Sacramento County
Public Health Advisory Board

Meeting Minutes
May 3, 2017 (12:07 PM - 1:25 PM)

Meeting Location
Primary Care Center
4600 Broadway
Sacramento, CA 95820
Conference Room 2020

Moderator: Dr. Adam Doughtery

Scribe: Theresa Vinson

Board Attendees: Adam Dougherty, Felicia Bhe, Jofil Borja, Sandy Damiano, Jeffery Rabinovitz, Kimberly Sloan, Farla Kaufman, Martha Moon, Emanuel Petrisor, Jack Zwald

Board Members Excused: Cathleen Ferraro**,** Paula Green, Steve Heath, Olivia Kasirye, Steven Orkand, Barbara Law, Sherry Patterson-Jarrett

Board Members Absent: None

Guest Speakers: Karen Giordano, Manager, Refugee Health Clinic
David Tzeng, MD, Kaiser Permanente

Guests: Sherri Heller, Department of Health and Human Services; Dr. Melody Law, Division of Public Health; Crystal Harding, Capitol Health Network; Karen Giordano, Primary Health Services; Dr. David Tzeng, Pulmonary, Critical Care and Sleep Medicine, Kaiser South

Meeting Opened at 12:07 PM

Welcome and Introductions

Dr. Dougherty welcomed PHAB members and guests. He explained to new members that PHAB views its business from two perspectives: research items and action items. We usually start with research, inviting speakers to inform the Board, and then move to action where it seems warranted. We attempt to develop recommendations to the Board of Supervisors or to the Department of Health and Human Services based on our research and our understanding of public health needs.

Minutes Review

Minutes from the April meeting were approved.

PHAB Vacancies and Appointments

There are currently 0 vacancies. There were seven recent appointments.

Public Health Division

In Dr. Kasirye's absence, Dr. Melody Law provided updates:

Prop 56: Tobacco tax was raised by $2.00 per pack last month.
Dr. Dougherty pointed out that in his recent budget request, Governor Brown proposed to use Prop. 56 revenues to continue funding the Medi-Cal expansion allowed under the Affordable Care Act. He did not propose to do what the voters had wanted, which was to expand into new territories for Medi-Cal access. Dr. Damiano said the State is in charge of Medi-Cal programs; they have decided to fund the looming deficit rather than start something new.

Marijuana: Sacramento County Board of Supervisors voted 3-2 to ban all commercial marijuana growing operations in unincorporated areas in the County, but Sacramento City will have its own ordinance.

Dental Transformation Initiative: Sacramento County received one of the 15 grants awarded. There are three main strategies that are focused on by Public Health: virtual dental home with care coordination; medical-dental partnership with care coordination; and coordination with community education.

Opioid crisis: In an effort to reduce opioid related injuries, the State Department of Public Health has offered grants for a naloxone distribution project. Local departments are eligible to apply, and Sacramento County has applied for 2900 doses that, if granted, will be distributed over two years. Public Health is working with the Medical Society, Harm Reduction Services, and hopefully with emergency medical services and law enforcement

Dr. Law indicated Public Health will act as a "middle man," distributing the naloxone to already-established service organizations for redistribution. Dr. Law explained that naloxone is an opioid blocker that reverses overdose. This naloxone will be in the form of a nasal spray, not injectable, and therefore considered user-friendly. Talks are underway to discuss whether EMS may train law enforcement in proper administration.

Dr. Heller clarified that this program requires approval from the Board of Supervisors. Because of a May 1 deadline, Sacramento County has already applied to participate. However, the Board must approve this retroactively at its May 23 meeting.

Dr. Kaufman proposed that PHAB vote to recommend that the Board of Supervisors support this program. Since this is the only PHAB meeting prior to May 23, Dr. Dougherty suggested that we vote today for a letter that would provide broad support, rather than focus on specific organizations.

Dr. Dougherty suggested that the Executive Committee draft this letter on behalf of PHAB indicating: a) we recognize the benefit of naloxone as an immediate life-saving measure, and b) we support distribution of naloxone in the community. A motion was made, seconded and passed unanimously.

Syphilis: CDC is calling for awareness of the rise in syphilis cases. These are increasing statewide and nationwide; therefore, CDC is reminding healthcare providers to follow CDC's recommended STD screening guidelines. The California Department of Public Health (CDPH) is encouraging local public health to improve surveillance and stay in communication with local health providers regarding these cases. The treatment for syphilis, Bicillin, is still in short-supply, due to reduced or lack of production by the manufacturer.

