



MEL AND ENID
ZUCKERMAN COLLEGE
OF PUBLIC HEALTH

Spring 2014 MPH Internship Conference

**Friday, April 11, 2014
12:00 p.m. - 5:00 p.m.**

**Drachman Hall
Phoenix Biomedical Campus**

Mel and Enid Zuckerman College of Public Health

**Public Health Alum:
Making a Difference at Home and Across the Globe**

Keynote Speaker:

Kelli M. Donley, MPH

Kelli M. Donley is a project manager at the Arizona Department of Health Services (ADHS). She is a 2004 MPH graduate from the University of Arizona, Mel and Enid Zuckerman College of Public Health.

Ms. Donley has worked in international health as the program manager for projects in five countries. She was also a Peace Corps volunteer in Cameroon. Her passion for public health is currently in policy and improving systems state-wide. She hopes to improve housing and health care access for Arizona's Native Americans.

Kelli is also a novelist. Her debut novel, "Under the Same Moon" was published in 2010. Her second novel, "Basket Baby" will be published later this year. She has one dog, Willie Nelson Mandela, who runs the show.

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Keynote Speaker

“Public Health Alum: Making a Difference at Home and Across the Globe”

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Acknowledgements

All of our wonderful internship sites
throughout the state, nation, and world with
whom we work to improve the state of public health

The students and faculty of MEZCOPH,
who are central to the success of the MPH program

The Office of Student Services and Alumni Affairs
for their outstanding efforts, support, and encouragement

The keynote panel for sharing their experiences and knowledge

Internship Conference Volunteers

We would like to thank all of the volunteers for their time and effort in
making this a wonderful event.

Office of Information Technology

Htay Hla, Jason Hollister, and Mike Martelle
Steven Hubbard, Alex Wochna

**The University of Arizona
Mel and Enid Zuckerman
College of Public Health**

**Spring 2014
MPH Internship Conference**

April 11, 2014

Conference Planning Committee

Co-Chairs:

Vanessa Cascio

Amita Graham

Committee Members:

Angela Armijo

Sarah David

Bill Degnan

Dustin Holloway

Pharah Morgan

Rachel Murray

Rebecca Scranton

Chinagozi Ugwu

Andrea Wheeler

Office of Student Services and Alumni Affairs:

Judy Williamson

Tanya Nemec

Kim Barnes

Chris Tisch, Assistant Dean

Schedule of Events

- 12:00-12:30** Registration
(South Entrance to **Drachman Hall, A114 / Bldg. 2, Phoenix**)
- 12:30-12:35** Welcome
Co-Chairs: Vanessa Cascio and Amita Graham
(**Drachman Hall, A114 / Bldg. 2, Phoenix**)
- 12:35-1:10** Keynote Speaker
(**Drachman Hall, A114 / Bldg. 2, Phoenix**)
- 1:10-1:20** Break
- 1:20-4:20** Internship Presentations (**Drachman Hall**)
- Session I:** *Making Connections: Health Promotion and Assessment*
(**Drachman Hall, Room A112**)
- Session II:** *Building Healthcare Systems and Enhancing Delivery*
(**Drachman Hall, Room A114**)
- Session III:** *Comprehensive Evaluation of Health Systems and Health Programs*
(**Drachman Hall, Room A116**)
- Session IV:** *Health Surveillance and Developing Safe Communities*
(**Drachman Hall, Room A118**)
- Session V:** *Public Health Models: Improving Quality of Life*
(**Drachman Hall, Room A119**)
- Session VI:** *Community Empowerment through Health Education and Health Promotion*
(**Drachman Hall, Room A120**)
- Session VII:** *Improving Health amongst Vulnerable Populations*
(**Drachman Hall, Room A122**)
- Session VIII:** *Building Capacity and Promoting Wellness*
(**Drachman Hall, Room A326, video-conferenced / Telehealth Amphitheater Room 2306, Phoenix**)
- Session IX:** *Health Administration: Assessment and Evaluation*
(**Drachman Hall, Room A276, video-conferenced / Building 2, Room 2208, Phoenix**)
- Session X:** *The Practice of Prevention in Underserved Populations*
(**Building 2, Room 2206, Phoenix**)
- 4:20-5:30:** Reception (**Breezeway, Tucson; Bldg. 2 PBC Campus, Phoenix**)

Presenters

Name	Concentration*	Room**	Time	Page
Moira Alexander	HBHP	A120	2:20 pm	86
Zandra Alford	FCH GLOBAL	A119	2:20 pm	77
Clark Alves	FCH GLOBAL	A119	3:00 pm	79
Mohammed Alzoubaidi	EPI	A112	1:40 pm	36
Keshav Anand	MDMPH	2306/A326	3:00 pm	106
Angela Armijo	HBHP	A122	2:40 pm	96
Amit Arora	EPI	A114	2:40 pm	49
Sarah Barrett	PHPM	A119	1:40 pm	75
Kaya Belknap	MDMPH	2206	1:40 pm	122
Megan Blain	EPI	A116	2:00 pm	56
Tara Blocher	PHP	2208/ A276	2:00 pm	113
Benjamin Brady	HBHP	A120	1:20 pm	83
Sheena Brown	FCH MCH	A119	3:20 pm	80
Yvonne Bueno	FC MCH	A116	3:20 pm	60
Jessica Burns	MDMPH	2306/A326	2:40 pm	105
Mariana Casal Sepulveda	EPI	A122	2:00 pm	94
Christiana Clauson	HBHP	A122	3:00 pm	97
Jacob Collins	HBHP	A112	2:40 pm	39
Cora Crecelius	PHPM/MLS	A118	2:20 pm	67
Sarah David	FCH MCH	A122	1:20 pm	92
Ashlee Davis	PHPM	A114	3:00 pm	50
Cynthia Davis	HBHP	A120	1:40 pm	84
Raeann Davis	HBHP	A122	2:20 pm	95
William (Bill) Degnan	BIOS	A116	1:20 pm	54
Rachel Doty	PHPM	A118	2:40 pm	68
Erin Dougherty	HBHP	A120	2:40 pm	87
Shauna Durbin	PHPM	A118	3:00 pm	69
Scott Enders	PHP	2306/ A326	3:40 pm	108

Katie Faschan	PHPM	A118	3:20 pm	70
Tom Finkelstein	EPI	A112	3:40 pm	42
Krystal Frick	PHPM	A114	3:20 pm	51
Elizabeth Funsch	EPI/LAS	A116	1:40 pm	55
Silviano Garcia	EIP	A122	3:40 pm	99
Jessica Gibbs	PHP	2208/ A276	3:00 pm	116
Elyse Guidas	PHP	2208/ A276	4:00 pm	119
Steven Hadeed	EPI	A112	2:00 pm	37
Charisse Holiday	PHP	2206	2:00 pm	123
Dustin Holloway	HBHP	A122	1:40 pm	93
Daniel Holman	FCH GLOBAL	A116	3:40 pm	61
Zandile Jele-Nhleko	FCH MCH	A116	4:00 pm	62
Beau Lamb	EPI	A116	2:20 pm	57
Stephanie Lashway	FCH GLOBAL	A112	2:20 pm	38
Jaziel Llanes	PHP	2306/A326	3:20 pm	107
Abby Lohr	FCH GLOBAL	A114	1:40 pm	46
Elise Lopez	FCH MCH	A116	3:00 pm	59
Andrea Mannell	EPI	A118	1:20 pm	64
Alexander Mar	PHPM	A118	3:40 pm	71
Alexander McCourt	EPI/JD	A112	3:20 pm	41
Lauren McCullough	HBHP	A120	3:00 pm	88
Katherine Merems	EOH	2306/A326	4:00 pm	109
Amy Muchna	FCH GLOBAL	A114	2:00 pm	47
Margaret (Maggie) Myers	FCH MCH	A112	3:00 pm	40
Sarah Nagaratnam	PHP	2306/ A326	1:20 pm	101
Christopher Nagata	PHPM/MBA	A114	3:40 pm	52
Vien Nguyen	BIOS	A116	2:40 pm	58
Onyinye Otaluka	PHP	2208/ A276	2:40 pm	115
Jennifer Parlin	PHPM	A119	2:00 pm	76
Stacy Percy	PHPM	A118	4:00 pm	72
Octavio Perez	PHP	2208/ A276	1:40 pm	112

Diana Perez-Ramirez	PHP	2306/ A326	2:00 pm	103
Ryan Peterson	PHP	2306/ A326	1:20 pm	102
Nicasia Piermarini	HBHP	A120	2:00 pm	85
Cornel Popescu	PHP	2208/ A276	2:20 pm	114
Hannah Renno	FCH MCH	A112	4:00 pm	43
Joseph Russo	PHP	2208/ A276	3:20 pm	117
Elizabeth (Libby) Salerno	HBHP	A119	3:40 pm	81
Kelley Saunders	MDMPH	2206	1:20 pm	121
Cheralyn Schmidt	FCH MCH	A119	2:40 pm	78
Jonathan Schouest	EPI	A122	3:20 pm	98
Erika Schuster	PHP	2306/ A326	2:20 pm	104
Crystal Silva	PHP	2208/A276	3:40 pm	118
Shyamia Stone	FCH GLOBAL	A114	2:20 pm	48
William (Raju) Thiagarajan	PHP	2208/ A276	1:20 pm	111
Alan Underwood	PHPM	A114	1:20 pm	45
Luis Valdez	HBHP	A120	3:20 pm	89
Sujana Vinjamuri	PHPM	A119	1:20 pm	74
Lindsay Walker	HBHP	A120	3:40 pm	90
Zimy Wansaula	EPI	A118	1:40 pm	65
Geun Young (Allison) White	EOH	A112	1:20 pm	35
Abdul (Wali) Yousufzai	PHPM	A118	2:00 pm	66

Concentrations

BIOS - Biostatistics

EOH - Environmental and Occupational Health

EPI - Epidemiology

FCH - Family and Child Health

FCH MCH - Family and Child Health Maternal and Child Health Track

FCH GLOBAL - Family and Child Health Global Track

FCH INTL - Family and Child Health International Health Track

HBHP - Health Behavior and Health Promotion
EPI/JD - Epidemiology/ Juris Doctor
EPI/LAS - Epidemiology/ Latin American Studies
MBA- Master of Business Administration
MD/MPH- Medical Degree/ Master Public Health
PHP - Public Health Practice
PHPM - Public Health Policy and Management
PHPM/MLS - Public Health Policy and Management/Master of Legal Studies

**Rooms:

All rooms listed are found on the first floor of the East wing of Drachman Hall, with the exception of: Drachman Hall, rooms A324 and A326 (located on the 3rd floor bridge room) and room A276 (located on the 2nd floor). Phoenix rooms are located at Telehealth Amphitheater, room 2306 and Building 2, rooms 2206 and 2208.

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Abdul (Wali)	Yousufzai	wali@email.arizona.edu

Presenters Schedule

Time	Session I <i>Room A112</i>	Session II <i>Room A114</i>	Session III <i>Room A116</i>	Session IV <i>Room A118</i>	Session V <i>Room A119</i>
1:20	White, A	Underwood, A	Degnan, W	Mannell, A	Vinjamuri, S
1:40	Alzoubaidi, M	Lohr, A	Funsch, E	Wansaula, Z	Barrett, S
2:00	Hadeed, S	Muchna, A	Blain, M	Yousufzai, A	Parlin, J
2:20	Lashway, S	Stone, S	Lamb, B	Crecelius, C	Alford, Z
2:40	Collins, J	Arora, A	Nguyen, V	Doty, R	Schmidt, C
3:00	Myers, M	Davis, A	Lopez, E	Durbin, S	Alves, C
3:20	McCourt, A	Frick, K	Bueno, Y	Faschan, K	Brown, S
3:40	Finkelstein, T	Nagata, C	Holman, D	Mar, A	Salerno, E
4:00	Renno, H		Jele-Nhleko, Z	Percy, S	

Time	Session VI <i>Room A120</i>	Session VII <i>Room A122</i>	Session VIII <i>Room 2306 / A326</i>	Session IX <i>Room 2208 / A276</i>	Session X <i>Room 2206</i>
1:20	Brady, B	David, S	Nagaratnam, S	Thiagarajan, W	Saunders, K
1:40	Davis, C	Holloway, D	Peterson, R	Perez, O	Belknap, K
2:00	Piermarini, N	Casal Sepulveda, M	Perez-Ramirez, D	Blocher (Gregory), T	Holiday, C
2:20	Alexander, M	Davis, R	Schuster, E	Popescu, C	
2:40	Dougherty, E	Armijo, A	Burns, J	Otaluka, O	
3:00	McCullough, L	Clauson, C	Anand, K	Gibbs, J	
3:20	Valdez, L	Schouest, J	Llanes, J	Russo, J	
3:40	Walker, L	Garcia, S	Enders, S	Silva, C	
4:00			Merems, K	Guidas, E	

Making Connections: Health Promotion and Assessment
Session I: 1:20 – 4:20 (Drachman Hall, Room A112)

- 1:20 PROGRAM EVALUATION (PTPPE). **A. White**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Burgess, MD, MPH. Site and Preceptor: Joint Base Lewis-McChord (JBLM), WA - A. Andrews, PhD, RD, CSSD
- 1:40 THE EPIDEMIOLOGY OF COCCIDIOIDOMYCOSIS IN SOUTHERN ARIZONA. **M. Alzoubaidi**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: Arizona Department of Health Services/Border Infectious Disease Surveillance Office - O. McCotter, MPH
- 2:00 THE EFFECT OF MORBID OBESITY ON TRAUMA MORTALITY IN MOTOR VEHICLE COLLISIONS. **S. Hadeed**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: The University of Arizona Medical Center - B. Joseph, M.D., FACS
- 2:20 IDENTIFYING INFECTIOUS DISEASE PRIORITIES IN THE THREE NEW MEXICO BORDER COUNTIES. **S. Lashway**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Gerald, PhD, MSPH. Site and Preceptor: New Mexico Department of Health Office of Border Health - K. Perez-Lockett, MPH
- 2:40 UA CAMPUS PANTRY: APPLYING PUBLIC HEALTH PRACTICES TO SUPPORT ORGANIZATIONAL GROWTH. **J. Collins**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: S. Carvajal, PhD, MPH. Site and Preceptor: UA Campus Pantry - C. Sun, MA
- 3:00 ADDRESS A RECOMMENDATION TO IMPROVE THE REFERRAL AND SERVICE ALLOCATION PROCESS FOR MENTAL HEALTH INTERVENTION TEAMS AT ALBUQUERQUE PUBLIC SCHOOLS. **M. Myers**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Cutshaw, Ph.D.. Site and Preceptor: Albuquerque Public Schools - S. McKee, M.A., LPCC.
- 3:20 STATE GUN LAWS AND GUN-RELATED INJURIES AND DEATHS. **A. McCourt**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Dennis, PhD., MS. Site and Preceptor: University of

Arizona Medical Center, Department of Surgery, Division of Trauma, Critical Care, and - J. Bambauer, J.D.

- 3:40 DATA LINKAGE PROJECT RELATING EMERGENCY MEDICAL SERVICE RESPONSE TIME TO HEALTH OUTCOMES FROM MOTOR VEHICLE CRASHES IN THE WESTERN REGION OF ARIZONA. **T. Finkelstein**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Dennis, PhD., MS. Site and Preceptor: Bureau of Emergency Medical Services & Trauma System, ADHS - D. Harden, JD NREMT
- 4:00 IMPROVING BREASTFEEDING KNOWLEDGE, PERCEPTIONS, AND RATES THROUGH PRENATAL BREASTFEEDING EDUCATION. **H. Renno**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: University of Florida Center for Breastfeeding and Newborns - M. Ryngaert, MS, ARNP, IBCLC

Building Healthcare Systems and Enhancing Delivery
Session II: 1:20 – 4:00 (Drachman Hall, Room A114)

- 1:20 APPLICATION OF SERVICE DOMINANT LOGIC TO HEALTH CARE PRACTICE AND QUALITY IMPROVEMENT. **A. Underwood**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Derksen, MD. Site and Preceptor: Arizona Connected Care - L. Glazar
- 1:40 EVALUATION OF GARDEN-BASED EDUCATION INFLUENCE ON ELEMENTARY SCHOOL YOUTH IN THE TUCSON UNIFIED SCHOOL DISTRICT . **A. Lohr**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: B. Duncan, MD. Site and Preceptor: Community Food Bank of Southern Arizona - N. Henry
- 2:00 UNDERSTANDING DETERMINANTS OF FRAILITY IN THE U.S. AND MEXICO AND OPPORTUNITIES FOR RESILIENCE: A CROSS-CULTURAL COMPARISON. **A. Muchna**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: B. Duncan, MD. Site and Preceptor: Arizona Center on Aging - J. Mohler, PhD, MPH, NP.
- 2:20 EVALUATION TO GUIDE EFFICIENCY AND EXPANSION OF PROGRAMS BY THE INTERNATIONAL ALLIANCE FOR THE PREVENTION OF AIDS IN CHENNAI, TAMIL NADU. **S. Stone**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor: International Alliance for the Prevention of AIDS (IAPA) - Chennai, Tamil Nadu, India - E. Hamm, MPH, MD
- 2:40 PHYSICAL ACTIVITY AND GENETIC SUSCEPTIBILITY TO TYPE 2 DIABETES. **A. Arora**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: Epidemiology & Biostats Division, MEZCOPH - Y. Klimentidis, PhD
- 3:00 THE DEVELOPMENT, IMPLEMENTATION, EVALUATION AND MANAGEMENT OF A PRENATAL EDUCATION PROGRAM. **A. Davis**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Eng, Dr.PH. Site and Preceptor: Mobile Health Program, University of Arizona, Family and Community Medicine Department - V. Murrain, M.D.

