Events

Author(s): A. MacDonald, College of Public Health, MPH Candidate, U of Kentucky
J. Holsinger, College of Public Health, U of Kentucky
S. Brown, College of Public Health, U of Kentucky
S. Wakerbarth, College of Public Health, U of Kentucky

Abstract: In the events leading up to, during, and following a catastrophic event, healthcare workers play a critical role in the health and welfare of the affected population. Therefore, it is of the utmost importance that healthcare workers are able and willing to report to work. Prior to September 2001, there was limited research on willingness to report in the literature. Post September 2001, and through 2011, there was a renewed interest in the topic which led to the publishing of twenty plus papers on the topic. The current literature has examined willingness to report thoroughly and definitively, however, there is a clear gap when it comes to rural healthcare workers and rural based healthcare systems. The most recent research has clearly been skewed towards large metropolitan areas, foreign countries, and large urban based healthcare systems. We are in the process of conducting a cross-sectional survey using a convenience sample of healthcare workers in Kentucky counties that are labeled rural by the USDA Rural-Urban Continuum Codes. We are administering a survey developed by Kristen Qureshi, which was used in her paper "Healthcare Workers Ability and Willingness to Report to Work During Catastrophic Disasters." The survey has been sent electronically to rural healthcare workers at different healthcare facilities in Eastern Kentucky. We are currently collecting data and anticipate having results by April 2015. I believe that our findings can help healthcare facilities better prepare for catastrophic situations. Ideally, healthcare facilities, when reading our report, will be able to plan for the factors that limit willingness and ability to work. Facilities in these geographical areas can plan ahead and develop plans and programs that alleviate the factors that prohibit reporting to work, such as childcare and transportation, and ensure full staffing capabilities when it is needed the most.

Supported by:

Primary Presenter / email: MacDonald, A / ammacd2@uky.edu

Degree being pursued: MPH/MHA

Mentor / e-mail: Brown, S / sabrina.brown@uky.edu

College of Public Health Research Day Poster Presentation Abstracts

#221 Abstract Title: Differences in characteristics of FSW in chains from productive and non-productive seeds

Author(s): V.Pravosud, College of Public Health, U of Kentucky
T.I. Andreeva, School of Public Health, National University of 'Kyiv-Mohyla Academy', Ukraine

Abstract: BACKGROUND: While studying FWS population in Ukraine using RDS methodology we paid attention to the length differences of recruitment chains from productive and non-productive seeds. These differences should be considered due to the probable confounding effect of homogeneity among respondents of productive recruitment chains leading to parameter over- or underestimation. OBJECT: To explore if the tendency of forming long and short chains was related to characteristics of FSW. METHODS: The study employed data from a bio-behavioral survey among FSW, conducted in 2009, which used RDS method to recruit 975 participants in 6 Ukrainian cities with 4 or 5 initial seeds. Pearson χ^2 was used to demonstrate differences in 29 parameters (demonstrating different ways of client search, social interaction, health and behavior of FSW) between respondents who were included in 5 productive (>82 participants) or 20 non-productive chains. RESULTS: Statistically significant differences ($p < .05$) were found for such parameters having higher estimates for FSW in productive chains: search for customers on the street, on the highway, railway stations, involvement in escort services; positive HIV & hepatitis C tests; use of any controlled substance; involvement in any FSW/IDUs NGOs. CONCLUSION: FSW with a wider and more homogeneous social network, being members of any NGO for FSW or IDUs, having substance abuse, and being HIV and hepatitis C positive had higher frequency among those who formed long recruitment chains. This should be considered for development of inclusion criteria for the seeds.

Supported by: The data was conducted in 2009 by the Kyiv International Institute of Sociology and commissioned by the International Charitable Foundation (ICF) 'International HIV/AIDS Alliance in Ukraine' in the frame of the program 'Tackling the HIV/AIDS epidemic in Ukraine' (supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria)

Primary Presenter / email: Pravosud, V. / vera.pravosud@gmail.com

Degree being pursued: MPH/MHA

Mentor / e-mail: Pravosud V. / vera.pravosud@gmail.com