Primary Health Services Division

In the interest of time, Dr. Damiano did not provide an update but indicated PHAB would have a guest speaker in June from Primary Health Juvenile Medical Services, JMS, Pamela Gandy-Rosemond, RN, MSN, Program Manager.

REFUGEE HEALTH CLINIC

Karen Giordano, Manager of Refugee Health Clinic provided an overview of the Refugee Health Clinic. Karen provided two handouts. One is a metrics dashboard which indicates the number of clients fully assessed each month and their countries of origin and native languages. The second handout summarizes refugee resettlement oversight, types of refugees, and resettlement agencies that provide support locally. The Clinic provides a comprehensive assessment to detect and treat communicable diseases, acute and chronic health conditions, including mental health, and assists refugees with linkage to primary care providers.

The three key agencies working with refugees (County Refugee Health Clinic, County Department of Human Assistance, and resettlement agencies) have different oversight bodies. The Office of Refuge Health, Dept. of Public Health, oversees the Refugee Health Clinic. The Office of Refugee Resettlement, Department of Social Services, oversees the Department of Human Assistance. And the State Department oversees resettlement agencies. Prior to departure, refugees are fully vetted and screened medically in their home country. They select a resettlement agency and a resettlement area. In the Sacramento area, there are five resettlement agencies that provide support during the first 30 days, which includes housing, school enrollment, DHA benefits, Social Security enrollment, education, training and employment support, and cultural and English classes. After 30 days, refugees must rely on community organizations and families and friends for support. Typically 70-80,000 refugees are settled in the U.S. with a ceiling of 110,000. During January, different systems were put in place which reduced the number of refugees resettling in the US. The President's Executive Order limiting travel and refugee resettlement was blocked temporarily by a restraining order and is going through the court system. If enacted, this order would limit the number of refugees to 50,000.

Historically, California has received the highest number of refugees (17%) in the nation; Sacramento received the third highest number of refugees in California, behind Los Angeles and San Diego counties. The travel ban and new processes do not impact individuals who worked with the US in Iraq and Afghanistan, called Special Immigration Visa (SIV) holders. Sacramento has the highest number of SIVs in the US, and that trend continues. As a result, while most counties in the US have experienced a reduction in individuals resettling, there has been an increase in the numbers settling in Sacramento, due primarily to the SIVs.

The dashboard indicates that in March 2017 the Clinic had the highest number of completed health assessments (551). The assessment takes two visits to complete. During the second assessment visit, refugees are also linked to a primary

care provider in the community. Refugees have had many challenges adjusting. Refugees often have difficulty understanding Medi-Cal Managed Care and linkage may be challenging due to language and transportation barriers.

Refugees, who worked with the US military in Afghanistan (SIVs), are often very well educated and lived in comfortable living arrangements in their home country. Many are professionals such as engineers and doctors who interpreted for military and government personnel. In California, their certifications and degrees may not be recognized, so often they are not able to secure jobs in their professions and must take lower paying jobs. Finding housing in desirable communities has been a challenge due to high rent and lack of credit histories, and refugees are resettled in poorer neighborhoods. Families tend to be large (up to 12 children) and some have been placed in two apartments within the same complex.

Dr. Damiano stated that the Refugee Health Clinic provides thorough testing and all required immunizations. Many of the children have dental issues and linking them with dental providers and engaging preventative care is key.

Along with individuals resettled initially in Sacramento, many SIVs relocate to Sacramento after being resettled elsewhere.

Dr. Damiano explained that it is often difficult to link the refugees to services. There have been instances where newly arriving women are late in their pregnancies. The resettlement agency focus is on housing. Many have been located in Arden Arcade, but the agencies are now looking for better and more affordable housing.

Two agencies offer legal services and the County provides information about those resources. Many refugees and SIVs do not have legal issues. Recently there was one woman, divorced and with one child, wanted to get her other child resettled in the US. She was referred for legal services.