- 3:20 BEHAVIORAL AND PRIMARY HEALTH CARE INTEGRATION FOR DUAL ELIGIBLE ADULTS IN SOUTHERN ARIZONA. **K. Frick.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Eng, Dr.PH. Site and Preceptor: The Arizona Center on Aging - J. Mohler, PhD, MPH, NP
- 3:40 ADDRESSING THE PRESCRIPTION RATES OF OPIOID NARCOTICS AT THE UNIVERSITY OF ARIZONA MEDICAL CENTER UNIVERSITY CAMPUS. **C. Nagata.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Eng, Dr.PH. Site and Preceptor: University of Arizona Medical Center- University Campus - K. Weibel, PharmD

Comprehensive Evaluation of Health Systems and Health Programs
Session III: 1:20 – 4:20 (*Drachman Hall, Room A116*)

- 1:20 ARSENIC INDUCED ALTERATIONS IN PROTEIN BIOMARKERS. **W. Degnan**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: A. Gruessner, Ph.D. Site and Preceptor: Southwest Environmental Health Sciences Center - R. Lantz, PhD
- 1:40 ALLI KIRU: AN ORAL HEALTH INTERVENTION IN THE ECUADORIAN AMAZON. **E. Funsch**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: R. Harris, Ph.D, MPH. Site and Preceptor: Pueblo Kichwa de Rukullakta - K. Sokal Gutierrez, MD, MPH
- 2:00 EVALUATION OF MOSQUITO TRAP DATA AND DETERMINING BEST MEASURES FOR HUMAN DISEASE PREVENTION OF WEST NILE VIRUS IN PINAL COUNTY, ARIZONA. **M. Blain**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: R. Harris, Ph.D, MPH. Site and Preceptor: Pinal County Public Health Services District - G. Briggs
- 2:20 RABIES INFECTION AND CLIMACTIC COUNTY CHANGES IN SANTA CRUZ COUNTY, ARIZONA. **B. Lamb**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: R. Harris, Ph.D, MPH. Site and Preceptor: Arizona Department of Health Services - M. Roach, MPH
- 2:40 DETERMINING THE EFFECT OF DIETARY FLAVONOID INTAKE ON INCIDENCE OF SQUAMOUS CELL CARCINOMA OF THE SKIN.. **V. Nguyen**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: P. Hsu, Ph.D.. Site and Preceptor: Arizona Cancer Center - D. Alberts, MD
- 3:00 LOGIC MODEL DEVELOPMENT AND MEASUREMENT FOR A BYSTANDER INTERVENTION PRIMARY PREVENTION TRAINING PROGRAM TO REDUCE SEXUAL AGGRESSION IN ALCOHOL SERVING ESTABLISHMENTS. **E. Lopez**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: M. Koss, Ph.D.. Site and Preceptor: Arizona Department of Health Services, Phoenix, AZ - C. Hensell

- 3:20 EVALUATION AND RECOMMENDATIONS FOR IMPROVING RECRUITMENT AND RETENTION OF THE GROW 2B FIT KIDZ KAMP. **Y. Bueno**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: V. Leybas-Nuno, PhD,MSW. Site and Preceptor: Grow 2B Fit and Children's Medical Services, Tucson, AZ - J. Schultz, M.D.
- 3:40 EVALUATION OF AN INTERACTIVE, GAMES-BASED ALCOHOL EDUCATION PROGRAM IN AFFECTING INTENTION AND BEHAVIORS RELATED TO HIGH- RISK ALCOHOL USE AMONG GREEK AFFILIATED COLLEGE STUDENTS. **D. Holman**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: V. Leybas-Nuno, PhD,MSW. Site and Preceptor: The University of Arizona Campus Health Service - Health Promotion and Preventive Services Office - D. Salafsky, MPH
- 4:00 EXPLORING THE ROLE OF SPIRITUALITY IN SUBSTANCE ABUSE RECOVERY AMONG ADOLESCENT GIRLS. **Z. Jele-Nhleko**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: V. Leybas-Nuno, PhD,MSW. Site and Preceptor: Springboard Home for Youth in Crisis - T. Ferrari, MACC

Health Surveillance and Developing Safe Communities
Session IV: 1:20 – 4:20 (Drachman Hall, Room A118)

- 1:20 ENHANCED SURVEILLANCE OF BINATIONAL CASES ON THE US-MEXICO BORDER. **A. Mannell**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Dennis, PhD., MS. Site and Preceptor: Arizona Department of Health Service, Office of Border Health, Border Infectious Disease Surveillance - O. McCotter, MPH
- 1:40 SEVERE ACUTE RESPIRATORY INFECTIONS PROJECT ALONG THE ARIZONA-SONORA BORDER. **Z. Wansaula**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Brown, PhD, MPH. Site and Preceptor: Office of Border Health/Border Infectious Diseases Surveillance - O. McCotter, MPH
- 2:00 DRAFTING AND PILOTING CLINICAL PRACTICE GUIDELINES. **A. Yousufzai**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: University of Arizona Cancer Center Blood and Marrow Transplantation Program - F. Answer, MD
- 2:20 NEIGHBORS CALLING NEIGHBORS. **C. Crecelius**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Safford, Az - R. Hunt
- 2:40 MEDICATION ERROR AND ADVERSE DRUG EVENT REPORTING SYSTEM: IMPLEMENTATION, ANALYSIS AND EVALUATION. **R. Doty**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: El Rio Community Health Center - D. Spegman, MD
- 3:00 VIDEO DIRECTLY OBSERVED THERAPY PROTOCOL FOR TUBERCULOSIS CONTROL: A POLICY EVALUATION. **S. Durbin**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Sacramento County Tuberculosis Control Program - O. Kasirye, MD, MS
- 3:20 HIV OCCUPATIONAL PROPHYLAXIS. **K. Faschan**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Arizona AETC - A. Bittenbender, MPH

3:40 DEVELOPING HEALTH INFORMATION SYSTEMS FOR HUMANITARIAN EMERGENCIES. **A. Mar.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Samaritan's Purse International Relief, South Sudan - D. Seyoum

4:00 ENGAGING FAMILIES TO REDUCE RECIDIVISM: RECOMMENDATIONS FOR PIMA COUNTY JUVENILE JUSTICE CENTER. **S. Percy.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Pima County Juvenile Detention Center - J. Torchia

Public Health Models: Improving Quality of Life
Session V: 1:20 – 4:00 (Drachman Hall, Room A119)

- 1:20 CAUTI QUALITY IMPROVEMENT PROJECT: GUIDELINES COMPARISON, DATA ANALYSIS AND RECOMMENDATIONS. **S. Vinjamuri**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Schloss, PhD. Site and Preceptor: University of Arizona Medical Center, Tucson - S. Bohnenkamp, RN, MS, APRN-BC, CNS, CCM
- 1:40 A COMMUNITY-BASED PARTICIPATORY EVALUATION OF THE COMMUNITY FOOD BANK OF SOUTHERN ARIZONA'S HOME GARDEN COOPERATIVE. **S. Barrett**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Schloss, PhD. Site and Preceptor: Community Food Bank of Southern Arizona - Community Food Resource Center - L. Davis
- 2:00 TRANSITION FROM JUVENILE DETENTION: RESOURCES, OPPORTUNITIES, AND REDUCED RECIDIVISM. **J. Parlin**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Schloss, PhD. Site and Preceptor: Pima County Juvenile Detention Center - J. Torchia, MPA
- 2:20 CREATION OF A PROGRAM EVALUATION AT THE LAS MILPITAS DE COTTONWOOD COMMUNITY FARM. **Z. Alford**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: Las Milpitas de Cottonwood Community Farm (operated by the Community Food Bank of Southern Arizona) - C. Mazarella, B.A.
- 2:40 PURCHASING, PREPARING AND PROVIDING WIC FOODS. **C. Schmidt**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: Pima County Cooperative Extension - D. McDonald, PhD
- 3:00 THE EPIDEMIOLOGY AND DIAGNOSIS OF MUCOCUTANEOUS LEISHMANIASIS IN MADRE DE DIOS, PERU. **C. Alves**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: Naval Medical Research Unit, No. 6 - Lima, Peru - A. Lescano, Ph.D., M.H.S., M.H.S.

- 3:20 DEVELOPING, IMPLEMENTING AND EVALUATING STRESS REDUCTION AND PERSONAL DEVELOPMENT CURRICULA FOR UA FRESHMEN AND UA OUTREACH.. **S. Brown**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: N. Teufel-Shone, Ph.D.. Site and Preceptor: University of Arizona - M. Irwin, PhD
- 3:40 A LIFE SKILLS PROGRAM TO INCREASE GENERAL SELF-EFFICACY, PARENTING SELF EFFICACY, AND SOCIAL SUPPORT FOR LOW-INCOME MOTHERS LIVING IN TUCSON'S SOUTH SIDE. **E. Salerno**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Southgate Academy - D. McCraley

Community Empowerment through Health Education and Health Promotion
Session VI: 1:20 – 4:00 (Drachman Hall, Rm A120)

- 1:20 SUPPORTING DIABETES SELF-MANAGEMENT THROUGH TOBACCO CESSATION LIFESTYLE COACHING. **B. Brady**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: R. Watson, PhD. Site and Preceptor: Arizona Smokers' Helpline - R. Seltzer, PhD
- 1:40 BEST PRACTICES FOR THE ELEMENTS OF THE AIR FORCE SUICIDE PREVENTION PROGRAM. **C. Davis**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: N. Yuan, Ph.D.. Site and Preceptor: Davis-Monthan Air Force Base - L. Fred, MPH
- 2:00 INTEGRATING PRECONCEPTION HEALTH INTO PUBLIC HEALTH PROGRAMS AND EFFORTS. **N. Piermarini**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: N. Yuan, Ph.D.. Site and Preceptor: Arizona Department of Health Services - A. Means, MBA/HCM
- 2:20 MENTAL HEALTH FIRST AID FOR COMMUNITY HEALTH WORKERS. **M. Alexander**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: AzCHOW - L. Verdugo
- 2:40 IMPACT OF PREVENTIVE DENTISTRY ON ORAL HEALTH OUTCOMES FOR YOUTH IN TUCSON, ARIZONA. **E. Dougherty**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: El Rio Community Health Center - G. LaChance, DDS
- 3:00 EXAMINING STRESS LEVELS AND EMOTIONAL HEALTH OF YOUTH WHO PARTICIPATE IN MUSIC EDUCATION IN PARAGUAY. **L. McCullough**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: Capiata, Paraguay - A. Burt, B.A/Masters
- 3:20 A YPAR APPROACH TO YOUTH EMPOWERMENT; CREATING YOUTH-LED ACTION PLANS TO IMPROVE HEALTH OUTCOMES FOR YOUTH LIVING ON THE NEW PASCUA YAQUI RESERVATION.. **L. Valdez**. University of Arizona, Tucson, AZ, U.S.A.

MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: Sewa Uusim, Pascua Yaqui Tribe, Tucson AZ - A. Cocio

3:40

PSYCHOSOCIAL IMPACTS WITH OUTDOOR ADVENTURE-BASED POSITIVE YOUTH DEVELOPMENT: KIDVENTURES PROGRAM EVALUATION. **L. Walker**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: Tierra Wild, Prescott, AZ - M. Smith, M.Ed.

Improving Health amongst Vulnerable Populations
Session VII: 1:20 – 4:00 (Drachman Hall, Room A122)

- 1:20 TRANSLATING ASTHMA MANAGEMENT RESEARCH TO PRACTICE: LESSONS LEARNED FROM CREATING AN INTERVENTION PROGRAM MANUAL. **S. David**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Gerald, PhD, MSPH. Site and Preceptor: American Lung Association of Arizona, Tucson - D. Bryson, R.N., AE-C
- 1:40 VIRTUAL REALITY-BASED BALANCE TRAINING IN CANCER PATIENTS WITH CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY: A RANDOMIZED CONTROLLED TRIAL . **D. Holloway**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Department of Surgery - B. Najafi, PhD
- 2:00 COCCIDIOIDOMYCOSIS TESTING AT SENTINEL HOSPITAL FACILITY IN SOUTHERN ARIZONA BORDER REGION.. **M. Casal Sepulveda**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Oren, PhD, MS. Site and Preceptor: Office of Border Health, Arizona Department of Health Services - O. McCotter, MPH
- 2:20 A COMPREHENSIVE EVALUATION OF A SCHOOL BASED SKIN CANCER PREVENTION PROGRAM IN GRADES 6-12: PROJECT ‘STUDENTS ARE SUN SAFE’ (SASS). **R. Davis**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: University of Arizona Cancer Center - D. Spartonos
- 2:40 PROMOTION OF PARENT ENGAGEMENT IN SCHOOL-BASED HEALTH AND WELLNESS PROGRAMS. **A. Armijo**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Healthy Schools Campaign - R. Ramirez-Richter, MS
- 3:00 CHANGE IN PHYSICAL ACTIVITY & NUTRITION KNOWLEDGE AND ATTITUDES OF YOUTH PARTICIPATING IN THE FIRED UP FOR FITNESS PROGRAM. **C. Clauson**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Tucson Fire Department - C. Gerber

- 3:20 PERCEPTION, UTILIZATION, MAINTENANCE AND BIO-EFFICACY OF RANDOMLY SAMPLED LLIN IN AN AREA OF STABLE MALARIA TRANSMISSION IN WESTERN KENYA. **J. Schouest**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Ernst, Ph.D., MPH. Site and Preceptor: Kenya Medical Research Institute Centre for Global Health Research - S. Munga, Ph.D.
- 3:40 A STUDY ON IMMUNIZATION COVERAGE AND PERSONAL BELIEF EXEMPTIONS IN PIMA COUNTY AREA SCHOOLS. **S. Garcia**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Ernst, Ph.D., MPH. Site and Preceptor: Pima County Health Department - F. Garcia, MD

Building Capacity and Promoting Wellness

Session VIII: 1:20 – 4:20 (*Drachman Hall, Room A326. Video-conferenced / Building 2, Telehealth Amphitheater Room 2306, Phoenix*)

- 1:20 PROJECT 21: A WEB-BASED INTERVENTION TO REDUCE HIGH-RISK ALCOHOL CONSUMPTION AMONG UNIVERSITY OF ARIZONA STUDENTS CELEBRATING THEIR 21ST BIRTHDAY. **S. Nagaratnam**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: University of Arizona Campus Health Promotions and Preventive Services - M. Fleck, MPH
- 1:40 GARFIELD COMMUNITY HEALTH ASSESSMENT. **R. Peterson**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Puente Arizona - C. Garcia
- 2:00 BUILDING CAPACITY AND STRENGTHENING ARIZONA'S COMMUNITY HEALTH WORKER MOVEMENT AND LEADERSHIP **D. Perez-Ramirez**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Arizona Community Health Outreach Worker Network - F. Redondo, BS
- 2:20 INTEGRATION RECOMMENDATIONS FOR PEER SUPPORT SERVICES SERVING INDIVIDUALS WITH A SERIOUS MENTAL ILLNESS AND SUBSTANCE USE DISORDER IN ARIZONA. **E. Schuster**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Arizona Department of Health Services (ADHS) - K. Bashor, MC, BS
- 2:40 WORKPLACE BREASTFEEDING POLICY. **J. Burns**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa County Department of Public Health - B. England, MD, MPH
- 3:00 MEDICAL MARIJUANA TRENDS. **K. Anand**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: University of Arizona/AZDHS - D. Hussaini, PhD
- 3:20 IMPLEMENTATION OF A COMMUNITY HEALTH EDUCATION PROGRAM. **J. Llanes**. University of Arizona, Tucson, AZ, U.S.A. MPH

Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor:
Esperanca - C. Araiza, MPH

3:40 VACCINE EXEMPTIONS - THE COST TO ARIZONA SCHOOLS. **S. Enders.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: TAPI - G. Hock

4:00 ERGONOMICS AT RAYTHEON MISSILE SYSTEMS. **K. Merems.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: T. Stobbe, PhD. Site and Preceptor: Raytheon Missile Systems - R. Force

Health Administration: Assessment and Evaluation

Session IX: 1:20 – 4:20 (*Drachman Hall, Room A276, video-conferenced / Building 2, Room 2208, Phoenix*)

- 1:20 DEVELOPMENT OF BANNER HEALTH CENTERS PEDIATRIC PATIENT CENTERED MEDICAL HOME. **W. Thiagarajan**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Banner Cardon's Children Hospital - R. Anderson, RN
- 1:40 EVALUATION AND IMPLEMENTATION OF A TELEMEDICINE PROGRAM IN A HOSPITAL SETTING. . **O. Perez**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: St. Joseph's Hospital and Medical Center - B. Bullock, MS
- 2:00 VACCINE PREVENTABLE DISEASES IN COLLEGE STUDENTS. **T. Blocher (Gregory)**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: TAPI-The Arizona Partners for Immunization - G. Hock, RN, MPH
- 2:20 DYSLIPIDEMIA IN SURVIVORS OF CHILDHOOD CANCER AND PUBLIC HEALTH IMPLICATIONS. **C. Popescu**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Phoenix Children's Hospital - G. Rosen, MD
- 2:40 COMPARISON OF THE BARRIERS TO POISON CONTROL CENTER UTILIZATION AMONG URBAN AND RURAL POPULATIONS IN ARIZONA. **O. Otaluka**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Banner Good Samaritan Poison and Drug Information Center - D. Brooks, MD
- 3:00 ASSESSMENT OF POLICIES, VITAL STATISTICS, AND EXTERNAL STAKEHOLDER INPUT SPECIFIC TO TEEN PREGNANCY IN ARIZONA. **J. Gibbs**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Arizona Department of Health Services - A. Means, MBA, HCM
- 3:20 HEALTH EDUCATOR TRAINING FOR TEEN PREGNANCY PREVENTION PROGRAMS. **J. Russo**. University of Arizona, Tucson,

AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: Arizona Department of Health Services - L. Bellucci, MBA

3:40 EARLY DETECTION OF CHILD ABUSE. **C. Silva**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: Phoenix Children's Hospital - P. Garcia-Filion, PhD, MPH

4:00 PLANNING FOR PUBLIC HEALTH: HOW THE GENERAL PLAN CAN SOLVE PHOENIX'S MOST PRESSING PUBLIC HEALTH PROBLEMS. **E. Guidas**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: City of Phoenix, Planning and Development Department - J. Bednarek, MA

The Practice of Preservation in Underserved Populations
Session X: 1:20 –2:20 (Building 2, Room 2206, Phoenix)

- 1:20 ASSESSMENT OF THE ARIZONA ALZHEIMER'S REGISTRY: A TEMPLATE FOR THE ALZHEIMER'S PREVENTION REGISTRY. **K. Saunders**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Banner Alzheimer's Institute - J. Langbaum, PhD
- 1:40 ADAPTATION OF A DIAGNOSTIC SCREENING TOOL TO ASSESS SEXUAL HEALTH CONCERNS AMONG IMMIGRANT AND REFUGEE WOMEN . **K. Belknap**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa Integrative Health Center - C. Johnson-Agbakwu, MD, MSc
- 2:00 DIABETES PREVENTION PROGRAM: PARTICIPANT MONITORING AND PROGRAM RECOGNITION. **C. Holiday**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: Gila River Health Care Diabetes Prevention Program - T. Watson, MEd

Making Connections: Health Promotion and Assessment

Session I: 1:20 – 4:20

Drachman Hall, Room A112

Abstracts

PERFORMANCE TRIAD PILOT PROGRAM EVALUATION (PTPPE). **A. White**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Burgess, MD, MPH. Site and Preceptor: Joint Base Lewis-McChord (JBLM), WA - A. Andrews, PhD, RD, CSSD

The Performance Triad Pilot Program Evaluation (PTPPE) examined the effectiveness, efficiency and sustainability of the Performance Triad prior to army-wide implementation. The primary purpose of my internship was to gain experience in a workplace environment through the PTPPE and to design an additional assessment to evaluate the program. My internship examined the Web of Science and Pubmed to identify lifestyle intervention studies performed in the workplace for comparison with the PTPPE parameters. Only systemic reviews or meta-analyses related to diet, physical activity and sleep intervention in the workplace between 2005 and 2014 were included. The measurements and outcomes were compared with the PTPPE, and an additional questionnaire was designed. Active duty soldiers assigned to the pilot program at Joint Base Lewis-McChord (JBLM) participated by completing questionnaires and reporting dietary and sleep information. Nine studies systematically publishing evidence related to diet (n=3), physical activity (n=5) or diet/physical activity (n=1) interventions were included and compared to the measurements and outcomes. Based on the article analyses, 13 additional questions were designed, including seven questions addressing work performance, resilience and injury. Seven soldiers in the case group were interviewed to evaluate the program while the primary data were collected. Three interviewees (43%) reported an increase in their energy level after participation in the program. However, there was no difference in stress management in the work place. Two soldiers reported an injury during the training in last 6 months .The study is ongoing and no conclusions can be drawn at this time.

THE EPIDEMIOLOGY OF COCCIDIOIDOMYCOSIS IN SOUTHERN ARIZONA. **M. Alzoubaidi**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: Arizona Department of Health Services/Border Infectious Disease Surveillance Office - O. McCotter, MPH

Background: Coccidioidomycosis (Valley fever) is endemic in Arizona. However, it does not occur uniformly in all counties in the state. A varying geographical distribution and incidence in the southern Arizona counties bordering Mexico has been noted in the past, but has not been specifically examined. We decided to explore this incidence gradient in further detail. Methods: Cases reported from 2006 to 2012 from Cochise, Pima, Pinal, Santa Cruz, and Yuma counties were extracted from the ADHS Medical Electronic Disease Surveillance Intelligence System (MEDSIS). ArcGIS was used to geocode the cases to their home addresses. SAS 9.3 was used for statistical analysis. Results: In 2012, the incidence of coccidioidomycosis/100,000 persons was highest in Pima and Pinal counties followed by Santa Cruz, Cochise, and Yuma. The incidence for each county increased from 2006 to 2012. In 2012, 54.7% of all cases were reported in females compared to 42.1% for men; in 3.2%, the gender was not known. Conclusions: The gradient in incidence across the southern Arizona counties has not been emphasized or explained. We were able to geocode cases and underscore those differences in incidence across these border counties. Future projects should focus on exploring the underlying reasons for this geographic variability.

THE EFFECT OF MORBID OBESITY ON TRAUMA MORTALITY IN MOTOR VEHICLE COLLISIONS. **S. Hadeed**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: The University of Arizona Medical Center - B. Joseph, M.D., FACS

Introduction: Safety devices are known to decrease mortality in motor vehicle collisions (MVC), however their protective effects in obese motorists remains undefined. The aim of our study was to assess the association between obesity and trauma mortality in MVC. We hypothesized that protective devices decrease mortality in obese patients after MVC. Methods: A retrospective analysis of MVC patients (Age \geq 16y.o.) was performed using the National Trauma Data Bank from 2007-2010. Patients with recorded comorbidity of morbid obesity (BMI \geq 40) and protective devices were identified. Patients dead on arrival, with isolated traumatic brain injury, or incomplete data were excluded. The primary outcome was in-hospital mortality. Multivariate logistic regression was used to measure the association between mortality and obesity. Variables were selected using backwards elimination and interaction was tested using the likelihood ratio test. Results: Our sample of 214,306 included 10,260 (4.79%) morbidly obese patients. Morbidly obese occupants were at greater risk of mortality (OR_{crude}=1.74[1.54-1.98]). After adjusting for patient demographics, safety device, physiological and anatomical severity, the odds of death was 1.52[1.33-1.74] times greater in obese motorists compared to non-obese drivers. Interaction by protective device was detected and compared to non-obese drivers, obese motorists were at greater risk of death if no restraint (OR=1.84[1.47-2.31]), seatbelt only (OR=1.48 [1.17-1.86]), or both seatbelt & airbag were present (OR=1.49[1.13-1.97]). Conclusions: Morbid obesity is an independent risk factor for mortality in MVC. Regardless of safety device use, obese motorists remained at greater risk of death. Further research examining the protective effect of vehicle restraints in obese & morbidly obese drivers is needed.

