RWJF AWARD

CSTE AWARD IN ADDRESSING RACIAL AND ETHNIC DISPARITIES

This is the fourth annual presentation of the "Robert Wood Johnson Foundation National Award for Outstanding Epidemiology Practice in Addressing Racial and Ethnic Disparities" by the Council of State and Territorial Epidemiologists (CSTE). This award was established to recognize an individual presenter at the CSTE Annual Conference whose professional work advances public health knowledge through epidemiology and applied research in racial and ethnic disparities and improves public health practice through effective use of data and epidemiology.

There were over 600 abstracts submitted for participation in the CSTE annual conference. In total, 25 abstracts were considered for the award. Of those abstracts that met the criteria for consideration, five finalists were chosen.

CSTE Member-at-Large, Duc Vugia convened a panel of judges to select the five finalists from abstracts submitted to the CSTE Annual Conference Planning Committee. Judges used the following criteria for selecting the award recipient:

- Impact of work to the field of eliminating health disparities
- Contribution/Translation to Practice
- Policy Implications for evoking long term change in eliminating and preventing health disparities
- Quality of poster or breakout session presentation

CSTE will present one of the finalists a plaque to commemorate this fourth annual award together with an honorarium valued at $1,000. The award will be presented on Tuesday, June 14th at the President's banquet.

Presentations are indicated on the program agenda with double asterisks (**).

ABSTRACT REVIEW COMMITTEE

CSTE is appreciative of the review committee who volunteer their time to make this award a reality. The role of the review committee is to review and score the abstracts submitted to the CSTE Annual Conference and participate in a discussion about this process. If you are interested in participating on this committee, please contact the CSTE national office. The review committee consists of the following professionals:

Duc J. Vugia, MD, MPH is Chief of the Infectious Diseases Branch at the California Department of Public Health. He also serves on the CSTE Executive Board.

Sonja S. Hutchins, MD, MPH, DrPH is a Senior Medical Officer (IV), Office of Minority Health and Health Disparities, Office of the Director, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia. As a Senior Medical Epidemiologist for more than 20 years at the CDC, she is most noted for the dual strategy used to reach racial and ethnic minority populations in the elimination of endemic measles and to achieve record high measles vaccination coverage and childhood vaccination coverage in the United States.

Dr. Zeenat Mahal is a medical graduate with a dual degree in Medicine, and Surgery-ObGyn, and a trained Lead Epidemiologist. Dr. Mahal is the Director of the Tribal Epidemiology Center at the Inter Tribal Council of Arizona, Inc. The Center serves tribes in Arizona, Nevada and Utah.

Corrine Miller, PhD, DDS is State Epidemiologists with the Michigan Department of Community Health.

Michael Landen, MD, MPH is the Deputy State Epidemiologist with the New Mexico Department of Health and a former CSTE Executive Board member.

APRIL YOUNG BENNETT, MPA

April Young Bennett has worked at the Utah Department of Health for eight years, including five at the Center for Multicultural Health. She authored a comprehensive report of Utah racial and ethnic data, created Utah's online health library in over 30 languages and evaluated Utah's tobacco control program. She completed fellowships and internships at a research center specializing in mental health, a veterans' hospital and the United States Senate. Ms. Bennett received her Master of Public Administration from the University of Arizona and her Bachelor of Science in Community Health Education from Utah State University.

Abstract ID: 1058764
Presentation Title: ***Utah Health Status by Race and Ethnicity: 2010 compared to 2005***
Presentation Date: Wednesday, June 15 – Cross-Cutting I Breakout at 1:30 PM
Presentation Time: 2:30 PM – 3:00 PM

BACKGROUND

In 2005 and 2010, the Utah Department of Health (UDOH) published comprehensive reports of public health data available about Utah racial and ethnic groups at each time period. UDOH compared the health status of Utah minorities reported in 2010 to the baselines established in the 2005 report.

METHODS

Data were compiled from birth and death certificates, statewide surveys, and mandated reporting of certain diseases and conditions by health organizations. Change was defined as follows: The estimated rate reported in 2005 does not fall within the 95% confidence intervals for 2010 status. When appropriate, age-adjusted rates were used to determine if there was a change over time or a difference from the statewide rate.