SLEEP OVER-RATED OR UNDER-APPRECIATED

Dr. Tzeng, MD, Chief, Pulmonary Critical Care and Sleep Medicine, Kaiser Permanente South

For several decades, the National Sleep Foundation (NSF) has been doing a survey throughout the United States. In 2005, Americans were surveyed and it was reported that Americans typically sleep 6.8 hours on week nights and 7.4 hours on weekends, and that about 40% were sleeping less than 7 hours on any given night. The trend shows that the number of people sleeping at least 8 hours per night has been slowly dropping - in 2001 it was 38%, in 2002 it dropped to 30% and in 2005 it was 26%. More recent data is not available but it is probably much lower yet. The NSF recommends approximately 8 hours of sleep per night. Sleep deprivation is defined as less than 6 hours sleep per night. This takes different forms: there can be acute sleep deprivation from jet lag, travel, or staying up all night. Doing shift work or holding multiple jobs contribute to chronic sleep deprivation and sleep fragmentation. Sleep fragmentation doesn't necessarily result in shortened duration of sleep, but the quality of sleep may be so fragmented that this leads to a relative sleep deprivation.

This presentation addresses the Sleep in America survey, consequences of sleep deprivation and consequences of sleep deprivation from shift work. How much sleep we get is driven and governed by biological forces, but also by environmental and societal forces. Some people can sleep 4-5 hours without any problems functioning, and some people need 9-10 hours per night of sleep in order to function normally. Some of it is driven by genetics and biology but other aspects are related to work and family as well as societal effects on how much sleep we get.

Shift work is defined as any work performed outside of the traditional work hours of 6am to 6pm; those can include evening shifts, night shifts or just rotating shifts, from morning to night. Studies have shown that 30% of people working outside of traditional work hours suffer from some sort of sleep deprivation. For example, those would include people engaged in hospital work, safety and law enforcement, and paramedics, plant workers and even IT.

The American Academy of Sleep Medicine (AASM) publishes an international classification of sleep disorders (http://www.aasmnet.org/library/default.aspx). Sleep disorders can be found when someone reports insomnia, excessiveness sleepiness, or when there is reduction of total sleep time. It is also found where a recurring work schedule overlaps the usual time for sleep. The individual has to have sleep complaints, described as either can't fall asleep when they should, or they are sleepy when they are supposed to be awake.

Physiologically, sleep is composed of two processes. The first is Process S, known as sleep pressure. If you wake up at 7am daily, as you stay awake, the sleep pressure increases and a tendency to fall asleep increases until pressure is relieved by sleeping. The second is Process C, the circadian rhythm process. As we wake up our circadian alertness is not at its greatest, but during the day, it peaks. There is a lull, around 3pm, but then it drops to its lowest level, usually around 3 am or 4 am which is the time when we are most likely to be sleep. When there is a misalignment of these two processes there will be difficulty falling asleep or staying asleep.

Some of the consequences of sleep deprivation or Circadian Rhythm Sleep Disorder are: for shift workers there is reduced recovery time before the next shift, which means that individuals working these shifts tend to be the most fatigued and most sleepy. Studies have looked at nurses with rotating shifts compared with those who have consistent day shift or night shift. These have shown a two-fold increase in accidents among these nurses. There is a large review article looking at junior physicians (internships, residents), in training. This study found when shifts are no more than 16 hours, compared to a maximum of 30 hours, there is a tendency to have fewer risks or fewer attentional errors. Also there is a huge risk of car accidents after shift work.

Health risks related to shift work/night work and sleep deprivation have been evaluated. There are studies that show positive correlations between shift work and occupational accidents, injuries, and medical illness. The greatest correlation is with coronary heart disease, risk of stroke, Type 2 diabetes. There are also positive studies that show correlation with colon cancer, depression, and decreased immunologic response to vaccines. For cancers, unfortunately, the data is mixed, some studies show some association with shift work and breast cancer and some don't. Cancer mortality is not shown to be increased with shift work. Sleep disruption such as sleep apnea, can affect 2-24% of population. This is characterized by recurrent upper airway obstruction; patients wake up frequently during apneic episodes.

In summary, sleep deprivation is very common and, using a definition of less than 7 hours of sleep per night, may affect 40% of the population. Some of the results: fatigue, poor concentration, increased heart disease, stroke, diabetes, obesity, depression and, possibly, risk for cancer. Some recommendations are: take short naps before shifts; drink coffee or other caffeine; allow exposure to blue wave length light, which, striking the retina, promotes wakefulness. Tablets have blue light and if used at night, can adversely affect sleep as well. During second half of shift, avoiding stimulants is recommended so sleep can be facilitated when home; avoid bright light on the drive home; and wear sunglasses on the drive home. Once home, have a bedroom environment conducive to sleep: cool temperature, using light blocking shades, a quiet environment. There is a questionable role for melatonin. Using anchors to sleep on non-work days, such as trying to maintain the same sleep schedule when off work, is highly recommended.