IDENTIFYING INFECTIOUS DISEASE PRIORITIES IN THE THREE NEW MEXICO BORDER COUNTIES. **S. Lashway**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Gerald, PhD, MSPH. Site and Preceptor: New Mexico Department of Health Office of Border Health - K. Perez-Lockett, MPH

Introduction: Three New Mexico counties share a border with Mexico: Doña Ana, Hidalgo, and Luna. The New Mexico Department of Health (NMDOH) Office of Border Health (OBH) in Las Cruces seeks to improve the health status and health services in the border region. To identify infectious disease priorities in the border region, the incidences of selected infectious diseases in the border counties were compared to the incidences of those diseases in NM non-border counties and the United States. Methods: The analysis included nationally notifiable infectious diseases for which cases occurred in NM during the five year period (2007-2011). Sexually transmitted infections and tuberculosis were excluded due to their specialized reporting programs. Data for the NM border counties and 30 non-border counties were extracted from the New Mexico Electronic Disease Surveillance System and the New Mexico Indicator-Based Information System. Total national case counts were taken from published CDC Morbidity and Mortality Weekly Report year summaries and CDC Wonder U.S. Census data. Results: Of the 34 diseases included in the analysis, six were identified with greater incidence in the NM border counties than non-border counties. Seven diseases were identified with greater incidence in the border counties than the U.S., and seventeen diseases were identified with greater incidence in NM than the U.S. Discussion: Due to the limitations of passive disease surveillance, further investigation to identify reasons for disparities in disease incidence is needed to develop programs to address them.

UA CAMPUS PANTRY: APPLYING PUBLIC HEALTH PRACTICES TO SUPPORT ORGANIZATIONAL GROWTH. **J. Collins**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: S. Carvajal, PhD, MPH. Site and Preceptor: UA Campus Pantry - C. Sun, MA

Introduction: While it is well known that food insecurity is growing problem in the United States, the amount of college students suffering from it is commonly underestimated. The UA Campus Pantry is a new organization with a mission to reduce food insecurity in the University of Arizona community. Purpose: This internship was designed to help the UA Campus Pantry to grow as an organization, so that it can better serve the increasing needs of its target population. The internship was aimed at bringing public health methods into the organization to initiate organizational development. Methods: The internship included a number of activities, primarily 1) a needs assessment of the target population, which included a literature review and collection of qualitative and quantitative data, 2) composition of a grant-funding proposal, 3) coordination of a large-scale donation collection project, 4) an improvement to the structure and content of the organizational newsletter, and 5) collaboration with outside stakeholders. Results: The internship outputs and outcomes include organizational development as a direct result of the internship activities, as well as strong potential for future growth. Conclusion: A theory-driven, multi-faceted approach is crucial when working to support growth within a new organization.

ADDRESS A RECOMMENDATION TO IMPROVE THE REFERRAL AND SERVICE ALLOCATION PROCESS FOR MENTAL HEALTH INTERVENTION TEAMS AT ALBUQUERQUE PUBLIC SCHOOLS. **M. Myers**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Cutshaw, Ph.D.. Site and Preceptor: Albuquerque Public Schools - S. McKee, M.A., LPCC

Introduction & Objectives: Albuquerque Public Schools (APS) offers comprehensive mental health services for students. APS has school counselors, family therapists, substance abuse counselors, and contracted mental health providers that provide services to students. Health and Wellness Team (HWT) is a collaborative program that is supposed to occur at every school to triage all students referred for mental health services. In June 2012, HWT was evaluated and several recommendations were made to improve the referral process and allocation of services. Objective: To assess the feasibility of implementing programmatic recommendations for HWT, and to create an action plan to execute feasible changes. Methods: Data came from three APS schools representing elementary, middle, and high school levels. HWT meetings were observed, and key team members interviewed using a semi-structured format. Data were collected to identify current HWT trends and to get feedback on recommended programmatic changes. Results: The HWT manager can feasibly train all counselors on HWT procedures next fall. Mandating one coordinator per school is not viable for all HWTs, but should be recommended as a model. Managers at the district level have very limited control over increasing school mental health resources due to budgetary restrictions for ancillary services. Training staff and increasing oversight on HWT procedures is the priority of the action plan. Discussion: HWTs function differently at every school. Providing resources and support for successful implementation, such as training and increased oversight may provide the assistance needed to get teams functioning well, and ultimately get students the mental health services they need.

STATE GUN LAWS AND GUN-RELATED INJURIES AND DEATHS. A.

McCourt. University of Arizona, Tucson, AZ, U.S.A. MPH Internship
Committee Chair: L. Dennis, PhD., MS. Site and Preceptor: University of Arizona
Medical Center, Department of Surgery, Division of Trauma, Critical Care, and -
J. Bambauer, J.D.

BACKGROUND: Gun-related injuries and deaths are a significant problem in the United States. Individual states have tried to combat injuries and deaths through varied gun laws. Laws and regulations that govern gun use and ownership tread a narrow path—states have, within their police power, the authority to protect the public’s health, but states must be careful to adhere to evolving interpretations of the 2nd Amendment. Additionally, the benefits or drawbacks of a given law are difficult to accurately determine *ex ante*. **OBJECTIVE:** This project seeks to identify any association between state gun-law stringency and gun-related injuries and deaths. Additionally, the project will determine whether there are any preliminary associations between specific laws and reduction in gun violence.

METHODS: Specific state gun laws were obtained through the Westlaw database. State scorecards from the Brady Campaign to Prevent Gun Violence were used to standardize the state gun laws. Firearm-related mortality data for 1999–2010 was obtained from the Center for Disease Control’s WONDER database and unintentional firearm injury data for Arizona was obtained from the University of Arizona Medical Center. Each state’s changes in mortality rate were compared to the changes in the total and law-specific Brady scores. Descriptive statistics were performed on the Arizona injury data. **PRELIMINARY**

RESULTS/CONCLUSION: The firearm-related mortality rate is elevated in states with low Brady scores. This finding suggests that states with relatively lax gun laws have correspondingly high firearm-related mortality rates. Further analysis is needed into the mortality rates’ association with specific gun laws and into the population characteristics of the Arizona residents unintentionally injured by firearms.

DATA LINKAGE PROJECT RELATING EMERGENCY MEDICAL SERVICE RESPONSE TIME TO HEALTH OUTCOMES FROM MOTOR VEHICLE CRASHES IN THE WESTERN REGION OF ARIZONA. **T. Finkelstein.**

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Dennis, PhD., MS. Site and Preceptor: Bureau of Emergency Medical Services & Trauma System, ADHS - D. Harden, JD NREMT

Background: Reducing the time from injury to definitive trauma care within 1 hour improves the health outcomes for trauma patients. Emergency medical Services (EMS) response times to motor vehicle trauma (MVT), a component of this pre-hospital time, has not been evaluated related to health outcomes. A barrier in analyzing MVT trends and health outcomes is that relevant elements are not captured by any single information system. Methods: This review concentrated on the Western Region of Arizona from June 2012 through February 2014. I performed descriptive statistics and probabilistically linked three information systems (ALISS, AZ-PIERS, ASTR) to evaluate EMS response times relate on crash fatality. EMS response times were considered collectively and by urban/rural locality. Results: Only 16% of car occupants were matched with EMS records. Less than 5% of the resulting records (N=44) were subsequently matched with the Trauma registry. Among all AZ-PIERS records (N=1795), the 50% and 90% response time fractiles were 5 and 8 minutes respectively. In urban regions the 90% fractile was 16 minutes. The matched sample's average Probability of Survival was 0.993 ± 0.01 , with no fatalities. The 50% and 90% EMS response times were 5 and 7 minutes respectively. Discussion: This cohort of MVT patients generally did not incur severe injuries requiring treatment at a designated trauma center. The longer response times to urban crashes were surprising, but locality designation may contain classification bias. Feedback to improve data quality and reduce missing data for future linkage success is discussed. Conclusion: As Arizona continues to develop their pre-hospital EMS database, I expect the collaborative infrastructure for state agencies to strengthen and explore research topics and questions previously disjointed.

IMPROVING BREASTFEEDING KNOWLEDGE, PERCEPTIONS, AND RATES THROUGH PRENATAL BREASTFEEDING EDUCATION. **H. Renno.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: University of Florida Center for Breastfeeding and Newborns - M. Ryngaert, MS, ARNP, IBCLC

Introduction: Breastfeeding rates in Florida currently lag behind the rest of the country, with only 1 out of 10 infants exclusively breastfed until 6 months. UF Health is committed to improving breastfeeding support for mothers. The purpose of this project was to create a curriculum for prenatal breastfeeding education, implement its use in UF's two prenatal clinics, and to evaluate its effectiveness through an impact analysis. Methods: Five computer-based breastfeeding education modules were designed and shared with expectant mothers during their prenatal visits at UF. The mothers completed a survey about their breastfeeding perceptions and their feedback on the modules. Hospital breastfeeding rates were measured over three-month periods prior to and after implementing this curriculum, with data from a random sample of 177 births. Criterion for involvement was prenatal care or delivery at UF Health. Results: 195 patients received the education and completed surveys, with 75.0% rating the curriculum as either very useful or somewhat useful. Of the 30 women (15.4%) who did not intend to breastfeed prior to receiving the education, 20.0% reported changing their mind, 13.3% were considering breastfeeding, and 66.6% were still planning to formula feed. Feeding data were obtained from a sample of 177 infants born during the two study intervals (88 pre-intervention and 89 post-intervention), with no change in breastfeeding attempts (1.01), and mean decrease of exclusive breastfeeding (0.90) after the curriculum was implemented. Conclusion: Improving breastfeeding perceptions through prenatal education is achievable, but has not yet proven to correlate with increased rates of breastfeeding initiation and exclusivity. Future efforts should focus on improving education delivery and documentation of education completion.

Building Healthcare Systems and Enhancing Delivery

Session II: 1:20 – 4:00

Drachman Hall, Room A114

Abstracts

APPLICATION OF SERVICE DOMINANT LOGIC TO HEALTH CARE PRACTICE AND QUALITY IMPROVEMENT. **A. Underwood**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Derksen, MD. Site and Preceptor: Arizona Connected Care - L. Glazar

Traditionally, the delivery of healthcare has been practiced in a very transactional manner in which the provider creates value (health) by applying their education, experience, and specialization to the treatment of disease. Patients consume value by becoming sick, living unhealthy lifestyles, or being ‘non-adherent’ to the medical advice of their providers. In this viewpoint, the provider is the only valuable component as they are the only necessary element in becoming healthy. This transactional model of care is being challenged today as patients take more ownership of their health and health care. Terms such as ‘patient-centered care’, and ‘patient engagement’ are becoming commonplace as the medical industry increasingly recognizes the impact of individual circumstances and patient behaviors on health outcomes. This new viewpoint understands that optimal health outcomes depend on both the provider and patient partnering together to improve health. Unfortunately, the degree to which providers partner with their patients is too often evaluated with satisfaction surveys incorporating transactional elements around a single incidence of care. Applying marketing principles of Service Dominant Logic (SDL), pioneered at the University of Arizona, this project attempts to first understand what elements of the provider-patient interaction are most valuable from the patient perspective before developing a tool to assess how well a provider co-creates and delivers value with their patients. This project also attempts to understand how effective a practitioner, or care team, is at partnering across the continuum of care and how well they perform in the areas that patients deem most valuable.

EVALUATION OF GARDEN-BASED EDUCATION INFLUENCE ON
ELEMENTARY SCHOOL YOUTH IN THE TUCSON UNIFIED SCHOOL
DISTRICT . **A. Lohr**. University of Arizona, Tucson, AZ, U.S.A. MPH
Internship Committee Chair: B. Duncan, MD. Site and Preceptor: Community
Food Bank of Southern Arizona - N. Henry

Introduction: The Community Food Resource Center is striving to increase vegetable consumption among youth using school gardens. The objective of the evaluation was to determine whether schools with gardens for more than three years as compared to schools with gardens for less than three years are associated with a positive outlook and behaviors toward vegetables. **Methods:** Positive outlook was defined as evidence that students like eating vegetables. Behavior was defined as evidence that students have tasted various vegetables and eat vegetables regularly. Third and fourth grade students at four elementary schools with different garden exposures completed a survey to determine student outlook and behaviors toward vegetables. **Results:** Students in schools with more garden exposure were more likely to answer yes to survey questions reflecting a positive attitude and behaviors toward vegetables. Six of the twenty-four survey questions met statistical significance. Students with more garden exposure were more likely to say that they have tried a new vegetable last month, eaten squash, eaten a vegetable that they have grown, and enjoy eating long skinny vegetables. **Discussion:** Students who have been exposed to a school garden for more than three years as compared to those who have been exposed for less than three years demonstrated a more positive outlook and behaviors toward vegetables. Other studies have shown that positive outlook and behaviors toward vegetables can change vegetable consumption habits in children.

UNDERSTANDING DETERMINANTS OF FRAILITY IN THE U.S. AND MEXICO AND OPPORTUNITIES FOR RESILIENCE: A CROSS-CULTURAL COMPARISON. **A. Muchna**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: B. Duncan, MD. Site and Preceptor: Arizona Center on Aging - J. Mohler, PhD, MPH, NP

INTRODUCTION: The Frailty Syndrome is measured as weight loss, grip strength, walking speed, exhaustion, and physical activity; additional determinants include falls, cognitive ability, and quality of life. The aging population is increasing, and current research is focused on better understanding how the ethnic and cultural determinants of frailty interact with biological determinants. The purpose of this study was to provide information to advocate for culturally competent decisions regarding the older Hispanic population in the U.S. **METHODS:** The study purpose was addressed by obtaining data through clinical research and running statistical tests to compare those data with a dataset from Mexico to discover how determinants encountered in the data aligned with the literature. **RESULTS:** Due to differences in contents of the datasets, it was not possible to directly compare the frailty status of the two groups. Instead, pertinent aspects of aging and frailty were compared. The data analysis showed that the Mexican cohort had significantly ($p < 0.05$) less falls, younger age, and lower cognitive scores than the American cohort. Walking speed and quality of life did not differ significantly ($p > 0.05$). **DISCUSSION:** While Hispanic populations show resistance to frailty in the literature, the data sets analyzed did not incorporate necessary variables to determine significant associations with ethnicity; more data must be collected for a comprehensive analysis. The information acquired has led to an investigation of modifiable factors influencing resilience in populations of varying ethnicities. Better understanding cultural variations and behavioral factors influencing frailty increases understanding of the social, physiological, and biobehavioral aspects of aging and helps us to better support the aging population.

EVALUATION TO GUIDE EFFICIENCY AND EXPANSION OF PROGRAMS BY THE INTERNATIONAL ALLIANCE FOR THE PREVENTION OF AIDS IN CHENNAI, TAMIL NADU. **S. Stone.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Ehiri, PhD, MPH, MSc. Site and Preceptor: International Alliance for the Prevention of AIDS (IAPA) - Chennai, Tamil Nadu, India - E. Hamm, MPH, MD

INTRODUCTION: India has the 3rd largest population of individuals affected by HIV, with over 57% of these concentrated in southern India. In spite of recent gains in reduction of HIV incidence in the country, it the disease remains a widespread problem, impacting mostly individuals aged of 15-49 years. The International Alliance for the Prevention of AIDS, the host organization for this internship, is a non-governmental organization (NGO) in the southern state of Tamil Nadu that focuses on HIV prevention through educational initiatives and intervention projects. **METHODS:** Two separate analyses were performed: a task analysis, and a situation analysis. The task analysis conducted using the focus group method, task trackers, individual interviews, and observation, aimed at evaluating staff capacity and recommending methods of program expansion in Chennai. The situation analysis in Pondicherry included review of existing services and a series of interviews with directors of NGOs and the Pondicherry AIDS Control Society to determine the way in which IAPA may be able to extend its services to this area. **RESULTS:** The task analysis revealed that IAPA is in need of additional staffing and task shifting of certain responsibilities from 3 staff to at least 4 staff in order to achieve greater effectiveness and efficiency. Expansion to Pondicherry was determined to best begin with expansion of the child nutrition program. **DISCUSSION:** Analyses performed provided a necessary framework for staff to consider in future expansion. Despite limitations, recommendations implicate direct ways to impact staff efficiency and realization of IAPA's mission.

PHYSICAL ACTIVITY AND GENETIC SUSCEPTIBILITY TO TYPE 2 DIABETES. **A. Arora**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: Z. Chen, PhD, MPH. Site and Preceptor: Epidemiology & Biostats Division, MEZCOPH - Y. Klimentidis, PhD

Background: Physical activity (PA) has a protective effect against obesity and type 2 diabetes (T2D). It is known to improve insulin sensitivity, increase glucose uptake in cells and reduce central obesity. Genetic risk factors for T2D have recently been identified, and PA may interact with genetic susceptibility to influence T2D risk. Method: The researcher determined whether baseline PA such as playing sports modified the association of genetic susceptibility to T2D with T2D incidence among Whites and African Americans in the Atherosclerosis Risk in Communities (ARIC) cohort. The participants were followed for an average of 7.6 yrs. Baseline PA was assessed using validated questionnaires at the first visit. Genetic susceptibility was measured using a genetic risk score (GRS), calculated using 65 single nucleotide polymorphisms (SNPs) identified through genome wide association studies. Cox Proportional Hazards models were used to examine the associations and interactions of PA and the GRS with T2D incidence, after adjusting for covariates such as age, gender, and body mass index. Results: Our analysis among Whites showed a lower T2D risk with regular participation in PA (HR = 0.91, 95% CI: 0.84-1.00). PA modified the association of the GRS and risk of T2D onset among Whites ($p < .05$). Among those with lower genetic risk, we observed a 0.73 to 0.58 fold decrease in risk of T2D onset with increasing levels of PA as compared to individuals with higher genetic risk. In African Americans, PA offered no significant reduction in risk for T2D (HR = 1.05, 95% CI: 0.92-1.22). Conclusion: Our study confirms the role of PA in lowering the risk of T2D and also suggests it may modify the influence of genetic susceptibility on T2D risk among Whites. There was no evidence for such an interaction among African Americans.

THE DEVELOPMENT, IMPLEMENTATION, EVALUATION AND MANAGEMENT OF A PRENATAL EDUCATION PROGRAM. **A. Davis.**

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Eng, Dr.PH. Site and Preceptor: Mobile Health Program, University of Arizona, Family and Community Medicine Department - V. Murrain, M.D.

Objectives: The purpose of this internship was to develop prenatal education curriculum and sessions for patients seeking prenatal care through the Mobile Health Program (MHP) at the University of Arizona Family and Community Medicine Department. **Methods:** A needs assessment was conducted through two focus groups with patients currently seeking prenatal care at the MHP. An on-going needs assessment via a prenatal survey was also conducted. The results of these needs assessments guided the health education sessions. Patients were called ahead of time, letting them know to come early to their appointments in order to participate in the education sessions. **Results:** The patients often did not show up to many of the sessions, or would show up late, making evaluation of the sessions difficult. Education sessions were modified to be given on an individual level and were shortened for time restraints. Patients demonstrated strong knowledge on some topics but evaluation of the shorter sessions showed increased patient comprehension of prenatal health topics. **Conclusions:** Patients of the MHP identified intent to vaccinate, breastfeed and lead healthy lifestyles. First time moms had more questions and concerns regarding prenatal topics and sessions were catered towards them. After sessions were modified for time, patients engaged with educators more and showed interest in the prenatal health education topics.