RESULTS

More Pacific Islanders and Hispanics lacked health insurance than in 2005. However, Hispanics reported higher rates of prenatal care and colon cancer screening and Pacific Islanders reported higher rates of colon cancer screening and blood cholesterol screening. Hispanics had the lowest health insurance coverage rate in the state. The Hispanic and Black/African American infant mortality rates dropped. However, Blacks/African Americans and Pacific Islanders continued to have nearly double the infant mortality rate of the statewide population. Hispanics saw declines in several diseases, including gonorrhea, tuberculosis, arthritis, and cancer. This ethnic group also had lower rates of death from diabetes, coronary heart disease, and stroke than in 2005. Blacks/African Americans reported improvements in overall physical and mental health. The American Indian motor vehicle traffic crash death rate improved. However, American Indians continued to have the lowest life expectancy in the state. The majority of Utahns were overweight, but American Indians, Blacks/African Americans, Pacific Islander and Hispanic Utahns had even higher overweight rates. In contrast, Asians had a low overweight rate and the highest life expectancy in the state. The lung cancer rate rose among Blacks/African Americans and the breast cancer rate rose among American Indians and Blacks/African Americans. As with all Utahns, all minority groups for whom data were available saw a rise in chlamydia rates.

CONCLUSIONS

Based on the results of this study, UDOH identified three priority areas for minority health outreach: improving access to healthcare among all Utah minority groups; obesity prevention among Blacks/African Americans, Pacific Islanders and Hispanics; and improving birth outcomes among Blacks/African Americans and Pacific Islanders. The results of the study were used to apply for a federal grant, raise media awareness of minority health issues and create the Utah Multicultural Health strategic plan.

RWJF AWARD FINALIST

REBECCA COUGHLIN, MPH

Rebecca Coughlin is the epidemiologist for the Health Disparities Reduction and Minority Health Section (HDRMHS), and sits in the Bureau of Epidemiology at the Michigan Department of Community Health. HDRMHS is the Office of Minority Health for the state of Michigan, and works to provide a persistent and continuing focus on eliminating health inequities in Michigan's populations of color. Rebecca has an MPH in Epidemiology from the University of Michigan and did her master's work with the Inter-Tribal Council of Michigan. Before moving to Michigan, Rebecca worked for John Snow, Inc., supporting projects in Romania and Ethiopia.

Abstract ID: 1060506
Presentation Title: ***Using secondary data to monitor racial and ethnic minority health disparities in Michigan: The Michigan Health Equity Data Project***
Presentation Date: Monday, June 13 at 3:00 PM – Poster Presentation
Presentation Time: 3:00 PM – 3:30 PM

BACKGROUND

African Americans, American Indians/Alaskan Natives, Arab Americans, Asian Americans, and Hispanics/Latinos together comprise 22.5% of Michigan's total population. Tracking racial/ethnic minority health disparities can be challenging due to variation in data available from varied and non-integrated sources. Information on race/ethnicity may be either missing or inaccurate, and reporting methods are inconsistent between sources. The Health Equity Data Project (HEDP) compiles data for eighteen priority indicators for each population across consistent time periods so that disparities can be identified and monitored.

METHODS

Eighteen indicators were chosen to provide a comprehensive description of health outcomes and health risks, including social determinants of health. Data were gathered from secondary data sources, including vital records, the Behavioral Risk Factor Survey, and census data. Four standard measures were used to evaluate health disparities: pairwise disparity, change in pairwise disparity over time, population-wide disparity, and change in population disparity over time. For each indicator, absolute and relative differences between each minority population and the reference white population were calculated for two time periods, 2000-2004 and 2005-2009. The percent change in the relative difference for each indicator was used to evaluate whether inequity for each population increased or decreased over time. In addition, an Index of Disparity (ID) was calculated to indicate subpopulation variation around the total population rate, which was used to assess population-wide disparity. Change in population-wide disparity over time was measured by the absolute difference in ID.

RESULTS

Among all pairwise comparisons, the smallest relative difference was unhealthy mental days between Asians and Whites; in 2001-2003 Asians had 0.2 times that of Whites. The largest relative difference was gonorrhea incidence between Blacks and Whites; in 2003 Blacks had 31.6 times that of Whites. Among all indicators, the largest population disparity was for gonorrhea incidence in 2003 (117.3%), while the smallest was for household income in 2000 (16.4%). Between 2000 and 2009, the indicator showing the greatest decrease in population disparity was unemployment rate (-37.6%), while the indicator showing the greatest increase was unhealthy physical days (18.7%).

CONCLUSIONS

There was great variation among populations and indicators in the magnitude of disparity and how disparity changed over time. The HEDP identifies disproportionate health exposures and outcomes in racial/ethnic minority populations and uses four standard measures to monitor progress toward reducing disparities. Results can be used to focus interventions to reduce disparities. These methods can be adopted by local health departments and by other states.