From an organizational standpoint, companies employing shift workers have a commitment to encourage healthy sleep habits. Most studies have been fairly inconclusive as to what the best shifts are as well as which rotational schedules are best. Factors that tend to increase sleepiness: Night shifts; early morning shift (starting before 6am); decreased recovery time between shifts; extended shifts of more than 16 hours or 55 hours per week. Rotating shift schedules tend to be the best from morning to evening to night and/or fast rotating shifts seem to be helpful, according to some studies.

Dr. Tzeng opened the floor for questions.

Q: Do iPhones have a different light, and is that helpful?

A: Yes, the 'night-mode.' It reduces emission of blue light so it does not affect your circadian rhythm. I recommend turning it on at night or use a blue light blocking app.

Q: The restrictions on work hours for residents has just changed. Is this beneficial?

A: I am not sure what recent shifts are. It used to be 24 hour shift plus six hours for education.

Dr. Doughtery explained that work hours were restricted, but residents are now allowed to work beyond 24 hours. It has been argued that the previous schedule resulted in multiple patient handoffs, and that these, themselves, were more unsafe for patients than the staff's extended work hours.

Q: Can you please say something more about melatonin?

A: Melatonin is a naturally secreted hormone, from the pineal gland, that is secreted in darkness. As the sun goes down the melatonin starts being secreted by your brain. It has an affect on sleep rhythm, and can be used therapeutically. It is also popular for folks who have insomnia. The feeling is that with shift work there is a disruption of the melatonin in your brain. Melatonin has some potential anti-inflammatory effects.

Q: In 2000 Wi-Fi increased. Has the implication of this been studied?

A: With respect to all studies we would have to ask how that disrupts our sleep. If you put electrodes on your scalp and sleep, you go through different stages of sleep, but I don't know if there has been any real published

studies regarding Wi-Fi and sleep deprivation or disruption.

Q: It was formerly recommended that if you can't sleep, you should get out of bed, get a book and read. Is that still recommended?

A: Yes, for people who suffer from insomnia that is one of the discussions frequently had as part of the training for reprogramming the brain, because folks who suffer from insomnia have poor sleep habits. They tend to spend excessive amounts of time in bed for the amount of sleep they get. Getting them to engage in some of these activities, such as reading, is encouraged, so they don't try so hard to sleep but rather reprogram that behavior.

Q: AMA Science Health, at some point, submitted a report looking at blue light on a greater scale. Do you think there should be greater emphasis on environmental light and is there a role for local organizations to encourage changes in environmental light, for example LEDS?

A: Certainly interior lighting and workplace lighting should be looked at. However, some of the research has been inconclusive, finding that melatonin secretion was normalized, but it did not necessarily affect their sleep. Until there is more conclusive science it's hard to make any recommendation. It is true with breast cancer literature, despite some of the mixed results, in 2009, the Danish Government starting paying compensation to nurses who worked nights and developed breast cancer.

Q: When people wake for short periods during the intended 7 or 8 hours sleep, does that disruption have negative effects or is it normal?

A: There are no known negative effects. In the early days (sleep studies started in 1960s-70s at Stanford), during the original research they found looking at normal and healthy people along the age continuum, that as we age, the rate of spontaneous awakenings increases, 20-30 times per night, on any given night. These are normal individuals and the awakenings are so short we may not even be aware of them.

Q: Are some demographic groups more susceptible to sleep deprivation than others, due to age or gender, for example?

A: Some people are morning larks, some are night owls, some are up at 4 am, some go to bed at 3am. Some studies are hard and very complex because for night shifts some people seek those shifts out because they tolerate

working nights better, but others don't. Those studies, if any, have been very few and far between to identify populations.

Announcements

The CEO's recommended budget for Fiscal Year 2017/18 is expected to become public approximately June 1.

Public Comment

There was none.

Adjourn

The meeting was adjourned at 1:25 PM.

Submitted by Theresa Vinson, Scribe, and Dr. Dougherty, Chair

Next Meeting of PHAB:

June 7, 2017, 12:00 PM - 1:30 PM
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4600 Broadway
Sacramento, CA 95820
Conference Room 2020