BEHAVIORAL AND PRIMARY HEALTH CARE INTEGRATION FOR DUAL ELIGIBLE ADULTS IN SOUTHERN ARIZONA. **K. Frick**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Eng, Dr.PH. Site and Preceptor: The Arizona Center on Aging - J. Mohler, PhD, MPH, NP

PURPOSE Nearly 55% of Pima County residents live in a Medically Underserved Area (MUA) and 27% reside in areas with a shortage of primary care practitioners. In addition to its designation as a MUA, Pima County is also designated as a Health Professional Shortage Area for behavioral health. With shortages in both primary care and behavioral health workers, many of Pima County's residents are left without access to necessary behavioral and primary health care services and are at risk of poor health outcomes (Pima County Health Department, 2013). To address these issues, the integration of behavioral and primary health care has become a viable health services delivery model.

OBJECTIVE This internship with the Arizona Center on Aging provided the opportunity to observe an integration model, characterize a cohort of 612 dual eligible patients (adults eligible for both Medicare and Medicaid), and examine the relationship between specific behavioral health diagnoses and emergency room use. **METHODS** Using claims data from the University of Arizona Health Network, descriptive analysis techniques were used to characterize the cohort and logistic regression was used to analyze the relationship between behavioral health diagnoses and emergency room use. **IMPLICATIONS** Preliminary results from the analysis identified statistically significant relationships between patients diagnosed with affective mood disorders and the number of emergency room visits, followed by those diagnosed with neurosis, psychosis, and depression. The rising prevalence and substantial costs associated with patients with medical and psychiatric comorbidities present critical policy and management implications, of which the most important will be presented and discussed.

ADDRESSING THE PRESCRIPTION RATES OF OPIOID NARCOTICS AT THE UNIVERSITY OF ARIZONA MEDICAL CENTER UNIVERSITY CAMPUS. **C. Nagata**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Eng, Dr.PH. Site and Preceptor: University of Arizona Medical Center- University Campus - K. Weibel, PharmD

Introduction: The University of Arizona Medical Center- University Campus (UAMC-UC) has experienced a large increase in the amount of opioids prescribed within the hospital over the past several years. The purpose of this quality improvement project was to statistically validate the increase in opioid prescriptions at UAMC-UC and present on root causes for this prescription trend, as well as propose possible policy or management recommendations to improve opioid prescriptions. Methods: Using Sunrise Clinical Manager, UAMC-UC's historical electronic medical record, a randomized sample of 50 patient charts from the 4W floor of UAMC-UC hospital were pulled from both 2007 and 2013 for comparative analysis. A chi-squared test was administered to determine statistical significance between the two subject groups for their proportion of opioid prescriptions at the time of their in-patient stay. Current narcotic prescription pharmacy policies were also reviewed. Results: In 2007, 44 of the randomly selected pool of 50 patients were prescribed an opioid during their admission. Of these patients, 14 were discharged with an opioid prescription. Preliminary analysis suggest that these numbers are even higher for the 2013 patient group. Conclusion: observations, insights and additional discussion regarding the opioid prescription rates and policy/management recommendations will be provided at time of presentation.

Comprehensive Evaluation of Health Systems and Health Programs

Session III: 1:20 – 4:20

Drachman Hall, Room A116

Abstracts

ARSENIC INDUCED ALTERATIONS IN PROTEIN BIOMARKERS. **W.**

Degnan. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: A. Gruessner, Ph.D. Site and Preceptor: Southwest Environmental Health Sciences Center - R. Lantz, PhD

Background: Arsenic is a naturally occurring element found throughout the world. Inorganic arsenic, its most abundant and toxic form, is indigenous to the soil of the southwest United States. Chronic inhalation or ingestion of inorganic arsenic can cause serious disease in humans. Therefore, estimating health risks associated with low-dose exposure is critical to risk assessment. The purpose of this project is to determine, using a mouse model, whether prenatal/postnatal inhalation exposure to inorganic arsenic compounds is correlated with alterations in expression for a set of 32 proteins shared by human beings. Four arsenic compounds were tested: calcium arsenate (high and low concentration), arsenic trioxide, and arsenite over four exposure periods: gestational, postnatal, gestational plus postnatal, and none. Methods: Using two-factor ANOVA, Box-Cox transformations and SAS statistical software, datasets containing expression measurements associated with each exposure were analyzed to determine if protein alterations in the serum and lungs of the mouse pups were statistically different from controls at the 0.05 level of significance. The analysis was adjusted for sex, exposure/sex interaction, and multiple comparisons. Results: Significant levels of protein expression were found in all arsenic compound exposures tested. Three potential biomarker candidates were identified: protein G-CSF, which was significantly differentially expressed in all four arsenic compounds, and Eotaxin and IL-4, which had significant expressions in three. Eight of the 32 proteins did not have expressions statistically different from controls. If these biomarker candidates are validated in humans, they could be used to establish the risk of developing diseases associated with arsenic exposure and motivate new intervention strategies.

ALLI KIRU: AN ORAL HEALTH INTERVENTION IN THE ECUADORIAN AMAZON. **E. Funsch**. University of Arizona, Tucson, AZ, U.S.A. MPH
Internship Committee Chair: R. Harris, Ph.D, MPH. Site and Preceptor: Pueblo Kichwa de Rukullakta - K. Sokal Gutierrez, MD, MPH

Background: Early Childhood Caries (ECC) is a major health concern worldwide. ECC is 5 times more common than asthma and one of the most preventable common childhood chronic and infectious diseases. Children with ECC are also at risk for other health issues. There is sparse information on the oral health status of individuals from the Amazon region in Ecuador. A four-year intervention among children in Pueblo Kichwa de Rukullakta in Ecuador seeks to decrease ECC through treatment and education. This internship project utilized current data from the study to describe participants and determine risk factors for ECC in this population. Methods: The subset of data from children and mothers examined in summer 2013 were analyzed to determine prevalence of decayed missing or filled (DMF) teeth in a child and which exposures were associated with number of DMF including oral hygiene and dietary habits. Multiple regression analyses were used. Results: A total of 385 children and their mothers (N=224) were interviewed. 66.7% of children had at least one DMF (mean of 5 ± 4.9 per child) with 22.9% of children = 10 DMF. Overall regression model significantly predicted DMF ($p < .0005$, $R^2=0.378$) with a moderate effect size of 0.336. Although many variables were found to correlate with DMF, three variables (child's age, number of prenatal visits, and number of dental visits) remained statistically significant in the final model. Conclusion: This study is a first step in understanding the oral health status of this region and provides evidence there are substantial dental issues in the population. Future study data will show if DMF has decreased in this population. Further understanding is needed to adequately address these issues.

EVALUATION OF MOSQUITO TRAP DATA AND DETERMINING BEST MEASURES FOR HUMAN DISEASE PREVENTION OF WEST NILE VIRUS IN PINAL COUNTY, ARIZONA. **M. Blain**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: R. Harris, Ph.D, MPH. Site and Preceptor: Pinal County Public Health Services District - G. Briggs

In 2004, Pinal County saw its first human case of West Nile Virus (WNV). Since then the Public Health Department in Pinal County has been performing mosquito surveillance yearly. We reviewed data from 2009 to 2013 to characterize mosquito and human activity of WNV. The purpose of this study was to determine when to implement fogging or larvaciding for human disease prevention. Mosquitoes have been routinely collected using CO₂ traps and tested for WNV using the RAMP WNV Test. The two competent vectors of interest were *Culex quinquefasciatus* and *Culex tarsalis*. *Cx. tarsalis* was greater in number compared to *Cx. quinquefasciatus* in all years except for 2010. The weekly virus infection rates and the index of relative virus activity were calculated using the surveillance data from 2009 to 2013. Infection rates from 2013 ranged from 1.48 to 14.80 infected mosquitoes per 1,000 tested and in 2010, infection rates ranged from 0.955 to 163.22 infected mosquitoes per 1,000 tested. ArcGIS was used to test for clustering and to target future trapping. This technique helped understand mosquito patterns but it did not lead to a conclusive answer with respect to WNV hot spots. Prior to 2013, Pinal County fogged high risk areas to mitigate WNV transmission; however, human cases of WNV still occurred. In 2013, larvaciding breeding sites was implemented and there were two cases reported. This relationship is not conclusive but opens the possibility that use of larvaciding was the contributing factor in the reduction.

RABIES INFECTION AND CLIMACTIC COUNTY CHANGES IN SANTA CRUZ COUNTY, ARIZONA. **B. Lamb**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: R. Harris, Ph.D, MPH. Site and Preceptor: Arizona Department of Health Services - M. Roach, MPH

Background: Although rabies infections have been impacted by the introduction of the rabies vaccine in domesticated animals and post-exposure prophylaxis in humans, the zoonotic infection continues to persist in less developed countries around the world. Rabies is also still reported in the United States and a source of concern. With surveillance of rabies a problem globally, cost effective prevention strategies need to be developed as well as methods for, identification of higher risk time periods. The goals of this internship were to describe geographic trends in rabies infections in Arizona and to identify if historical climactic county changes were correlated with historical incidences of rabies infection. Methods: Utilizing data compiled from Arizona Department of Health Services and National Oceanic and Atmospheric Administration, a database was constructed that included: geocoded locations of rabies infection by animal. County-level Santa Cruz data were mapped using arcGIS. Secular trends were graphed by time and animal. Spearman correlations of climactic variables and rabies infection were completed using STATA. Results: The number of reported animal rabies cases in the state of Arizona ranged between 18 and 280 cases between 1943 and 2012. Endemic levels of rabies observed across Santa Cruz County with outbreak years also observed. Statistically significant correlations were identified between number of rabies cases and mean temperature ($p=0.031$) and mean max temperature ($p=0.034$) for Santa Cruz County. Conclusion: This analysis identified a potential relationship between climate and occurrence of a rabies outbreak in animals. This study was conducted in only one county of Arizona. Further research is needed, but this does suggest that climactic data may assist in the forecasting of rabies infection.

DETERMINING THE EFFECT OF DIETARY FLAVONOID INTAKE ON INCIDENCE OF SQUAMOUS CELL CARCINOMA OF THE SKIN.. V.

Nguyen. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: P. Hsu, Ph.D.. Site and Preceptor: Arizona Cancer Center - D. Alberts, MD

Squamous cell cancer (SCC) associates with high health care costs and morbidity. Ultraviolet radiation is the main cause of SCC. Hence, flavonoids have become an intense focus research interest due to their cancer prevention effects. The purpose of this study was to determine whether flavonoid intake was associated with SCC. A case-control study was conducted by using the Southeastern Arizona Health Study. Flavonoid intake /day was estimated by adding flavonoid subclasses. Wilcoxon-rank sum and Chi-square tests were used for continuous and categorical variables, respectively. Also, Spearman's correlation and tests for trends were used when appropriate. Multivariate logistic regression was employed to adjust for confounders. 301 cases and 267 controls were identified from the database. By treating average flavonoid daily intake as a continuous variable, there was no association between flavonoid consumption and SCC. When categorizing flavonoid daily intake into quartiles and stratifying by gender, the third quartile (204.5-342.4 mg/day) for males demonstrated a protective effect against SCC (OR: 0.48, 95% CI :0.24-0.96). For females, no association was observed between SCC and all quartiles. The test for trends indicated that high flavonoid consumption may increase the risk of SCC for females ($p=0.045$). To understand the above trend, Spearman's correlation between covariates of female cases vs. male cases was examined. Correlations between tanning booth use and SCC for female cases and male cases were in opposite direction (0.15, -0.12), suggesting recall bias. Our results suggested no association between flavonoid intake and SCC. Recall bias could have played a role in the positive association between high flavonoid consumption and SCC for females.

LOGIC MODEL DEVELOPMENT AND MEASUREMENT FOR A BYSTANDER INTERVENTION PRIMARY PREVENTION TRAINING PROGRAM TO REDUCE SEXUAL AGGRESSION IN ALCOHOL SERVING ESTABLISHMENTS. **E. Lopez**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: M. Koss, Ph.D.. Site and Preceptor: Arizona Department of Health Services, Phoenix, AZ - C. Hensell

The Arizona Department of Health Services houses the federally-funded Sexual Violence Prevention and Education Program (SVPEP). In 2011, SVPEP was charged with implementing an effort to train staff in alcohol-serving establishments to identify sexual aggression by bar patrons and safely intervene. Over the last two years, SVPEP has established the Arizona Safer Bars Alliance (ASBA), and developed and piloted an educational bystander intervention skills training program in several communities in Arizona. Some data from pre/post-training surveys showed ceiling effects, as well as evidence of limited construct and content validity to map measurement to training components and intended program outcomes. The purpose of this internship was to strengthen the ASBA program evaluation through several key initiatives: (1) development of a logic model of conditions that foster sexual aggression by bar patrons; (2) redesign of assessment tools to better match the desired immediate and intermediate training outcomes and yield data to support statistical analysis of the proposed logic model, and; (3) creation of a centralized, user-friendly database for storage, cleaning, and analysis of ASBA data. This presentation briefly reviews the multi-step process through which these objectives were achieved and identifies the next steps in ASBA program expansion and evaluation.

EVALUATION AND RECOMMENDATIONS FOR IMPROVING RECRUITMENT AND RETENTION OF THE GROW 2B FIT KIDZ KAMP. **Y. Bueno.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: V. Leybas-Nuno, PhD,MSW. Site and Preceptor: Grow 2B Fit and Children's Medical Services, Tucson, AZ - J. Schultz, M.D.

Introduction: Arizona is experiencing increasing numbers of obese children. Health effects associated with childhood obesity can include high cholesterol and mental health problems. Grow 2B Fit helps Tucson families redefine their health and lifestyle practices by providing the knowledge and skills to make healthy nutrition and exercise choices through their monthly family Kidz Kamp. Objective: To evaluate Kidz Kamp and identify recruitment and retention strategies for the program. Methods: All evaluation participants had children who are patients of a general practice clinic. Mixed methods were applied including focus groups and surveys. In all, 40 parents participated in the evaluation. There were 23 non-attendeo parents and 17 attendee parents. Non-attendeos were asked about knowledge, interests and potential barriers to Kidz Kamp participation while the attendees were asked about their satisfaction and recommendations. Results: Attendees indicated interest in cooking demonstrations to learn to make small, healthy modifications to existing family meals. Attendees also desired new recipes and more support to strengthen new skills learned at Kidz Kamp. Non-attendeos identified logistical barriers such as transportation and conflicting schedules that interfered with participation. Non-attendeos' interests were for nutrition education and exercise education for their children. Conclusion: Attendee and non-attendeo families demonstrate distinct health education needs. Tailoring dissemination strategies appropriately for attendee and non-attendeo families can optimize recruitment and retention of Kidz Kamp.

EVALUATION OF AN INTERACTIVE, GAMES-BASED ALCOHOL EDUCATION PROGRAM IN AFFECTING INTENTION AND BEHAVIORS RELATED TO HIGH- RISK ALCOHOL USE AMONG GREEK AFFILIATED COLLEGE STUDENTS. **D. Holman**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: V. Leybas-Nuno, PhD,MSW. Site and Preceptor: The University of Arizona Campus Health Service - Health Promotion and Preventive Services Office - D. Salafsky, MPH

Background: Alcohol is the most commonly abused substance in the United States and its abuse is a significant public health concern. College students are among the most frequent abusers of alcohol and members of Greek letter organizations are a particularly high-risk group. Numerous studies establish that Greek affiliated students consume more alcohol, binge drink more often, and experience more negative consequences from drinking than non-affiliated students. Limited research exists on effective interventions for these students. Objectives: The purpose of this project was to conduct an evaluation of The Buzz, a brief, single-session alcohol education program at the University of Arizona and examine its effectiveness in changing alcohol consumption as well as behaviors among Greek affiliated students. Methods: Participants were fraternity and sorority members attending the University of Arizona (n=359). Evaluation tools were developed to measure alcohol consumption, alcohol risk factors, protective factors, and behavior. Participants completed immediate pre and posttests as well as a follow-up survey 30 days later. Results: The prevalence of alcohol use was 92%. The average reported alcoholic drinks per week was 19 for males and 13 for females. Prevalence of binge drinking, a significant risk factor, was 95% for males and 80% for females. Utilization of protective factors was low overall. The Buzz participants who completed the follow-up survey (n=59) showed a significant decrease in alcohol consumption and an increased usage of protective behaviors. Conclusions: Alcohol use among this population is alarmingly high. Results suggest that the current metrics used to categorize high-risk alcohol consumption may be inadequate. The Buzz may be an effective alcohol education program for Greek affiliated students.

EXPLORING THE ROLE OF SPIRITUALITY IN SUBSTANCE ABUSE RECOVERY AMONG ADOLESCENT GIRLS. **Z. Jele-Nhleko**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: V. Leybas-Nuno, PhD,MSW. Site and Preceptor: Springboard Home for Youth in Crisis - T. Ferrari, MACC

Background: Substance abuse is prevalent among adolescents. Of the estimated 25.1 million adolescents in the United States in 2011, more than 25% drank alcohol, about 20% used an illicit drug and 12% smoked cigarettes. Springboard is a residential program from the larger organization called Teen Challenge. Springboard draws upon spirituality to promote substance abuse recovery in adolescent girls aged 12-18 years. The goal of the internship was to investigate the role of spirituality in substance abuse recovery among adolescent girls. Methods: Interviews were conducted at three levels: 2 directors (state and city), 6 staff members, 7 resident adolescents and 1 graduate of Springboard one year after completion of the program. Charts were extracted for current resident adolescents to gather information on substance use history. The curriculum was reviewed to identify approaches used to integrate spirituality. Results: Interview themes from directors and staff suggest a conversion process occurs demonstrating a commitment to God that appears to facilitate recovery, success of the program lies in staff forming life-long relationships with the girls while encouraging independence and families play a vital role in the recovery process. Interviews with residents showed that at intake, residents were opposed to attending the recovery program and exhibited negative sentiments: anger, disrespect, hatred, hopelessness and resistance. With time, these sentiments changed to openness, hope and self-love. The curriculum review found lessons were Bible-based and included sessions where residents memorized Bible verses and applied them to their unique situations. Conclusion: Girls in the Springboard program engage in a life-long journey that promotes a relationship with God that appears to enable them to live free of substance use.

Health Surveillance and Developing Safe Communities

Session IV: 1:20 – 4:20

Drachman Hall, Room A118

Abstracts

ENHANCED SURVEILLANCE OF BINATIONAL CASES ON THE US-MEXICO BORDER. **A. Mannell**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: L. Dennis, PhD., MS. Site and Preceptor: Arizona Department of Health Service, Office of Border Health, Border Infectious Disease Surveillance - O. McCotter, MPH

Introduction: Since the inception of the Border Infectious Disease Surveillance (BIDS) program, Arizona has monitored reportable infectious diseases in cases of binational status. This project sought to determine the accuracy of binational status designation in routine reporting of cases of infectious diseases. Methods: Using SAS version 9.4, a program was developed to elicit data from Arizona's Medical Electronic Disease Surveillance Intelligence System (MEDSIS) regarding those cases of infectious disease that might have been binational but were not reported as binational by local health departments. The SAS program was developed to search variable fields for key terms related to Mexico and Disease Specific Observations (DSO) used in MEDSIS. The cases that were extracted as possibly binational were then individually investigated in MEDSIS to determine whether they were truly binational. Results: There were 172 binational cases identified during the period January 1, 2012 through December 31, 2012. Of these 172 cases, 41% (n=70) were identified as binational by BIDS. The most common identifier used to classify cases as binational was travel history, accounting for 81% (n=139) of the reported cases. Other identifiers included residence in Mexico and eating food from Mexico, which accounted for 9% (n=16) and 5% (n=8) of reported cases, respectively. Foodborne and waterborne diseases accounted for the majority of case morbidity at 63% (n=108). Conclusion: The public health implications of underreporting binational cases that had compatible travel history, residence in Mexico, or consumption of products from Mexico include less timely reporting of information to public health partners on both sides of the border and decreased knowledge of the geographic spread of infectious diseases in the Arizona-Sonora border region.