MEGHAN JERNIGAN, MPH

Meghan Jernigan is the Lead Project Coordinator with the Urban Indian Health Institute, a division of the Seattle Indian Health Board. She has over seven years of experience in the field of public health, working with both rural and urban American Indian and Alaska Native communities. Meghan is an enrolled member of the Choctaw Nation of Oklahoma, where she was born and raised. She received her Master's in Public Health from Columbia University, and is honored to be considered for the Robert Wood Johnson Foundation's Award for Outstanding Epidemiology Practice in Addressing Racial and Ethnic Disparities.

Abstract ID: 1060546
Presentation Title: ***Using community health profiles to understand and improve the health of urban American Indians and Alaska Natives***
Presentation Date: Wednesday, June 15 – Chronic / MCH / Oral Health II Breakout at 10:30 AM
Presentation Time: 11:30 AM – 12:00 PM

BACKGROUND

Local health data is an essential tool for decision making, advocacy, and education. It drives the allocation of health resources, offers insight into the health dynamics affecting vulnerable populations, and highlights health disparities in need of innovative solutions. However, the lack of standardized collection practices for the urban American Indian and Alaska Native (AI/AN) population creates challenges in retrieving and analyzing local health data. In response to these challenges, the Urban Indian Health Institute (UIHI) developed a series of community health profiles (CHP) for the network of thirty four urban Indian health organizations (UIHO). The CHP provide an overview of the health status of the AI/AN population in each specific community, examining preventable causes of illness, death, access to care, and burden of disease.

METHODS

Preliminary discussions with UIHO staff on data needs drove the development of a comprehensive list of core indicators and respective data sources to be included in the CHP. Nineteen final indicators from five distinct topics (census overview, mortality overview, reported health and health influencing behaviors, barriers to care, and the health of mothers and children) were selected. Prior to data analysis, each of the thirty four UIHO was surveyed to finalize a list of service areas (county level) for their clinic. For each CHP, U.S. census data, vital statistics data, and behavioral risk factors surveillance system (BRFSS) data were analyzed. Each analysis provided data across two comparison groups, AI/AN and the general population (all races combined). Notes on data use and limitations in the data including racial misclassification were included in each CHP.

RESULTS

Aggregate analysis of all UIHO service areas found alarming health and economic disparities among urban AI/AN when compared to the general population. In the aggregate analysis, 24% of urban AI/AN are living in poverty compared to 13.3% of the general population. Over 23% of AI/AN in the urban areas served UIHO report that they are current smokers and over 31% of AI/AN report being diagnosed as obese. Significant barriers to care were identified through the BRFSS analysis including 20.5% of urban AI/AN reporting that they could not see a doctor because of cost, and over 27% reporting that they had no health insurance in the past 12 months. Over 14% of urban AI/AN women reported smoking during pregnancy, and 8.2% reported having late or no prenatal care.

CONCLUSIONS

The CHP utilize available local and national data so that UIHO staff have access to relevant, up-to-date information about their community's health. Having access to local data can mobilize urban AI/AN communities for collaborative identification of health problems and successful activism to address these problems. Specifically, the CHP can be used to support grant writing, program expansion, and are a critical resource for understanding and addressing the health disparities of urban American Indians and Alaska Natives (AI/AN).

RWJF AWARD FINALIST

MARIA NESS, MPH

Maria Ness attained her Master of Public Health degree in 2008, from the University of Sydney, Australia. She is currently undertaking the CDC/CSTE Applied Epidemiology Fellowship at the Oregon Office of Family Health, Maternal and Child Section. Prior to the fellowship, she completed a Policy/Community Education Internship with the NYC Coalition for a Smoke Free City, at the New York City Department of Health and Mental Hygiene. From 2008 to 2009, she was an active volunteer with the New Jersey Women and AIDS Network. She has a particular interest in the maternal and child health of Native communities.

Abstract ID: 1057660

Presentation Title: ***Comparison of the predictors of overweight and obesity between American Indian/Alaska Native children and non-Hispanic white children***

Presentation Date: Monday, June 13 – Chronic / MCH / Oral Health II Breakout at 10:30 AM

Presentation Time: 11:00 AM – 11:30 AM

BACKGROUND

Childhood overweight/obesity is a public health crisis in the United States that disproportionately affects American Indian/Alaska Native (AI/AN) children. There is a higher prevalence among AI/AN children than children of other race/ethnicities, and interventions targeting overweight/obesity have been less effective among these children. This analysis examines the predictors of overweight/obesity among AI/AN children, and compares them to predictors among non-Hispanic white children. We hope that once risk factors for overweight/obesity among AI/AN children are better understood, that effective interventions can be tailored to suit this population.

