HAWAI'I JOURNAL WATCH

Highlights of recent research from the University of Hawai'i and the Hawai'i State Department of Health

HOW THE AFFORDABLE CARE ACT AFFECTED SUBSTANCE USE DISORDER TREATMENT PROGRAMS

The Affordable Care Act (ACA) required state Medicaid plans to expand coverage of treatments for substance use disorders (SUDs). Researchers including Clifford Bersamira PhD, of the Myron B. Thompson School of Social Work, collected and analyzed data from the National Drug Abuse Treatment System Survey and compared enrollment in SUD treatment programs before and after the ACA took effect. The percentage of patients in SUD treatment programs nationally who were insured by Medicaid rose from 26% to 38% after the ACA was implemented. The percentage of patients in these programs who had no insurance fell from 38% to 23%. The findings show that Medicaid increases insurance coverage for people enrolled in specialty SUD treatment, the researchers wrote. The study (PubMed ID: <u>31202283</u>) is published in the *Journal of Substance Abuse Treatment*.

DISPARITIES IN DIABETES RATES IN HAWAI'I

Differences in the prevalence of diabetes among Hawai'i's major ethnic groups appear by age 35, and increase rapidly with age. Researchers led by Olivia Uchima MA, with the Office of Public Health Studies, looked at data gathered in the Hawai'i Behavioral Risk Factor Surveillance System. Native Hawaiians and Other Pacific Islanders and Filipinos had higher rates of diabetes than Japanese, Chinese, and whites in Hawai'i. Public health efforts should promote healthy lifestyle behaviors and should be aimed at people in their early adult years, especially for low-income groups, the researchers concluded. The findings (PubMed ID: <u>30789820</u>) were published in *Preventing Chronic Disease*.

DRUG INTERACTIONS IN ELECTRONIC DATABASES

Drug-drug interactions (DDIs) can cause treatments to fail, which can result in morbidity and mortality. Electronic reference databases are useful tools to detect and prevent potential DDIs, increasing patient safety. Researchers including Supakit Wongwiwatthananukit PhD, PharmD, of the Daniel K. Inouye College of Pharmacy, compared the drug interactions listed in two online databases for 84 drugs used to treat patients with metabolic syndrome. Results showed Drugs.com reported interactions for 1122 pairs of the drugs, while Micromedex reported interactions for 724 pairs. The study also found the two databases had a significant discrepancy in reporting the severity of DDIs. The Drugs.com database had a higher sensitivity to detect potential DDIs, but Micromedex provided more informative documentation about DDI severity. Pharmacists should use at least two databases to evaluate interactions, the researchers concluded. The study (PubMed ID: 31725785) is published in PLoS ONE.

MEDIATORS OF PHYSICAL ACTIVITY IN POST-PARTUM WOMEN

For post-partum women, having social support from family and friends may be a key factor in increasing physical activity. Researchers led by Cheryl Albright PhD, MPH, of the School of Nursing and Dental Hygiene, explored mediators of physical activity over a 12-month randomized controlled trial. The trial was designed to increase physical activity in 311 postpartum women in Hawai'i using a website and telephone counseling tailored to new mothers' lifestyles. The results showed significantly higher increases in physical activity during the second 6 months of the study among the women who had increases in their social support in the first 6 months. Social support enhanced participants' ability to integrate exercise into their daily routines. New mothers benefited from learning how to enlist social support for exercise, the researchers concluded. The study is published in the *Translational Journal of the ACSM*.

GENETIC LINKS TO PREECLAMPSIA

The causes of preeclampsia, a condition that involves high blood pressure and is associated with maternal deaths and stillbirths, remain unclear, but a genetic link has been suggested. Researchers including Paula Benny PhD, of the UH Cancer Center, tested DNA samples from 31 women with early-onset preeclampsia and a control group of 29 women without preeclampsia who delivered healthy newborns at Kapi'olani Medical Center for Women and Children between 2005 and 2011. Results revealed 68 genes that were significantly associated with early-onset preeclampsia. The study was the first to examine the genetics of this condition in a largely Asian and Native Hawaiian/Other Pacific Islander population. More research is needed to examine the possible roles of these genetic associations in the development of early-onset preeclampsia, the researchers concluded. The study (PubMed ID: <u>31557190</u>) is published in *PLoS ONE*.

SURVIVORSHIP IN LIVER CANCER

Hepatocellular carcinoma (HCC), a cancer of the liver, is a leading cause of cancer deaths, and the 5-year survival rate is dismal. Researchers led by Linda Wong MD, of the John A. Burns School of Medicine, utilized a database of 1374 HCC patients in Hawai'i. They identified 70 patients who had survived 10 years with HCC and compared them with 164 patients who had undergone either a liver resection (removal of a portion of the liver) or transplant (replacement of whole liver) and had died within 10 years. They found that the majority of 10-year survivors had also undergone either a liver resection or a transplant. After the adjustment of several factors, the study showed the 10-year survivors were younger and less likely to have diabetes. Patients who underwent transplants had a lower rate of cancer recurrence compared to the liver resection group. The only predictor of not surviving 10 years after a transplant was a recurrence of the cancer. The study (PubMed ID: 31701016) is published in Hepatoma Research.