SEVERE ACUTE RESPIRATORY INFECTIONS PROJECT ALONG THE ARIZONA-SONORA BORDER. **Z. Wansaula**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: H. Brown, PhD, MPH. Site and Preceptor: Office of Border Health/Border Infectious Diseases Surveillance - O. McCotter, MPH

The Border infectious Disease Surveillance (BIDS) program, has been conducting Severe Acute Respiratory Infections (SARI) surveillance along the Arizona-Sonora Border, collecting and analyzing data for hospitalized patients since 2009. However, risk factors for poor outcomes of SARI case patients have not yet been analyzed among this population. This project sought to describe the epidemiological profile of SARI patients and identify the risk factors for poor outcomes among patients hospitalized in Pima County, AZ during 2009-2013. Methods: Patients with respiratory symptoms admitted to three large acute care hospitals that met the SARI case definition were recruited. A case report form was completed with demographics and clinical details. Nasal and throat swabs and blood samples were collected for viral, bacterial or fungal identification. Differences between groups were evaluated using Chi-square or Fisher's exact test. Results: A total of 148 patients were included in this study. The majority of patients were male (52.7%) and white non-Hispanic (45.9%). The median age was 63 years. Among these cases, 13.5% (n=20) were positive for Influenza and 8% (n=12) were positive for syncytial respiratory virus (SRV). During the study period, 13 (25%) of 52 patients were intubated, 18 (41.8%) of 67 patients were admitted to ICU, and 12 (8%) died. Patients who died tended to have associated comorbidities (91.6%, n=11) and pneumonia (66.7%). They were mostly male, admitted to ICU (75%, n=9), and aged 65 years and above. Conclusion: SARI surveillance is a good tool for monitoring morbidity and mortality in patients with acute respiratory infections along the border. Comorbidities and people aged 65 years and above may constitute some factors of poor outcomes in this population.

DRAFTING AND PILOTING CLINICAL PRACTICE GUIDELINES. A. Yousufzai. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: University of Arizona Cancer Center Blood and Marrow Transplantation Program - F. Answer, MD

Abstract Background: Evidence-based clinical practice guidelines have potential benefits for healthcare providers, healthcare systems, and patient outcomes. They can improve the quality of clinical decision-making; reduce medical errors; standardize procedures; increase efficiency; and eliminate ineffective, dangerous, and wasteful practices. The University of Arizona Cancer Center Blood and Marrow Transplantation (BMT) Program serves both adults and pediatric patients with allogeneic, autologous, and syngeneic transplants from both related and unrelated donor sources. **Purpose:** The purpose of this internship was to help the BMT Program improve its services by 1) contributing to the development of evidence-based clinical practice guidelines; 2) providing a set of suggestions, including evidence, value judgments, and practitioner consensus regarding the benefits and risks of alternative care options. **Methods:** A user-friendly framework was created for the guidelines, which is flexible enough to be modified and updated routinely. A multi-stage process was generated to search literatures, studies, trials, meta-analyses, and national/state guidelines related to blood and marrow transplantation. Information from the studies was sorted based on clinical factors and statistical evidence. **Results:** Eight clinical practice guidelines were drafted as followings: Infection Prophylaxis (bacterial, fungal, viral), Pneumonia/Pneumocystis Jiroveci Prophylaxis, Management of Fever and Neutropenia, Prevention of Cytomegalovirus (CMV), Prophylaxis of Graft vs. Host Disease (GVHD), Vaccination of Patients Receiving Transplant, Management of Penicillin-Allergic Patients, Clostridium Difficile Prophylaxis and Treatment. These guidelines address both autologous and allogeneic hematopoietic cell transplantation (HCT) recipients.

NEIGHBORS CALLING NEIGHBORS. **C. Crecelius**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Safford, Az - R. Hunt

Neighbors Calling Neighbors Beginning last summer, I worked with SouthEast Arizona Community Unique Services (SEACUS), which provides services to citizens of rural Safford. It oversees the operation and functioning of the Graham County Senior Center and all the programs and services it provides, e.g. daily production and delivery of both home-delivered and congregate meals. I helped SEACUS design manuals and manuals to train and be used by volunteers conducting daily care calls to homebound elderly and disabled citizens. Interviews and meetings with members of the SEACUS and Senior Center staff were helpful, independent literature reviews of ongoing studies and similar projects were also to some extent, but the extent of translation to Safford's community varied. The very best connection was with Jerry Smith of Nogales who has been successfully running a very similar volunteer program and shared documents, resources, and insights about how to cultivate a successful, continuously growing and strong team culture of volunteers in a small Arizona town. After spending time there, getting to know professionals and resources of the community, I helped launch a pilot program last fall. This program enables people to live safely in the independence of their homes and removes burdens on the county sheriff's office automated care call program that currently operates, straining the department. Working here with segments of SEACUS's underserved, predominantly rural population and the aging population as well taught me much about implementing a good policy in the real world, especially as an outsider to a small community. Now I must step away and hope that the program can sustain itself through volunteers calling their neighbors.

MEDICATION ERROR AND ADVERSE DRUG EVENT REPORTING SYSTEM: IMPLEMENTATION, ANALYSIS AND EVALUATION. **R. Doty**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: El Rio Community Health Center - D. Spegman, MD

Introduction: Humans have used rituals and medicines since the dawn of recorded history for curing disease, reducing symptoms and treating chronic illnesses. Beginning in the 1970s, increased attention was given to tracking, researching and addressing adverse drug events (ADEs) to improve patient safety. Methods: My internship at El Rio Community Health Center focused on assisting with the development and implementation of an ADE program, the Medication Error and Adverse Drug Event Reporting System (MEADERS), to incorporate an ADE reporting form into their electronic medical record (EMR) system and encourage its use to track, evaluate and address ADEs. Results: My work led to the development of a simpler, streamlined, more user-friendly MEADERS template. In addition, I developed a MEADERS Playbook with step-by-step instructions to guide MEADERS implementation and management of as El Rio moves to full system spread. Although, the full impact of MEADERS awaits further implementation and experience, one serious safety event (SSE) and other medication errors have been captured. Discussion: The MEADERS program allowed for data collection and analysis, which captured a SSE among other medication errors. Capturing this SSE enabled safety measures and precautions to be implemented to eliminate any recurrence. El Rio is one of the first outpatient health centers to implement a MEADERS program, therefore, there is very limited data to make comparisons. However, a baseline of process, policy and performance improvement measures from the data and information collected through the MEADERS program has been established. Conclusion: MEADERS programs should be implemented throughout all health centers, inpatient and outpatient, in order to improve patient safety as well as process, policy and performance improvement.

VIDEO DIRECTLY OBSERVED THERAPY PROTOCOL FOR TUBERCULOSIS CONTROL: A POLICY EVALUATION. S. Durbin.

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Sacramento County Tuberculosis Control Program - O. Kasirye, MD, MS

Background: Directly Observed Therapy (DOT) is an effective, yet expensive, method of treatment designed to promote adherence to Tuberculosis (TB) therapy by requiring patients to ingest their medication in the presence of trained providers. To lower costs and protect the autonomy and privacy of patients, TB programs are exploring the use of videoconferencing technology (VCT) for DOT. Objective: To develop a Video DOT (VDOT) protocol for a TB control program, including an evaluation of the process, barriers to adoption, and ramifications of protocol implementation. Methods: VDOT policies and best practices were compared against existing VDOT protocols from counties across the nation. Program administrators selected the Skype VCT platform based on its low cost and ease of use. Other low-cost store-and-forward platforms were deemed unacceptable by clinic staff due to lack of real time monitoring capabilities. DOT providers were interviewed to determine the site-specific standards for VDOT enrollment. Finally, draft protocols were reviewed for compliance with the Health Insurance Portability and Accountability Act (HIPAA). Results: A Skype-based VDOT protocol was developed for clinic use and several patients were identified as potential candidates for program enrollment. However, HIPAA officials advised us that Skype does not provide the protections necessary for HIPAA compliance; therefore the protocol was not implemented. The enrollment criteria and basic procedure were approved for future programming. Conclusions: VDOT is acceptable and desirable to patients and providers. At the time of this study, low cost VCT platforms did not satisfy HIPAA requirements. Therefore TB clinics wishing to develop VDOT programs with HIPAA compliant VCT platforms may need to make considerable front-end investments.

HIV OCCUPATIONAL PROPHYLAXIS. **K. Faschan**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Arizona AETC - A. Bittenbender, MPH

The AIDS Education Training Center (AETC) is a national program committed to providing physicians and healthcare professionals with the knowledge and skills necessary to provide the best care possible to persons living with HIV/AIDS. The AETC is a program of the Ryan White Care Act, which seeks to improve availability and care for low-income persons living with HIV/AIDS. The AETC aims to increase the HIV/AIDS knowledge and skills of health care providers in order to ensure that persons living with HIV/AIDS have access to knowledgeable providers. There are 11 regional chapters of the AETC. The Arizona AETC is located in the University of Arizona Medical Center (UAMC) and provides training, consultation, capacity building, and technical assistance to healthcare providers including, but not limited to, nurses, physicians, and healthcare workers. I collaborated with the UAMC its Infectious Disease Department, Emergency Department, and Employee Health to: (1) help develop a revised emergency prophylaxis protocol (PEP) for UAMC workers who had an occupational exposure to HIV, (2) develop brochures to distribute the protocol information, and (3) design a program to educate UAMC staff on the protocol. The methods used to accomplish these objectives included: a literature review, expert interviewing, reviewing best practices, and interprofessional collaboration. Accidental needlesticks are a common problem in healthcare settings and can cause transmission of HIV. Though the risk of transmission is low, the implementation of evidence-based, hospital-wide protocol for occupational post-exposure prophylaxis (PEP) is an important means of protecting healthcare employees.

DEVELOPING HEALTH INFORMATION SYSTEMS FOR HUMANITARIAN EMERGENCIES. **A. Mar.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Samaritan's Purse International Relief, South Sudan - D. Seyoum

PURPOSE: To improve the efficiency, accountability, and capability of refugee nutrition programs in South Sudan through the development of effective health information systems (HIS). **BACKGROUND:** In yet another crisis stemming from decades of conflict in Sudan, inhabitants of South Kordofan, a state sharing a border with the newly-independent South Sudan, have been forced from their homes into refugee camps across the border. Yida, one such camp, holds over 70,000 refugees, including many severely malnourished children. Samaritan's Purse (SP), an NGO, operates nutrition programs across the camp to rehabilitate these children and commissioned this effort to improve its data management and reporting. **METHODS:** The development of a new HIS was informed by a literature review, process observation, questionnaires, focus groups, interviews, and records audits. **RESULTS:** The assessment identified areas for improvement including limited staff competence, inefficient reporting, and limited surveillance. The new HIS utilized an electronic patient register and screening database, improved screening processes, and integrated hardcopy records. It also required computer-literacy trainings and capacity-development activities for staff. **IMPLICATIONS:** Investing in effective data management is critical for NGOs and public health agencies to optimize accountability and performance. A genuine commitment to serve communities in need requires an equal commitment to effective and efficient practices.

ENGAGING FAMILIES TO REDUCE RECIDIVISM: RECOMMENDATIONS FOR PIMA COUNTY JUVENILE JUSTICE CENTER. **S. Peercy**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Schachter, MD, MBA. Site and Preceptor: Pima County Juvenile Detention Center - J. Torchia

Juvenile delinquency and high recidivism are costly to local and state governments as well as damaging to adolescents' life trajectories and can be reduced by engaging families in the process. Delinquency and subsequent recidivism are the result of numerous factors including poor mental health, peer group pressure, disengagement in school, family conflict and low socio-economic status. Family engagement programs have often been utilized with young children to prevent delinquency, but its efficacy has been expanded to reducing recidivism among delinquent adolescents. Parents/caregivers face numerous challenges for which they may need education, emotional support, and help accessing resources. The Pima County Juvenile Detention Center requested a needs assessment on the feasibility of providing a family engagement program. Four criteria for program inclusion were identified during the assessment; 1) Low cost; 2) Minimal staffing requirements with utilization of volunteers; 3) Convenient meeting location; and 4) Involvement of only parents/caregivers, due to the detained status of youth. Additionally, three essential program components were identified; education, support and resources. Based on these program criteria and the realities within the Pima County Juvenile Justice Center; it is recommended that Juvenile Justice 101, a program piloted with great success in King County, Washington, be implemented. Family engagement programming research and the subsequent recommendation for the Detention Center can be viewed in the attached report titled, Engaging Families to Reduce Recidivism: Recommendations for Pima County Juvenile Detention Center.

Public Health Models: Improving Quality of Life

Session V: 1:20 – 4:00

Drachman Hall, Room A119

Abstracts

CAUTI QUALITY IMPROVEMENT PROJECT: GUIDELINES COMPARISON, DATA ANALYSIS AND RECOMMENDATIONS. S. Vinjamuri. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Schloss, PhD. Site and Preceptor: University of Arizona Medical Center, Tucson - S. Bohnenkamp, RN, MS, APRN-BC, CNS, CCM

BACKGROUND: Urinary tract infection is the most common hospital acquired infection. CAUTI's (Catheter Associated Urinary Tract Infections) constitute about 40% of hospital acquired infections with an incidence of 3% to 10% per day of indwelling catheterization. **OBJECTIVES:** 1) to compare the indications for foley catheter insertion between National guidelines and UAMC (University of Arizona Medical Center) guidelines and identify the differences between indications, 2) to do a retrospective data analysis from 2011 to 2013. The data analysis involved comparing various parameters namely, foley days, patient days, number of UTI's (urinary tract infections), device utilization rates and CAUTI rates across units as well as quarters, in order to detect any seasonal variation. In addition, a comparison between National Health Safety Network and UAMC CAUTI thresholds is performed across units to examine the differences, if any, and 3) to recommend ways to reduce the rate of CAUTI's based upon observation of the practices followed, mainly in the Operating Room at UAMC, Tucson. **METHODS:** This internship encompassed a literature review and data analysis. The project also involved an observatory phase, chiefly in the operating room at UAMC, Tucson. Other observations were done on the floors. **RESULTS:** Preliminary results indicate that CAUTI rates were progressively decreasing across the years, owing to the team work and persistent effort by the CAUTI team at UAMC, Tucson. **CONCLUSION:** Developing nurse protocols that clearly define criteria for insertion and removal of catheters that can reduce CAUTI rates. This internship was an invaluable experience that improved my knowledge and skills through participation in a quality improvement project in a large tertiary care hospital setting like UAMC, Tucson.

A COMMUNITY-BASED PARTICIPATORY EVALUATION OF THE COMMUNITY FOOD BANK OF SOUTHERN ARIZONA'S HOME GARDEN COOPERATIVE. **S. Barrett**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Schloss, PhD. Site and Preceptor: Community Food Bank of Southern Arizona - Community Food Resource Center - L. Davis

INTRODUCTION The Community Food Bank of Southern Arizona is a hunger-relief organization dedicated to supporting healthy, hunger-free communities. Within this broader entity, the Community Food Resource Center (CFRC) administers programs that address root causes of hunger using a food security model. The Home Garden Cooperative is a CFRC program that provides resources and training to low-income households to empower them to develop their own home food supply, and to make the benefits of home gardening accessible to families at risk for low food security. An evaluation was conducted to measure the program's health impact, explore the effectiveness of home gardening in relieving food insecurity in low-income communities, and to provide advocacy tools to staff. **METHODS** A retrospective post-then-pre survey was administered to program 'alumni' to determine their self-reported change over time in a number of health outcomes, such as physical health and food security status. In addition, a PhotoVoice project was conducted to engage participants in program development, and to understand its reach and stewardship. **RESULTS** Almost all participants surveyed experienced positive change in the health indicators measured, and reported changes in health behaviors as a result of gardening and interacting with the program. PhotoVoice data is still being collected as of March 14th, 2014. **DISCUSSION** The evaluation project supported existing efforts to clarify the vision and structure of the Home Garden program. As a result, the project allowed staff to measure the validity of their conceptual model in a timely way, and supported ongoing program assessment. In turn, the Home Garden program serves as a model for measuring and evaluating outcomes in a food security context, and has guided policy discussions at the organizational level.

TRANSITION FROM JUVENILE DETENTION: RESOURCES, OPPORTUNITIES, AND REDUCED RECIDIVISM. **J. Parlin**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Schloss, PhD. Site and Preceptor: Pima County Juvenile Detention Center - J. Torchia, MPA

As of 2010, the rate of juvenile recidivism in Arizona was estimated at 51.3%.¹ Juvenile recidivism has many public health concerns attached to it that include negative economic and psychological effects on the detainee as well as continued criminal activity of the detainee that affects the public as a whole. The objective of this project was to better describe the potential risks and factors that have the potential to provide protection from juvenile recidivism in the Pima County Juvenile Court system, located in Pima County, Arizona and influence the creation of a more comprehensive transition plan for juveniles moving out of detention and back into the community. In order to assess this, a literature review was conducted as well as 27 interviews with professionals that work with juvenile detainees, parents of juvenile detainees, and juvenile detainees themselves. As a result, four main risk factors were uncovered that potentially influence juvenile recidivism and could be lessened by changes in the transition process occurring as juveniles are released from detention back into the community. They include: the lack of a positive connection with a person outside of detention, low academic achievement, lack of employment, and inadequate parental involvement. Because of these results it is suggested that the transition process include: access to a mentoring program for juvenile offenders, access to a support group for parents and guardians, a community resource list for transition specialists, and that transition specialists stay in contact with juveniles once they are released back into the community.

CREATION OF A PROGRAM EVALUATION AT THE LAS MILPITAS DE COTTONWOOD COMMUNITY FARM. **Z. Alford**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: Las Milpitas de Cottonwood Community Farm (operated by the Community Food Bank of Southern Arizona) - C. Mazzearella, B.A.

Introduction and Objectives: Las Milpitas de Cottonwood is a community farm that operates through the Community Food Resource Center (CFRC), a department of the Community Food Bank of Southern Arizona (CFBSA). The farm addresses root causes of hunger by supporting the CFRC's goals: increase access to healthy food, support community capacity building, foster economic development, and conserve local resources. A program evaluation was designed to help staff improve effectiveness, document accomplishments, demonstrate worth, and illustrate need for continued support. Methods: Planning a program evaluation for Las Milpitas entailed defining the program's mission, objectives and programmatic theory in order to generate meaningful and appropriate data collection tools. The evaluation team engaged program stakeholders through on-going conversations with staff, participants, community members, and CFBSA management and board members. A focus group was facilitated to elicit formal participant feedback. Results: Data collection tools were created to capture information related to program outcomes. A data collection schedule was established to enable staff to gather and record relevant information monthly, seasonally and annually. A participant survey was produced to use before and after every season to collect individual information related to food security, mental and physical wellness, and sense of community. Discussion: Data collection tools were implemented in March 2014. Continued application of the evaluation plan will include analyzing data and reporting findings. Though data is still forthcoming, the evaluation can help Las Milpitas, the CFRC and the CFBSA improve their programming, better communicate their program theory, and demonstrate program impact and value to stakeholders.

PURCHASING, PREPARING AND PROVIDING WIC FOODS. C. Schmidt.
University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D.
Taren, PhD. Site and Preceptor: Pima County Cooperative Extension - D.
McDonald, PhD

Introduction and Objectives: Targeted video messages will create a lasting, positive change in parental attitudes and practices regarding purchasing, preparing, and providing healthy foods for their children. The proposed internship will provide preliminary work for the formative "Byte Sized" research project. The internship will focus on best practices for engaging small children and their caregivers in healthy nutrition knowledge and habits. Methods: Prevention is more likely to be effective when the family is the focus of the intervention and when nutrition education is addressed. Starting from this premise, the internship will pilot an intervention aimed at promoting behavior change for families by testing effective marketing communications strategies as family based interventions for the prevention of obesity. Results: Internship activities will result in the following outcomes: • Identification of 1 -3 key barriers for targeted health messages to address. • Increased information, motivation and behavioral skills among 80% of project participants (WIC mothers and children) on the importance of healthy food choices. Discussion: The project will develop and display communications to reach the highest concentration of consumers in a targeted and highly scalable way. As a result, youth and their families will build information, motivation, and behavior skills regarding healthy eating habits.

THE EPIDEMIOLOGY AND DIAGNOSIS OF MUCOCUTANEOUS LEISHMANIASIS IN MADRE DE DIOS, PERU. **C. Alves**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Taren, PhD. Site and Preceptor: Naval Medical Research Unit, No. 6 - Lima, Peru - A. Lescano, Ph.D., M.H.S., M.H.S.