METHODS

We analyzed data on 10 to 17 year old children from the 2007 National Survey of Children's Health, which is a population-based cross-sectional survey. The analysis was limited to only the seven US states that reported AI/AN race as a distinct category, resulting in a sample size of 386 AI/AN children and 4956 non-Hispanic white children, and an average response rate of 53.3%. Bivariate associations between overweight/obesity (body mass index at the 85th percentile or higher for age and sex) and demographics, socioeconomic characteristics, neighborhood environment, household environment, and the child's behavior were assessed using pooled and race-stratified logistic regression. Multivariate logistic regression was conducted using a model including selected race-interaction terms, and all variables with significant odds ratios in the pooled bivariate regression. All analyses were conducted in SAS (version 9.2) using complex survey procedure.

RESULTS

The prevalence of overweight/obesity was 29% (95% Confidence Interval (CI) = 26.2%-31.8%) among non-Hispanic white children and 48.3% (95% CI = 38.7%-58.0%) among AI/ AN children ($p<0.0001$). The results of the multivariate logistic regression were that younger age, male sex, household income less than 400% of the federal poverty level, family structure other than two parents or a single mother household, lack of perceived neighborhood support, and TV viewing, were all statistically significantly associated with a higher odds of overweight/obesity among both AI/AN children and non-Hispanic white children. Lack of sports participation was the only variable which was statistically significantly associated with higher odds of overweight/obesity among AI/AN children, but not among non-Hispanic white children. Among AI/AN children, not participating in a sports team led to a 2.7 times greater odds of overweight/obesity (95% CI = 1.3–5.2).

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CONCLUSIONS

Correlates of overweight/obesity did not differ between AI/AN and non-Hispanic white children, with the exception of sports participation. This indicates that the same risk factors need to be addressed in AI/AN communities as in others to prevent childhood overweight/obesity, although particular attention could be paid to encouraging AI/AN children to engage in school or community sports teams. Future research could be directed towards examination of the effectiveness of interventions, as aspects such as cultural sensitivity may need to be assessed.

Abstract ID: 1057690

Presentation Title: ***An examination of stressful life events and intimate partner violence as risk factors for self-reported postpartum depression among American Indian/Alaska Native mothers***

Presentation Date: Tuesday, June 14 – Chronic / MCH / Oral Health II Breakout at 3:30 PM

Presentation Time: 4:00 PM – 4:30 PM

BACKGROUND

The prevalence of stressful life events (SLEs) and intimate partner violence (IPV) is disproportionately high among American Indian/Alaska Native (AI/AN) women in Oregon, which may contribute to the similarly high prevalence of postpartum depression within these communities.

METHODS

Analysis was conducted using linked data from Oregon birth certificates, Oregon's Pregnancy Risk Assessment Monitoring System (PRAMS), and PRAMS-2 (Oregon's PRAMS follow-back survey). 1,911 women responded to PRAMS-2 in 2006-2007 shortly after their child's second birthday, 226 of whom were AI/AN. The PRAMS-2 weighted response rate was 56.7% for 2006-2007. PRAMS-2 asks mothers to report symptoms of depression, thirteen separate SLEs, and five types of IPV, occurring 13-24 months after the birth of their child. The SLEs were divided into four categories: partner-related, traumatic, financial, and emotional. Prevalence rates of postpartum depression, SLEs, and IPV were calculated among all racial/ethnic groups. Bivariate and multivariate logistic regression models were created to examine risk factors for postpartum depression among AI/AN mothers only. The final multivariate logistic regression model was limited to risk factors with a p-value less than 0.05. All statistical analysis was conducted using STATA 11.0, to account for the complex sampling design of PRAMS and PRAMS-2.

RESULTS

29.4% of AI/AN mothers reported experiencing symptoms of depression in their baby's second year of life. During this time period, 41.9% of AI/AN mothers reported experiencing partner-related SLEs, 35.4% reported traumatic SLEs, 66.3% reported financial SLEs, 65.5% reported emotional SLEs, and 19.5% reported IPV. The prevalence rates of all categories of SLEs and IPV were higher among AI/AN mothers than among any other racial/ethnic group. The final multivariate model included two categories of SLEs which were statistically significantly associated with increased odds of postpartum depression among AI/AN mothers in this sample. These were partner-related SLEs (Adjusted odds ratio (AOR) = 3.75, 95% Confidence Interval (CI) 1.88-7.50) and traumatic SLEs (AOR = 2.89, 95% CI 1.44-5.85).