Introduction: The epidemiology of leishmaniasis in Madre de Dios (MDD) has yet to be described in detail, and PCR-based diagnosis has not been compared with microscopy-based diagnosis in the region. This study described the epidemiology and diagnosis of leishmaniasis in MDD in order to support disease control efforts. **Methods:** Researchers were contacted when patients with lesions characteristic of leishmaniasis presented to seven healthcare facilities in MDD. Tissue/lymph samples were taken, and a questionnaire was completed for each patient. Samples were tested for *Leishmania Viannia* using PCR and microscopy. In addition to calculating descriptive statistics, tests for association between mucocutaneous leishmaniasis (MCL) and various covariates were conducted. **Results:** Of the 106 patients enrolled in the study, 24/106 (22.6%) were female, 21/103 (20.4%) were less than 18 years, 24/72 (33.3%) had mucosal lesions, 36/104 (34.6%) had received previous treatment, 86/87 (98.9%) were diagnosed positive through PCR, 42/77 (54.6%) experienced diagnostic failure using microscopy, and of those in whom the infecting species was determined, 55/58 (94.8%) were infected with *L. (V.) braziliensis*. Previous infection and receiving more than one previous treatment were associated with MCL. **Conclusions:** The high percentages of women and children in the cohort suggest high rates of transmission outside traditionally exposed groups. The high prevalence of *L. (V.) braziliensis* and/or delays and failures in diagnosis and treatment may be causing a high prevalence of MCL in MDD. These findings highlight the importance of new prevention strategies and early/successful diagnosis and treatment in the control of MCL in MDD.

DEVELOPING, IMPLEMENTING AND EVALUATING STRESS REDUCTION AND PERSONAL DEVELOPMENT CURRICULA FOR UA FRESHMEN AND UA OUTREACH.. **S. Brown**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: N. Teufel-Shone, Ph.D.. Site and Preceptor: University of Arizona - M. Irwin, PhD

Background: A curriculum that combined contemplative practices, neuroscience research and student reflection was designed to explore the concept of authentic happiness. The overarching questions were: what is authentic happiness, how may we experience it, and what are the obstacles in our way? The hypothesis was that through the introduction of mindfulness, students would learn simple, yet tangible ways to manage their emotions, resolve conflicts, make responsible decisions, and ultimately manage stress. By bringing together science and contemplative practices through experiential learning, students would gain insight of the importance of mind-body integration in the pursuit of wellbeing, and be provided with the resources to improve their social and emotional skills. Methods: The course was piloted in spring 2013, with freshmen enrolled in the Arizona Assurance Scholars Program (AASP), a support program for low-income students. Part of the mission of this program aims to ensure success, retention and graduation from the University of Arizona by offering academic, financial and social support. The curriculum addressed the need to provide additional social support. Results: Written evaluations and open-ended surveys were completed at: the beginning of the semester, during the semester, and at the end of the semester. Analyses revealed self-reported benefits in: individual health and wellness, benefits in mindfulness practices both in-class and out-of-class, with 44% of students reporting more confidence in handling personal problems, and 44% experiencing colds or flu less often than in the previous semester. Conclusions: The social and emotional benefits reported by students, and that some students reported benefits in their physical health, supports a justification to offer this course to incoming freshmen at UA.

A LIFE SKILLS PROGRAM TO INCREASE GENERAL SELF-EFFICACY, PARENTING SELF EFFICACY, AND SOCIAL SUPPORT FOR LOW-INCOME MOTHERS LIVING IN TUCSON'S SOUTH SIDE. E. Salerno.

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Southgate Academy - D. McCraley

Objective: In collaboration with El Rio Community Health Center's Health Education Project and Southgate Academy, the student delivered the "Healthy Families" life skills program to young, low-income Latina mothers living in Tucson's South Side. This free and accessible intervention was designed and implemented to educate and empower young, low-income mothers to confront the challenges in their lives, pursue personal goals and interests, and balance family and relationships. The "Healthy Families" curriculum included three components: Woman, Mother, and Partner, and was composed of 16 weeks of lectures, discussions, and educational activities. The program aimed to increase participant general self-efficacy, parenting self-efficacy, and network of social support. A total of 6 mothers, age 22-43 years engaged in the program; 83 % completed all 16 weeks of programming. Quantitative and qualitative results of the study indicate that participants showed a significant increase in general self-efficacy, parenting self-efficacy, and social support from baseline to follow-up. The greatest improvements were specific to increases in general self-efficacy and parenting self-efficacy.. These results suggest this program is effective for enhancing self-efficacy in young mothers. Future efforts will evaluate longer-term effects of the program on behavior change associated with general self-efficacy and parenting self-efficacy. Implications for Public Health Policy: The major findings of this study support this research and demonstrate that public health policy should focus on cross-sectorial partnerships to provide free and accessible resources that educate and empower young, low-income mothers, promote social equality, and increase quality of life for low-income, minority families.

Community Empowerment through Health Education and Health Promotion

Session VI: 1:20 – 4:00

Drachman Hall, Room 120

Abstracts

SUPPORTING DIABETES SELF-MANAGEMENT THROUGH TOBACCO CESSATION LIFESTYLE COACHING. **B. Brady**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: R. Watson, PhD. Site and Preceptor: Arizona Smokers' Helpline - R. Seltzer, PhD

As an intern at Arizona Smokers' Helpline (ASHLine) I assisted in developing a program designed to address two health concerns—diabetes self-management and tobacco cessation among smokers with diabetes. This report outlines the program's conceptual foundation, its goals and objectives, activity details, evaluation procedures and the elements of a feasibility trial. The program was designed to address four interrelated aspects to diabetes self-management adherence: reinforcement, health literacy, self-efficacy, and motivation. Emphasizing client participation and coach-based support, the program guides ASHLine clients who wish to participate in formalizing their self-management plan and improving their capacity to adhere to it. In my conclusion, I reflect upon the program's public health implications, including philosophical perspectives on prevention and the role of participation in addressing ecological determinants of health.

BEST PRACTICES FOR THE ELEMENTS OF THE AIR FORCE SUICIDE PREVENTION PROGRAM. C. Davis. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: N. Yuan, Ph.D.. Site and Preceptor: Davis-Monthan Air Force Base - L. Fred, MPH

INTRODUCTION: Suicide is a leading cause of death among those aged 15-34 years of age. It is a growing problem in the military. In 2011 there were 301 deaths by suicide where 50 of those deaths were from all Air Force installations. Davis-Monthan AFB (DMAFB) had two deaths among the active duty in the age range of 18-34. Death by suicide reduces the military's most important asset in the fight for freedom, manpower. Air Force leadership recognizes that airmen are members of a high risk group and prevention needs to be a priority. Thus, there is a need to increase suicide prevention supported by best practices among airmen aged 18-34. **INTERNSHIP:** This internship was developed to assist Air Force leadership in determining which best practice and suicide screening tools would complement existing programs. The Best practices and tools had to be compliant with the Air Force Instruction (AFI) 90-505 which governs and guides suicide prevention practices. They also needed to address limitations in the current guide which lacked advising on specific prevention practices. **OUTCOMES:** A comprehensive report including recommendation to supplement the existing suicide prevention program was created and presented to leadership at DMAFB. The guidance was created in accordance with the AFI 90-505. Also a list of recommendations was provided regarding utilization of an environment assessment tool by commanders to assess the military work climate. **CONCLUSION:** The Suicide Prevention Subcommittee Chair of the Integrated Delivery System at DMAFB reviewed the recommendations. Feedback indicated that the review and application process of the suicide prevention recommendations will be ongoing.

INTEGRATING PRECONCEPTION HEALTH INTO PUBLIC HEALTH PROGRAMS AND EFFORTS. **N. Piermarini**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: N. Yuan, Ph.D.. Site and Preceptor: Arizona Department of Health Services - A. Means, MBA/HCM

The Arizona Department of Health Services (ADHS) has prioritized preconception health efforts in order to lower infant mortality rates throughout Arizona. This internship project assessed current preconception health education integration efforts that were implemented through public health programs administered through the Bureau of Women's and Children's Health (BWCH). In addition, this project identified strategies for integrating preconception health education into other public health programs offered by various departments and bureaus throughout ADHS. Three BWCH public health programs were selected for preconception health integration assessment and five other ADHS public health programs were included as well. The goal of the internship project was to collect data that could be used to advance PCH integration and PCH efforts throughout BWCH and ADHS public health programs to lower infant mortality rates throughout the State of Arizona.

MENTAL HEALTH FIRST AID FOR COMMUNITY HEALTH WORKERS.
M. Alexander. University of Arizona, Tucson, AZ, U.S.A. MPH Internship
Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: AzCHOW -
L. Verdugo

Introduction: In Arizona, rates of mental illness exceed the national average. This internship explores whether and how community health workers (CHWs) can provide a viable resource to individuals with mental illness in chronically underserved communities. Methods: Six key informant interviews elicited behavioral health provider (BHP) perceptions of CHWs' capacity to recognize behavioral health problems and be active referring agents. CHWs enrolled in Mental Health First Aid training completed pre-/post-certification surveys and participated in a follow-up focus group. CHW measures included changes in knowledge of and stigma towards mental illness, and changes in self-efficacy in addressing the behavioral health needs of their clients. Results: BHPs supported training CHWs to recognize mental illness in clients and refer them to additional behavioral health services. BHPs and CHWs agreed that CHWs play a key role in identifying unmet community mental health needs. They agreed that to effectively deliver behavioral health support, CHWs should be trained on using a standardized curriculum, receive professional support in maintaining personal and professional boundaries, and be trained on helping clients access the behavioral health network. BHPs and CHWs expressed that the use of Mental Health First Aid in combination with a depression scale and training time designated to cultural competency would assist CHWs in responding to the behavioral health needs of their clients. Conclusion: Certifying CHWs in Mental Health First Aid has the potential to improve behavioral health referral services in chronically underserved communities.

IMPACT OF PREVENTIVE DENTISTRY ON ORAL HEALTH OUTCOMES FOR YOUTH IN TUCSON, ARIZONA. **E. Dougherty**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: El Rio Community Health Center - G. LaChance, DDS

Background: The El Rio Community Health Center: Dental is dedicated to serving the dental needs of children in Tucson, AZ. The United States Department of Health and Human Services ranks tooth decay as the most common childhood disease for children in the United States and according to the Centers for Disease Control and Prevention, 75% of third graders in the state of Arizona have at least one dental caries experience, either treated or untreated. In the US, Arizona has the highest rate of children who have experienced dental caries, which is a completely preventable disease. El Rio offers preventive dental services to children at outreach events and at in-clinic appointments. Three of the preventive services offered include: Fluoride Varnish Treatments (FLVTs), Oral Hygiene Instruction (OHI), and Nutritional Counseling (NC). Methods: This internship was a mixed methods, retrospective study. Sixty-six patient charts were identified as fitting the inclusion criteria and analyzed based on number of dental caries experiences, FLVTs, and appointments. Data was collected and a Spearman Correlation Coefficient was used to test the null hypothesis that the change in dental caries is independent of the number of FLVTs. Phone calls were placed to each family in the study, with a total of 21 interviews completed regarding OHI, NC, and experiences at El Rio. Qualitative and quantitative data were analyzed and compared. Conclusion: Data collected indicate a statistically significant relationship between FLVTs and change in dental caries. Parents of children who experienced a decrease in dental caries reported a higher rate of impact of OHI on at home care, while also reporting higher rates of anxiety in the dental chair, and the highest rate of consistency of dental team between visits.

EXAMINING STRESS LEVELS AND EMOTIONAL HEALTH OF YOUTH WHO PARTICIPATE IN MUSIC EDUCATION IN PARAGUAY. L.

McCullough. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: Capiata, Paraguay - A. Burt, B.A/Masters

There is an emerging perspective among public health professionals of art activities as an integral part of healthcare environments as well as in preventative strategies. Practicing music may affect stress and emotional health by providing an outlet for daily stressors. As Paraguayans struggle with economic stress on a daily basis, this community is an ideal location to study stress and emotional health. The purpose of this study is to explore the effects of music education on the stress levels and perceived emotional health of youth-aged individuals in Capiatá, Paraguay. The methodology includes one-on-one interviews to illuminate how the adolescents personally link the concepts of stress and emotional health to music. Stress level surveys will be utilized and compared against control subjects (non-music students) to see if the music program does affect the stress levels of the adolescents participating in music education in a significant manner. This project would then provide the foundation for further research and fill the need for empirical evidence that can justify the fact: If we want to have emotionally healthy children, adolescents and youth then we must focus on their holistic health, and continue all programs that provide that support. The findings will be provided to the music education program in Paraguay, Sonidos de La Tierra, in a newsletters, annual reports, and presentations to potential funders.

A YPAR APPROACH TO YOUTH EMPOWERMENT; CREATING YOUTH-LED ACTION PLANS TO IMPROVE HEALTH OUTCOMES FOR YOUTH LIVING ON THE NEW PASCUA YAQUI RESERVATION.. L. Valdez.

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: Sewa Uusim, Pascua Yaqui Tribe, Tucson AZ - A. Cocio

Introduction Despite the efforts to ameliorate substance abuse with the use of prevention and clinical programs, the prevalence of substance abuse in some American Indian communities has not improved significantly. There is a growing trend to change research and intervention strategies with AI/AN communities in order to guarantee cultural responsiveness and increase effectiveness. **Purpose** An approach imbedded in Youth Empowerment Model and Community Youth Development was used for Youth Participatory Action Research (YPAR) that informed the development of youth-led action plans aimed at decreasing the prevalence of substance abuse (SA) in youth of the Pascua Yaqui Tribe (PYT). This internship also aimed to acquire an understanding of health perspectives and sociocultural correlates related to youth SA in this community. **Methods** The curriculum employed was partially based on a critical pedagogy philosophy of education, to build critical consciousness through a “generative theme” building process and youth-led research projects. Activities included spoken word, community social mapping, causal root tree mapping, focus groups, photography, and generative theme building. **Results** Findings of this collaborative project led to themes related to Drug and Alcohol Use and Access, Social Cohesion and Intergenerational Exchange, Expansion of Knowledge Base, Health Promotion and Awareness, Importance of Culture and Youth Civic Engagement Discussion. Pervasive health disparities found in the Pascua Yaqui tribe can be remedied only with the voice and involvement of all community members. Only by understanding the profound and sometimes overlooked effects of systemic inequality on underserved and marginalized communities can we begin to understand the changes that need to be made.

PSYCHOSOCIAL IMPACTS WITH OUTDOOR ADVENTURE-BASED POSITIVE YOUTH DEVELOPMENT: KIDVENTURES PROGRAM EVALUATION. **L. Walker**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Reinschmidt, PhD., MPH. Site and Preceptor: Tierra Wild, Prescott, AZ - M. Smith, M.Ed.

Youth need opportunities to grow physically and psychosocially, in positive, enriching environments. Outdoor adventure programs for youth provide great opportunities to psychosocially benefit their participants in the natural setting. This study explored the psychosocial impacts of 67 participants (ages 6-14) using qualitative and quantitative inquiry for a program evaluation of a 5-day outdoor adventure program called KidVentures. Participants shared their experiences in themes of emotional, cognitive, intrapersonal and interpersonal impacts. The findings encourage outdoor adventure programs such as KidVentures to incorporate positive youth development (PYD) theory in designing curriculum to include: opportunities for youth to engage in challenging tasks that promote learning of valued skills, to form strong social bonds with non-familial adults and prosocial peers, and to develop and confirm positive identities. Public health prevention should integrate these findings into creating and implementing outdoor adventure-based PYD programs as an approach to improve physical and psychosocial health for youth, so that they may improve their quality of life and more likely to be healthy and active adults.

Improving Health amongst Vulnerable Populations

Session VII: 1:20 – 4:00

Drachman Hall, Room A122

Abstracts

TRANSLATING ASTHMA MANAGEMENT RESEARCH TO PRACTICE:
LESSONS LEARNED FROM CREATING AN INTERVENTION PROGRAM
MANUAL. **S. David**. University of Arizona, Tucson, AZ, U.S.A. MPH
Internship Committee Chair: L. Gerald, PhD, MSPH. Site and Preceptor:
American Lung Association of Arizona, Tucson - D. Bryson, R.N., AE-C

Background: Asthma is a chronic lung disease and a leading contributor to childhood morbidity with much of the excess morbidity associated with medication non-adherence. Consequently, the National Asthma Education and Prevention Program identified the need for effective medication adherence programs. The Supervised Asthma Medication in Schools (SAMS) research project was developed to provide directly observed, daily controller medications to students as part of a comprehensive, school-based asthma intervention. This proved to be an efficacious approach to increase medication adherence and asthma control. Approach: The current project translates the research into a program model for community and school partnerships to administer. Through collaboration with local schools and the American Lung Association, a program guide was created providing information and support on planning, maintaining, and evaluating such a program. Throughout the creation of the manual, implementation challenges arose and mitigation strategies were identified. Findings: Parent and community partnerships early in the project clarify goals and expectations. Strategic evaluation demonstrates program benefits and guides management. Tailoring to each site integrates SAMS into the school environment. The major challenges for translating SAMS into a sustainable community program relate to funding and acquiring medication. Discussion: Local schools and community partners appear well equipped to implement SAMS. To realize the full potential of this program, it will be necessary to solve the challenges of funding and acquiring medication. Future research demonstrating the cost-effectiveness of public health spending in schools is needed to inform policies which can address these challenges and improve population level asthma control.

VIRTUAL REALITY-BASED BALANCE TRAINING IN CANCER PATIENTS WITH CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY: A RANDOMIZED CONTROLLED TRIAL . **D. Holloway**.
University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Department of Surgery - B. Najafi, PhD

Background: Evidence is limited but suggests that chemotherapy-induced peripheral neuropathy (CIPN) is associated with impairment of balance in cancer patients, and may increase the risk of falls. CIPN specific exercise training programs targeting balance impairments have not been developed. This study, through the Department of Surgery was designed to investigate the effect of virtual reality-based exercise training (ExerGaming) on balance performance in cancer patients with confirmed CIPN. Methods: Six patients with cancer were recruited from the Arizona Cancer Center at North UMC Campus who had confirmed CIPN (vibration perception threshold test (VPT), cut off value >25 Volt) were enrolled into the study and randomized into an intervention (IG n=2) or control group (CG n=4) (age 73.7±5.4). The IG performed ExerGaming, which included personalized and motivational postural balance and dynamic balance tasks. The training was conducted twice a week for four weeks. The CG received usual care treatment. Improvements in postural balance were quantified by a reduction in ankle joint, hip joint, and center of mass (COM) measured by validated wearable sensor-based assessment during two 30-sec according to Romberg protocol (with eyes open and eyes closed). Results: Preliminary findings show a reduction in COM sway (eyes open change: IG -40%, CG +16%. Eyes closed change: IG -46%, CG +8%) and ankle sway (eyes open change: IG -47%, CG +17%. Eyes closed change: IG -49%, CG +3%). Both groups demonstrated a reduction in hip sway. Discussion: These preliminary findings suggest that cancer patients with confirmed CIPN who perform balance training may demonstrate improvement in balance. This is an ongoing study and we anticipate significant improvements in balance in a larger sample of patients.

COCCIDIOIDOMYCOSIS TESTING AT SENTINEL HOSPITAL FACILITY IN SOUTHERN ARIZONA BORDER REGION.. **M. Casal Sepulveda.**

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: E. Oren, PhD, MS. Site and Preceptor: Office of Border Health, Arizona Department of Health Services - O. McCotter, MPH

Introduction: Valley fever is an endemic disease in the United States – Mexico border region including Arizona. It is estimated that around 150,000 undiagnosed primary coccidioidal infections occur in humans each year in these endemic areas, with Arizona having the highest number of reported cases, accounting for 70% of all national cases. **Objective:** To describe coccidioidomycosis-testing data in a Southern Arizona border region sentinel hospital site. **Materials and methods:** Review of laboratory database for cases identified between January 2007 and April 2009 at a Border Infectious Disease Surveillance sentinel site hospital. Data included diagnostic techniques, admission and discharge diagnosis and demographic characteristics of patients. **Results:** During this time period and site, 5411 serological tests were performed for coccidioidomycosis. After excluding indeterminate and research validation results, 5356 (99%) were valid completed tests. Among all included test performed, 753 (14%) were considered to had a positive result, and 4603 (86%) had a negative result. These laboratory information system data were then cleaned to include only non-duplicated information. This process identified 4692 individuals, with a mean age of 49.73 years. Of those tested, 298 (6.4%) had a positive result. **Discussion and conclusion:** Coccidioidomycosis serology is routinely performed in endemic regions of Arizona; the majority of patients receive multiple tests. Percentage of positive results was within range expected for border region. A more exhaustive analysis comparing data on patient level, to determine number of medical visits, number of tests and correlation with clinical symptoms could follow this study.

A COMPREHENSIVE EVALUATION OF A SCHOOL BASED SKIN CANCER PREVENTION PROGRAM IN GRADES 6-12: PROJECT 'STUDENTS ARE SUN SAFE' (SASS). **R. Davis**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: University of Arizona Cancer Center - D. Spantonos

INTRODUCTION Skin cancer is the most common cancer in the United States accounting for more cancer cases than all other types of cancers combined. UV exposure is the leading risk factor for skin cancer. Childhood and adolescence are vulnerable times for UV exposure and skin damage. Schools have a strong potential for reaching this population, yet there are few studies evaluating the effectiveness of school-based interventions in adolescents. The purpose of this evaluation was to evaluate the effectiveness of the Arizona Students Advocating Sun Safety (SASS) skin cancer prevention program in adolescents. **METHODS** A mixed methods multiphase design was used to evaluate Project SASS, predominantly driven by quantitative measures with some qualitative measures. The instruments included a pre-post survey (n=468), post intervention satisfaction survey (n= 1283), teacher questionnaire (n=39), presenter questionnaire (n=16), interviews (n=16), and focus groups (n=9). **RESULTS** After the intervention, participants perceived their risk of skin cancer as higher and reported less appeal for tanned skin. While participants showed an increase in sun safety knowledge, they did not report changes in sun exposure behaviors. Both teachers and presenters reported a high level of satisfaction with the program. **DISCUSSION** These findings suggest that Project SASS has potential to impact sun-safety knowledge in adolescents. Translation to sun-safe behaviors was not demonstrated on self-report despite favorable changes in perceptions, knowledge and beliefs. Efforts to modify the program to change behaviors are needed. This evaluation can be used as a guide for other school-based skin cancer prevention programs and evaluations in adolescents.

PROMOTION OF PARENT ENGAGEMENT IN SCHOOL-BASED HEALTH AND WELLNESS PROGRAMS. A. Armijo. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Healthy Schools Campaign - R. Ramirez-Richter, MS

Introduction: Schools play a necessary role in establishing health behaviors to prevent childhood obesity. An important strategy in reducing childhood obesity and improving the health of youth is increasing parent engagement in health and wellness initiatives. Chicago Public Schools is one of the largest schools in the nation, with 404,151 students, who are primarily low-income and of minority status. Low-income urban school districts have failed to engage parents around health and wellness initiatives. Methods: A parent-engagement toolkit for schoolteachers and administrators was developed based on principal and parent focus groups, and the Center for Disease Control Six Strategies for Parent Engagement. Additionally, a parent leadership training was evaluated for changes in knowledge, behavior and attitudes. Results: The parent engagement toolkit was modified from the CDC Parent Engagement Six Strategies for Parent Engagement and tailored to represent Chicago Public Schools. Tip sheets were also created as resources to carry out each strategy. The evaluation demonstrated an increase in parental knowledge and behavior. Parents had a greater understanding of healthy eating, wellness education, familiarity of school wellness team and local school wellness policy and intended to get involved with their child's school. This data confirms that parent leadership trainings are an effective dissemination method of critical information to engage parents around health and wellness. Conclusion: Promotion of parent engagement in school-based health and wellness initiatives requires a multi-faceted approach and appropriate dissemination of information. School administrators should utilize community partnerships, engage parents on multiple levels, and make considerations for health literacy, culture and communication methodology.

CHANGE IN PHYSICAL ACTIVITY & NUTRITION KNOWLEDGE AND ATTITUDES OF YOUTH PARTICIPATING IN THE FIRED UP FOR FITNESS PROGRAM. **C. Clauson**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Thomson, Ph.D.. Site and Preceptor: Tucson Fire Department - C. Gerber

Nearly one in three children in the United States are overweight or obese, and the rate of childhood obesity continues to rise. Overweight or obese status in childhood is associated with higher risk for obesity and obesity-related chronic diseases in adulthood, including higher incidence of cardiovascular disease, select cancers, hypertension, and diabetes. Public health initiatives, on a national and community level, seek to solve this problem by providing education, healthy food choices and environments for children to play and be active. The Tucson Fire Department has addressed the issue of childhood obesity by developing a multi-session educational curriculum called “Fired Up for Fitness.” The program educates youth on the importance of maintaining a healthy lifestyle by promoting nutritious food choices and regular exercise/physical activity. The purpose of this study was to assess change in knowledge and attitudes of youth participating in the Fired Up for Fitness Program. Eight 5th grade classrooms from three Tucson Unified School District schools were selected to participate in this study, consisting of a student demographic in which over 80% were eligible for free or reduced-price lunch. Pre and Post Nutrition and Physical Fitness surveys were given before and after implementation of the Fired Up for Fitness Program. Survey results showed an increase in knowledge and enhanced attitudes toward healthy nutrition and physical activity behaviors from pre to post-survey, reflecting a positive evaluation of the Fired Up for Fitness Program. Future efforts should expand to determine if the program also impacts health indicators in youth such as attainment or maintenance of healthy body weight, meeting daily activity goals and/or improved nutritional status.

PERCEPTION, UTILIZATION, MAINTENANCE AND BIO-EFFICACY OF RANDOMLY SAMPLED LLIN IN AN AREA OF STABLE MALARIA TRANSMISSION IN WESTERN KENYA. **J. Schouest**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Ernst, Ph.D., MPH. Site and Preceptor: Kenya Medical Research Institute Centre for Global Health Research - S. Munga, Ph.D.

With an estimated 270 million cases and 627,000 deaths in 2012, malaria remains a serious global health challenge. Ninety-percent of cases occur in sub-Saharan Africa. Long Lasting Insecticide Treated Nets (LLIN) have been shown to be highly effective at reducing transmission rates. Randomized control trials have indicated life-spans of four to five years. The determinants of LLIN uptake and correct utilization have only been examined in limited contexts. Few have captured the fluid nature of LLIN ownership and interplay between environment and sociological motivations that determine real world utilization and perceptions. In order to examine the determinants of continued bio-efficacy of LLIN ownership, a cross-sectional research study was conducted in Miwani, Kenya. Malaria is highly endemic in Miwani, with an estimated 50% parasite prevalence. We sampled 150 bednets from households drawn at random from a community census. A 51 item questionnaire was simultaneously administered to examine knowledge areas such as History, Use, Perceived Effectiveness, Maintenance, Condition and an Observational section. Collected bednets were tested for bio-efficacy using the WHO Cone bioassay test. Poisson and inverse binomial regression were utilized to analyze the associations between maintenance and use with increased continued bio-efficacy of the collected bednet. After adjustment for confounders and covariates, frequent washing, use of harsh detergent and full sun drying maintenance behaviors were associated with decreased bio-efficacy of the LLIN, and hanging over or in proximity to sharp objects was associated as a utilization practice. This research should inform future attempts to explore the complex relationship, politics and economics of this promising vector control measure.

A STUDY ON IMMUNIZATION COVERAGE AND PERSONAL BELIEF EXEMPTIONS IN PIMA COUNTY AREA SCHOOLS. S. Garcia. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: K. Ernst, Ph.D., MPH. Site and Preceptor: Pima County Health Department - F. Garcia, MD

Background: Declining immunization coverage in school age children is a growing public health concern. Clustering of low coverage has been recently linked to outbreaks of pertussis (2010) and measles (2008) in California. Characterizing vaccine coverage among schools within geographic areas may be beneficial to identifying high risk sites or areas for future outbreaks and can direct control strategies. **Objectives:** The current study aims to present a description of immunization coverage and vaccine exemptions in Pima County area schools by school grade level (kindergarten, 6th, 10th), vaccine type (DTAP, Polio, MMR, Hepatitis B, Varicella), and trends over five years (2008-2012). Furthermore, a spatial visualization will identify high risk areas and/or sites. **Methods:** Data on school immunizations was compiled from vaccine reports from the Pima County Health Department (PCHD). STATA (v12.0, StataCorp) was used to perform statistical analysis on immunization coverage. ArcMap (v10.2, ESRI) and SaTScan (v9.2) were used to illustrate study findings. **Results:** During the five year time span assessed in this study, immunization coverage has been high (>93%) for all Arizona required student immunizations. Overall trends in vaccine coverage have been decreasing by 2-5% over the time period. Total and permanent personal belief exemptions (PBEs) have been increasing by 42.7% and 28.4%, respectively. Conducting spatial analysis revealed high risk sites in the Northeastern portion of Pima County. **Conclusion:** Characterization of immunization coverage in Pima County schools revealed potential targets for public health intervention measures. This may assist in utilizing local public health resources effectively. Future research may seek to understand the underlying determinants contributing to the high risk sites.

Building Capacity and Promoting Wellness

Session VIII: 1:20 – 4:20

*Drachman Hall, Room 326, video-conferenced
Building 2, Telehealth Amphitheater
Room 2306, Phoenix*

Abstracts

PROJECT 21: A WEB-BASED INTERVENTION TO REDUCE HIGH-RISK ALCOHOL CONSUMPTION AMONG UNIVERSITY OF ARIZONA STUDENTS CELEBRATING THEIR 21ST BIRTHDAY. S. Nagaratnam.

University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: University of Arizona Campus Health Promotions and Preventive Services - M. Fleck, MPH

Introduction: 21st birthday celebrations are often linked with high risk alcohol consumption, which can lead to a host of negative health and safety consequences including alcohol poisoning, motor vehicle accidents and assault. To address this behavior among University of Arizona (UA) students who are celebrating their 21st birthday, the Health Promotion and Preventive Services (HPPS) office within the UA Campus Health Service (CHS) is developing Project 21: an event-specific, web-based intervention that provides 1) individualized feedback on planned blood alcohol content (BAC) levels; 2) alternative activities to alcohol consumption; and 3) additional health resources related to alcohol consumption. This will be CHS' first program designed to address high risk alcohol consumption specifically among 21-year-olds at the University. Goals: 1) To design a responsive website ("responsive" meaning adaptable to a variety of devices including smartphones and tablets) based on the content and site map devised by the Project 21 team prior to the start of the internship; and 2) To prepare a survey that will be used to evaluate the website's appeal and effectiveness within the target population. Methods: Utilized the software Adobe Illustrator to create initial mockups for each page of the website, including the interactive features "Plan Your Night" and "BAC Calculator". Several design ideas were evaluated and modified to achieve a minimalist aesthetic and optimal responsive design. Electronic evaluation forms were created using Google Forms. Output: The final designs were shared with the Student Affairs Systems Group so that they could use these designs to build the website. The evaluation forms were created, as well as the email invitations that will be sent to students.

GARFIELD COMMUNITY HEALTH ASSESSMENT. **R. Peterson.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Puente Arizona - C. Garcia

The purpose of this assessment is two fold: 1) to carry out a community health assessment of the Garfield District, an urban neighborhood located in downtown Phoenix, and 2), in so doing, to increase the capacity of the community and its residents to become empowered in making educated decisions about their health. Utilizing a community-based participatory approach, the specific aims, objectives, and questions to be answered include investigating perceived health problems in the community by utilizing analytical tools to generate and evaluate evidence by inviting participation from citizens, community members, and health care providers. Furthermore, we will engage the community in a culturally competent manner by working with Health Promoters from the local community in administering health assessment surveys. Given that cultural factors are an important determinant of health, we will seek to reduce the marginalization and stigmatization of minority groups by identifying paths to increase access to culturally appropriate health care services. Preliminary data from the Garfield community demonstrates that severe disparities exist among the major health indicators including education, income, and socioeconomic status. Data collected during the 2010 census identifies the median household income in the Garfield community to be \$23, 554, less than half of the median income in Arizona of \$49,214. Additionally, it is estimated that 52% of Garfield community residents have incomes below the poverty level, compared to 16.3% of Arizona residents. Moreover, only 33.3% of Garfield residents have attained a High School education or equivalent compared to 59% of Arizona residents, and only 3% have attained a college degree or higher compared to 26% of Arizona residents.

**BUILDING CAPACITY AND STRENGTHENING ARIZONA'S
COMMUNITY HEALTH WORKER MOVEMENT AND LEADERSHIP . D.
Perez-Ramirez.** University of Arizona, Tucson, AZ, U.S.A. MPH Internship
Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Arizona Community
Health Outreach Worker Network - F. Redondo, BS

Community Health Workers play an important role in not only bridging services to underserved populations but also empowering communities to address the social determinants of health that impact health outcomes. This empowerment is essential for transforming communities and encouraging them to be change agents for the health, wellbeing, and future of their own communities. The Arizona Community Health Outreach Worker Network (AZCHOW) is a volunteer CHW-run statewide organization designed to unify, while preserving cultural diversity among community health workers. Based on input provided from network members, AZCHOW leadership has guided the development of its organizational strategic plan. This strategic plan will be subsequently presented to the entire network's membership at their 2014 statewide conference and where strategic committees stemming from the different identified goals and objectives will be formed among the members. Engaging in organizational development practices is imperative to increasing capacity, developing programs, growing membership, enhancing network cohesion, strengthening partnerships and improving overall sustainability of the network and CHW's in Arizona.

INTEGRATION RECOMMENDATIONS FOR PEER SUPPORT SERVICES SERVING INDIVIDUALS WITH A SERIOUS MENTAL ILLNESS AND SUBSTANCE USE DISORDER IN ARIZONA. **E. Schuster**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: C. Rosales, MD, MS. Site and Preceptor: Arizona Department of Health Services (ADHS) - K. Bashor, MC, BS

Background: Integrated care services are at the forefront of healthcare and have been a recent national focus. Co-occurrence among substance abuse and mental illness accounts for 8.4 million adults in the United States. Currently services for individuals with serious mental illness (SMI) and substance use disorder (SUD) are separated, and one must navigate the fragmented system to receive both types of services. The objective of this project was to identify and address the barriers and concerns among stakeholders regarding the integration of care between peer support services for individuals with SMI and SUD. Methods: Focus groups and interviews were performed as the data collection method for this program evaluation. This type of evaluation allows for stakeholders to give in-depth, subjective perspectives about peer support services. Based on the objectives, target population, and information that the Arizona Department of Health Services (ADHS) was seeking to determine, a set of ten questions were generated. Results: Five focus groups and four clinician interviews were conducted in Maricopa County, for a total of 65 participants. The trends indicated the lack of communication and cooperation between agencies, the need for greater public understanding, funding and insurance coverage concerns, limited access and knowledge about available resources, proper training and supervision, and qualified clinicians and peer support staff. Conclusions: Findings show a shared outlook of combining services for individuals with SMI and SUD. Some recommendations include the expansion of peer support curriculum, a separate resource entity, community engagement, and a state-level stakeholder task force.

WORKPLACE BREASTFEEDING POLICY. **J. Burns**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa County Department of Public Health - B. England, MD, MPH

Breastfeeding has long been established as a benefit to an infant's health, in addition to economic and social benefits for communities. The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for the first six months of life. The CDC reports that only 15% of Arizona infants met this goal. When a woman expects to work full-time, breastfeeding initiation and duration are lower. A review of literature on workplace breastfeeding policy and an analysis of the Infant at Work Program (IAWP) at the Arizona Department of Health Services (ADHS) were conducted. ADHS employees who participated in the IAWP and their co-workers were surveyed. This data was used to propose a pilot IAWP for the Maricopa County Department of Public Health. National data was used to estimate potential healthcare cost savings of instituting this program. 100% of breastfeeding IAWP participants met the AAP breastfeeding recommendation, 100% were very satisfied with the program, 75% were very satisfied with their job, 100% reported that the IAWP contributed to their job satisfaction, and participants reported an average of 30 minutes to 1 hour of reduced productivity due to infant care. 90% of co-workers reported that it was not disruptive to have an infant in the workplace, 100% said they were very satisfied with the program, and 60% reported participants spent 30 minutes to 1 hour on infant care. If breastfeeding improved by only 50% at six-months for Arizona women by participating in the IAWP, it could save the US healthcare system \$12,300 for every ten women that participated. Workplaces with policy allowing infants at or near their workplace substantially improve breastfeeding duration, reducing healthcare costs and potentially increasing employee retention and satisfaction.

MEDICAL MARIJUANA TRENDS. **K. Anand**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: University of Arizona/AZDHS - D. Hussaini, PhD

In 2010, the Arizona Medical Marijuana Act (AMMA) was passed which required the Arizona Department of Health Services (AZDHS) to establish a medical marijuana program. Since the institution of the program, AZDHS has monitored the “top 24” frequent certifiers for medicinal marijuana who in 2012 accounted for 75% of the total number of marijuana certifications in the state. ADHS contracted with the University Of Arizona College Of Public Health to create a CME module to educate physicians about the medical marijuana act and their responsibilities. Objective: To determine the composition of physicians completing the CME module, to assess the number of certifications written by these physicians, and to understand the trend that has occurred. A secondary aim is to determine whether the number of opioid prescriptions written by physicians in Arizona has decreased on a yearly basis since the institution of the AMMA. Results: Among those individuals completing the training module, 25 physicians were identified by ADHS as having certified patients both before and after the module completion. Those 25 physicians account for 8782 certifications prior to the module and 28131 certifications after the institution of the module, a significant increase ($p < 0.0001$). The results are surprising as we expected this number to decrease on the assumption that physicians are over certifying and not cross referencing the Board of Controlled Substances and taking the CME module would educate them on these topics. The data regarding the number of opioid prescriptions written is still pending. Hence this study demonstrates that further research is necessary in analyzing physician behavior with regards to medical marijuana certifications, with education of physicians playing a critical role.

IMPLEMENTATION OF A COMMUNITY HEALTH EDUCATION PROGRAM. **J. Llanes**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Esperanca - C. Araiza, MPH

Abstract Implementation of a Community Health Education Program Jaziel Llanes Background: Health education programs aim to better the health and lives of people through educational means. The public can gain valuable information through such programs. Objective: The following report delves into the process of implementing a community health education program in schools, after school programs, and community centers. Methods: Based on an assessment taken in the Central Phoenix region, an intervention was needed to help prevent the prevalence of unhealthy eating and lack of exercise in the community's youth, specifically among the Hispanic population. In order to assess the program's effectiveness a pretest and posttest were given to participants. A brochure was also created for the purpose of informing potential participants about the program. Results: After the implementation of the program the pretest and posttest were analyzed for the program's effectiveness in the improvement of nutritional knowledge and change and physical activity knowledge and change in 17 different areas. Conclusion: The health of individuals and communities may be affected by the implementation of health education programs. Implementing a community health education program requires partnerships with communities and other organizations in order to work efficiently. Providing the program to communities may increase their knowledge on the importance of nutrition in their lives.

VACCINE EXEMPTIONS - THE COST TO ARIZONA SCHOOLS. **S. Enders.**
University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G.
Barker, MBA, PhD. Site and Preceptor: TAPI - G. Hock

Abstract Vaccine Exemptions the Cost to Arizona Schools Scott Enders

Background: Personal or religious belief exemptions continue to increase leaving communities poised to be impacted by vaccine preventable diseases due to lower immunization rates. Exemptors tend to cluster in specific geographies resulting in some schools having higher exemption rates. In the event an outbreak is declared by the county health department or state, legislation in Arizona allows students with exemptions or without proof of immunity to be excluded from school for three weeks or longer. This project examines the impact to the school, county and family during a 2012 Mumps outbreak in a PreKindergarten-8th grade school in Arizona. Methods: This outbreak was evaluated to determine if it would impact school funding based on average daily attendance. Current Arizona immunization rate exemption data and this outbreak were used to model possible outcomes.

Results: The modeling demonstrated that an exemption rate of 8.5% could negatively impact school funding. Conclusions and Recommendations: Evidence supports several actions to address the growing trend of vaccine exemptions in schools. These include; public educational programs, school materials provided to parents and information regarding free or low cost vaccine locations. In addition, a school health report card or scorecard, which lists exemption rate data by school, should be created and made available to the public. This scorecard would allow parents to make informed decisions regarding where their children should attend school and reduce the risk of exposure to vaccine preventable disease outbreaks.

ERGONOMICS AT RAYTHEON MISSILE SYSTEMS. **K. Merems**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: T. Stobbe, PhD. Site and Preceptor: Raytheon Missile Systems - R. Force

The Raytheon Company is an industry leader in the defense market all over the world. The company is comprised of four businesses, Intelligence, Information and Services, Space and Airborne Systems and Missile Systems. Raytheon Missile Systems has a large manufacturing site in Tucson, Arizona and employs over 11,000 people. The large number of employees, working in both an office setting and manufacturing setting, creates a great need for an effective ergonomic process to prevent injuries. The Raytheon Missile Systems Environmental Health and Safety Internship involved training in the areas of both office and industrial ergonomics. The goal was to become an ergonomic evaluator and mentor and help achieve the goal of 100% tasks evaluated. Four industrial ergonomic evaluations were completed in addition to four office ergonomic evaluations. However, due to time constraints only eight evaluations were completed with no observed solutions. The internship evolved into an assessment of the effectiveness of the ergonomic process currently utilized at Raytheon Missile Systems in Tucson. The office ergonomic program is far more effective at solving ergonomic issues than the parallel industrial ergonomic program. Although cost of solutions and job tasks plays a large role in the comparison of the programs, there is a usable clearly defined process employed by the office ergonomic program while the industrial ergonomics program is more obscure.