CONCLUSIONS

AI/AN mothers experience the highest prevalence of SLEs and IPV in Oregon, indicating an important racial health disparity, and highlighting a dire need for interventions which address these issues. AI/AN mothers in Oregon also experience a high prevalence of postpartum depression, for which partner-related and traumatic SLEs are statistically significant risk factors. Interventions to address the high levels of postpartum depression among AI/AN mothers in Oregon could focus on either prevention or screening. Interventions focusing on preventing partner-related or traumatic SLES from occurring may help lower the prevalence of postpartum depression. Alternatively, screening for postpartum depression among AI/AN mothers who are known to have experienced partner-related or traumatic SLEs may lead to increased diagnosis.

RWJF AWARD FINALIST

MAILE TAUALII

Dr. Maile Taualii received her PhD in Health Services, with an emphasis in Public Health Informatics and Public Health Genetics from the University of Washington, where she also completed her Master's degree in Public Health. She's the founding Director of the Native Hawaiian Epidemiology Center housed at Papa Ola Lokahi, the Native Hawaiian Health Board. Prior appointments include, Scientific Director for the Urban Indian Health Institute, an Indian Health Service designated Tribal Epidemiology Center. She's an Assistant Professor of Indigenous Health at the University of Hawaii where she brings cultural, ethical, and community-oriented perspectives to the instruction of public health.

Abstract ID: 1061002
Presentation Title: ***Liberating data: Accessing native Hawaiian and other Pacific Islander data from national data sets***
Presentation Date: Tuesday, June 14 – Surveillance/Informatics II Breakout at 10:30 AM
Presentation Time: 10:30 AM – 10:50 AM

BACKGROUND

The limited data available show that Native Hawaiians and Other Pacific Islanders (NHOPI) experience severe health, social, economic, and service access inequities compared to the majority of Americans. For example, among Indigenous Peoples, Native Hawaiians experience the highest infant and neonatal mortality rates. NHOPI are served by a variety of independent, non-profit, culturally-linked, community-based organizations (CBO). Challenges facing these organizations include decentralized communities, limited service access, distrust of non-NHOPI services, and not least of all, limited and poor data. Reasons for this is include the continued aggregation of NHOPI data with other Asian groups (despite OMB's 1997 revised Directive 15 standard for reporting on race), racial misclassification, and statistical/logistical limitations related to small numbers. Papa Ola Lokahi (POL), founded in 1988, is designated in law as the lead agency responsible for the health of Native Hawaiians. The Native Hawaiian Epidemiology Center (NHEC), created within POL in 2009, was established to confront the poor state of and access to information on NHOPI health. The NHEC works in partnership with the Pacific Islander Epidemiology Center, housed at the Toa Institute, to build a robust foundation of valid data on which the improvement of health and health services, and the reduction of health disparities for NHOPI can be based.

METHODS

Traditional epidemiologic approaches enhanced through the application of business intelligence methods and technologies can significantly improve the accessibility, ease of analysis/reporting, and ultimately use of large health-relevant data sets. Using data from the National Center for Health Statistics, the NHEC assessed the quality of death reporting in accordance with OMB standards, developed a working definition for NHPI, performed an analysis of deaths counts and rates for several racial categories, modeled the data for consumption through data structures optimized for analysis and reporting (on-line analytic processing cubes), and delivered information to users through MS Excel on the desktop (for analytic users) and interactive web-based dashboards (for general users).

RESULTS

The NHEC mortality analysis tool set allows rapid analysis and reporting of death counts and rates (with confidence intervals) by several dimensions of interest, including racial category, age, sex, location, and cause of death. Through the use of pivot tables and charts, mortality measures can be cross-tabulated, sorted, filtered and graphed along any combination or number of dimensions. Customized visualizations also allow users to drill down into the data along a specific lines of questioning.

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CONCLUSIONS

Information technology plays a critical role in ensuring access to data for small populations who bear the largest health disparities in the US. Data is essential for decision support; such as informing policy decisions, program planning and evaluation, and assessing health. A partnership between Federal agencies, community organizations, scientists, and information technologists can result in successful liberation of health data. Data accessibility creates visibility to the health of a population. More work is needed to ensure the health status of NHOPI is visible so the alarming disparities experienced by this population can be brought to light and addressed.