Health Administration: Assessment and Evaluation

Session IX: 1:20 – 4:20

*Drachman Hall, Room 276, video-conferenced
Building 2, Room 2208, Phoenix*

Abstracts

DEVELOPMENT OF BANNER HEALTH CENTERS PEDIATRIC PATIENT CENTERED MEDICAL HOME. **W. Thiagarajan**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Banner Cardon's Children Hospital - R. Anderson, RN

Introduction: The Patient Centered Medical Home (PCMH) Model for health care delivery is an established concept that whose goal is to improve medical outcomes while reducing health care cost by assessing its strengths, recognize areas of improvement, and develop more efficient and effective patient centered care modalities. This model has shown positive outcomes within various healthcare metrics with emphasis placed on population health management to focus on health care disparities within this population. Banner's Pediatric Clinic in Maricopa, AZ has been chosen as a pilot site for PCMH implementation.

Methods: A GAP analysis is being performed at the Maricopa site to determine readiness of becoming a Pediatric PCMH. Interviews were done with clinic staff and providers to determine the clinic workflow and infrastructure capabilities. These data were compared with the standards set forth by the National Committee for Quality Assurance (NCQA). To be recognized as a PCMH, the NCQA has established 6 Major Standards with 27 Elements (of which, 6 are Must-Pass Elements). A cumulative score for each element determines if this site will achieve a Level 1, 2, or 3 recognition.

Results: All 6 Standards have been surveyed with the site Practice Manager but have not been critically scored yet. Initial results show >50% score in most elements with the relevant infrastructure in place to achieve at least Level 1 Recognition. However, gaps in the documenting process for certain required information are present.

Conclusion: Although the relevant infrastructure is in place to meet many of the PCMH guidelines, gaps in documentation of required data are present, which is necessary to pass certain requirements. However, Banner is in the process of addressing these documentation gaps and the evaluation process is still ongoing.

EVALUATION AND IMPLEMENTATION OF A TELEMEDICINE PROGRAM IN A HOSPITAL SETTING. . **O. Perez**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: St. Joseph's Hospital and Medical Center - B. Bullock, MS

BACKGROUND: The problem of providing specialty medical care to patients is receiving considerable attention in the world. Telemedicine can provide specialty medical care to communities in need. **OBJECTIVE:** During the Spring and Fall 2013, the telemedicine program recently implemented at the St. Joseph's Hospital and Medical Center's Emergency Department was examined to determine the impact on specialty care delivery in the emergency department. Observation and interview notes were taken during the evaluation process to identify barriers, workflow, and physician acceptance of telemedicine program. **METHODS:** Background research was conducted on implementation of telemedicine models; physicians were surveyed on their knowledge, usage and acceptance of telemedicine; participation at telemedicine program meetings was performed to note current progress and barriers; and a training manual for implementing a telemedicine program was created. **CONCLUSION:** Implementation of a telemedicine program is a complex issue and requires an entire team to assemble. Having a well-respected champion and documented procedures are crucial to provide awareness and education to peers.

VACCINE PREVENTABLE DISEASES IN COLLEGE STUDENTS. T.

Blocher (Gregory). University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: TAPI-The Arizona Partners for Immunization - G. Hock, RN, MPH

Background: In Arizona the only vaccine required to attend ASU, UofA and NAU is MMR (Measles, Mumps, Rubella). This is also the same policy for all other universities in the PAC 12 and the Big 10 conferences. There is a policy in place that requires every student have proof of this vaccine before they can register for classes. This policy unfortunately only covers one vaccine, while there are others that are recommended by the Centers for Disease Control (Meningitis, Pertussis/Tetanus) and are needed for college age students. Having a large population of college students in a condensed community leaves them vulnerable during a disease outbreak. **Methods:** The current process (for each university) to verify student MMR vaccine upon admission was evaluated. In addition each college disease outbreak protocol was reviewed and analyzed. No disease prevention plan was found for the three universities in Arizona. The Arizona State Immunization Information System was also evaluated: it keeps record of all immunizations given in the state and is a database for public health records. **Results:** Each university has a different system to verify MMR vaccinations and record disease outbreaks. There is also no consistency in university disease protocols aligning with Centers for Disease Control recommendations. **Conclusion/Recommendation:** The three state universities should use the free state immunization system to record student vaccines. In addition, it was recommended to the Arizona Board of Regents and community stakeholders that new policy should be considered to require students to obtain all preventable disease vaccines per the CDC guidelines, not just MMR. The recommendation can be a model for other universities in the PAC12 and Big 10 conferences to adopt.

DYSLIPIDEMIA IN SURVIVORS OF CHILDHOOD CANCER AND PUBLIC HEALTH IMPLICATIONS. **C. Popescu**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Phoenix Children's Hospital - G. Rosen, MD

Background: Subsequent treatment for cancer, be it surgery, radiation, chemotherapy or biologic therapy has an effect on cancer survivors and quality of life. One of these effects is characterized as dyslipidemia. Dyslipidemia is defined as an elevated level of low-density lipoprotein (LDL) cholesterol levels or low levels of high-density lipoprotein (HDL) cholesterol. It also is an important risk factor for coronary heart disease and Type 2 diabetes. Methods: The Phoenix Children's Hospital patient registry totals 315 patients, all childhood cancer survivors enrolled in the Cancer Survivor/ Long Term Follow Program. Research data were obtained from the initial three follow-up visits. Information gathered from the Survivor Clinic Survey Questionnaire, social work assessment, and a comprehensive survivor nutritional evaluation and laboratory blood was analyzed and recorded. Results: The nutritional evaluation results showed that most of the survivors had an inadequate intake of calcium, vegetables and fruits and low levels of Vitamin D. In addition the percentage of patients that had a BMI-percentile associated with overweight or obese weight status was constant throughout the three visits. Total cholesterol levels were higher than normal for 24.91% of the patients on the first visit, 25.60% on the second visit and 30% on the third visit, while the levels of lipid profile associated with dyslipidemia were consistent throughout the 3 visits. In order to improve the awareness of the increased risks to cardiovascular disease and Type 2 diabetes in survivors, an educational brochure was created and sent to survivors after their follow-up visit. The goal was focused on weight management, nutrition and physical activity as non-pharmacological therapy alternatives to lowering dyslipidemia associated risk factors.

COMPARISON OF THE BARRIERS TO POISON CONTROL CENTER UTILIZATION AMONG URBAN AND RURAL POPULATIONS IN ARIZONA. **O. Otaluka**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Banner Good Samaritan Poison and Drug Information Center - D. Brooks, MD

Background: Utilization of Poison Control Centers (PCC) has been shown to be of great public health importance by improving care of poisoned patients and reducing unnecessary use of healthcare resources. An increased awareness of the existence and services of PCC is expected to reduce unnecessary 911 services and Emergency Department visits thereby reducing healthcare costs. **Objective:** This internship was designed to assess the knowledge of PCC among urban and rural citizens of Arizona. We hoped to identify barriers to PCC utilization among Arizona residents to better understand factors preventing PCC utilization. **Methodology:** A cross-sectional study of Arizona residents using a structured written survey in English and Spanish was performed over several weeks in 2014. Subjects' characteristics and their understanding of PCC services were obtained and divided into "urban" and "rural" groups based on zip code data. An analysis of the demography of the respondents will be performed using descriptive statistics. Continuous variables will be reported as means and standard deviations. Categorical variables will be reported as percentages; outcome variables will include 95% confidence intervals. Odds ratios may be reported depending on the identification of risk factors for management site and the development of symptoms. Results and Conclusions are pending and will be presented at the internship conference in April.

ASSESSMENT OF POLICIES, VITAL STATISTICS, AND EXTERNAL STAKEHOLDER INPUT SPECIFIC TO TEEN PREGNANCY IN ARIZONA.

J. Gibbs. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: Arizona Department of Health Services - A. Means, MBA, HCM

Background: From 2007 to 2010, Arizona teen pregnancy rates declined 27%. The contributing factors to the significant decline are unknown. However, reproductive federal and state policies affecting access to family planning services, sexuality education, abortion services, and contraception are known to impact teen pregnancy rates. Therefore, the Arizona Department of Health Services (ADHS) in partnership with the Arizona Public Health Training Center requested a study to look at Arizona social policies influencing teen pregnancy in Arizona. Methods: A focus group was conducted among 38 individuals working on ADHS Teen Pregnancy Prevention Program grants. Participants included staff from county health departments, faith based organizations and nonprofit agencies throughout Arizona. A questionnaire was used to measure external stakeholders' programs' strengths, weaknesses, opportunities, and threats. The questionnaire also measured how their work as a stakeholder has changed over the period, 2005 to 2010. A literature and web search to identify vital statistics and reproductive policies was also conducted. Results: Preliminary analysis shows declines in teen pregnancy rates may be primarily associated with the 10% increase in the use of oral contraception among female teens in Arizona over the time period, 2007-2011. Further, teen pregnancy prevention programs in Arizona have become more widespread and have increased focus on the use of evidence based practices. Conclusion: Evidence based teen pregnancy prevention programs and teen education on availability and use of contraception is crucial to teen pregnancy prevention efforts in Arizona.

HEALTH EDUCATOR TRAINING FOR TEEN PREGNANCY PREVENTION PROGRAMS. **J. Russo**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: Arizona Department of Health Services - L. Bellucci, MBA

Teen pregnancy prevention (TPP) programs funded through the Arizona Department of Health Services (ADHS) rely on the use of trained health educators to work with vulnerable youth populations statewide. In order to deliver curriculum with fidelity, these program facilitators must be well versed in a variety of education and health topics. The purpose of this internship project was to provide additional training materials for ADHS TPP contracting agencies, in order to ensure the competence of health educators. After conducting an initial needs assessment, a series of in-person and web-based trainings were developed and implemented with TPP contractors. Program evaluation data showed a statistically significant increase in knowledge and attitudes regarding training topics at $p=0.05$. However, there was a lack of significant improvement for questions relating to application of training content, indicating an ongoing need for professional development and staff training in practical application and teaching strategies.

EARLY DETECTION OF CHILD ABUSE. **C. Silva**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: Phoenix Children's Hospital - P. Garcia-Filion, PhD, MPH

Background: In the US, child abuse (CA) is estimated to occur at a rate of 9.1-17.1 per 1,000 children, accounting for up to 1,256,000 victims a year. Past research identified physical findings and social-behavioral (SB) cues as risk factors and point to emergency departments (ED) as locations for early detection. This research aimed to evaluate a CA screening algorithm implemented in the ED at an area hospital. Methods: Two phase project: 1) Retrospective analysis of pediatric patients presenting to the ED with suspected non-accidental trauma between January 2012 and July 2013. All subjects were previously evaluated by the institution's Child Protection Team and classified by likelihood of abuse; 2) Chart review of patients (≤ 24 mo) presenting on the first Tuesday and Saturday between November 2013 and January 2014. Results: Phase 1: 312 charts reviewed [median age: 6mo (IQR: 3, 10)]. SB risk factors not assessed in 26% (n=80), leaving a sample of 232 patients. The most and least commonly documented risk factors were responses of caregiver to social worker (n=109;35%) and patient to caregiver (n=252;81%), respectively. Documentation did not vary by abuse classification (p=0.583). A positive SB assessment was more likely among probable CA (p=0.047). Sensitivity to detect CA was 57%; specificity 62%. Phase 2: 454 charts reviewed [median age 10mo (IQR: 5, 16)]. 234(52%) charts did not document at least one of the five algorithm activators. 78(17%) documented exam was not disrobed. Conclusion: Frequency of a positive SB assessment in probable CA cases shows assessment is important. Low sensitivity indicates importance of assessing other clinical factor. Significant proportions of evaluations are not receiving a SB cue assessment, disrobed exam, or documentation, highlighting the need for ongoing evaluation and modification of CA algorithm.

PLANNING FOR PUBLIC HEALTH: HOW THE GENERAL PLAN CAN SOLVE PHOENIX'S MOST PRESSING PUBLIC HEALTH PROBLEMS. E. Guidas. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: G. Barker, MBA, PhD. Site and Preceptor: City of Phoenix, Planning and Development Department - J. Bednarek, MA

BACKGROUND: An increasing body of evidence suggests that our built environment, the settings in which we live, work, play, and exist as a community, greatly influences our wellbeing and ultimately, our health outcomes. Nevertheless, public health, transportation and city planning policies have been unable to keep up with the rapid growth of Phoenix, resulting in a variety of complex structural issues including a lack of access to recreation and healthy foods, compromised air quality and environmental issues, and unprecedented urban sprawl. Although multi-faceted in nature, preventable diseases such as obesity, diabetes, respiratory illnesses, cardiovascular disease, and injuries are exacerbated by the declining built environment. **METHODS:** The goal of the internship was to integrate public health research into the new General Plan in order to mitigate health issues caused by Phoenix's built environment. Prior to this, public health policy has historically been uninvolved in city development and planning. By attending planning meetings, conducting in-depth analysis of health issues, and fostering new collaborative partnerships, the objective was to create an industry standard that is both proactive and comprehensive in addressing urban health issues via the General Plan. **RESULTS:** Current drafts of the Phoenix General Plan include health data and potential policies specifically catered to improving health and wellness in Phoenix. **RECOMMENDATIONS:** City planners should continue to incorporate community health needs and results from health impact assessments into measurable health policies for Phoenix's new General Plan.

The Practice of Prevention in Underserved Populations

Session X: 1:20 – 2:20

Building 2, Room 2206, Phoenix

Abstracts

ASSESSMENT OF THE ARIZONA ALZHEIMER'S REGISTRY: A TEMPLATE FOR THE ALZHEIMER'S PREVENTION REGISTRY. K. Saunders. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Banner Alzheimer's Institute - J. Langbaum, PhD

Alzheimer's disease (AD) is responsible for millions of cases of dementia, costs billions of dollars in healthcare spending, is the 6th leading cause of death, and has no effective means of prevention, treatment, or cure. The scientific community faces significant hurdles in the evaluation of promising new treatments, largely in part due to enrollment challenges facing clinical trials. The Banner Alzheimer's Institute (BAI) in partnership with the Arizona Alzheimer's Consortium (AAC) created the Arizona Alzheimer's Registry (Registry) to allow for the screening and referral of interested participants into local AD related research projects. As outlined by its goals, the Registry increased awareness of AD research opportunities, enrolled a large number of people into this statewide database and referred hundreds of potential participants to AAC sites. Through this internship, the Registry was thoroughly assessed as an AD research pre-enrollment mechanism, as well as, a community outreach effort. The BAI, in collaboration with other academic and industry stakeholders, have formed the Alzheimer's Prevention Initiative (API) to facilitate the evaluation of the most promising pre-symptomatic AD treatments as quickly as possible. In an effort to support this goal the Alzheimer's Prevention Registry (APR) was devised. The APR is a web-based (www.endALZnow.org) community for people interested in receiving information regarding AD news and education, advances in research, and participation opportunities. The APR aims to enroll 250,000 participants into it in order to ensure successful enrollment into planned prevention trials. Through analysis of the Registry we created the framework for the APR. This internship allowed for active participation in the design, planning, and subsequent launch of the APR.

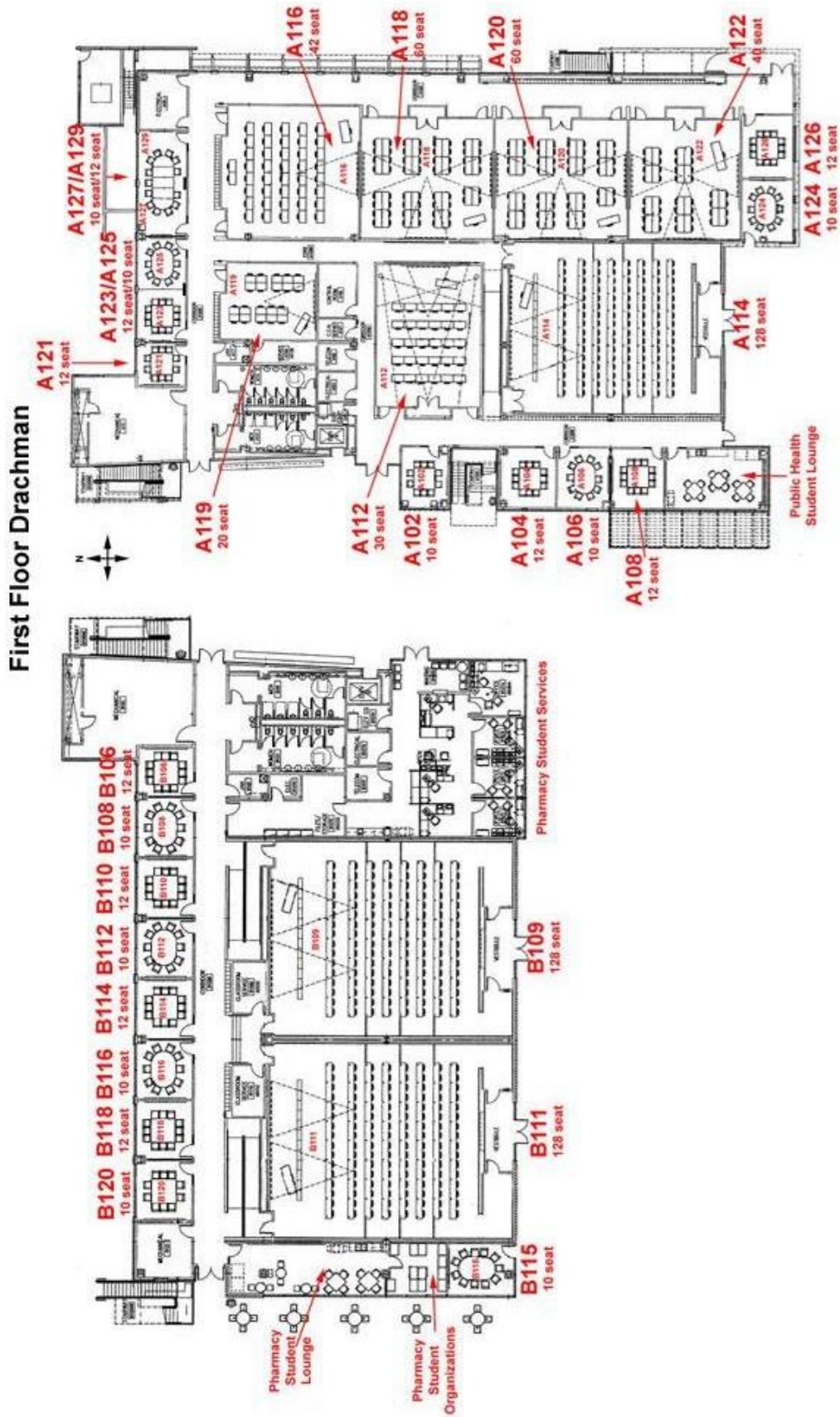
ADAPTATION OF A DIAGNOSTIC SCREENING TOOL TO ASSESS SEXUAL HEALTH CONCERNS AMONG IMMIGRANT AND REFUGEE WOMEN . **K. Belknap**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: D. Campos-Outcalt, MD, MPA. Site and Preceptor: Maricopa Integrative Health Center - C. Johnson-Agbakwu, MD, MSc

Female sexual dysfunction is multi-factorial issue involving anatomic, physiologic, and psychological factors. The most common type of sexual dysfunction - decreased desire - affects 32% of women. Much of the research into diagnosis of female sexual dysfunction has been conducted in a largely homogenous population of Western Anglo-Saxons, immigrant and refugee populations have been largely ignored. This study examined the utility of incorporating the Female Decreased Sexual Desire Screener (DSDS) as a screening tool to be orally conveyed across multiple languages to determine the prevalence of sexual health complaints among immigrant and refugee women. The study was completed at Maricopa Integrated Health System (MIHS), the leading safety net health system in Arizona. The first phase included conducting small focus groups to determine a basic understanding of culturally specific influences on women's sexual health and the appropriate terminology to use. Then culturally appropriate translations of the DSDS were administered at the annual exam or gynecological appointments for the patient population who meet the inclusion criteria. Qualitative analysis of the small focus groups was transcribed and analyzed. Quantitative analysis of the survey data was conducted incorporating descriptive analyses of the demographic variables and responses to the DSDS. There were varying perspectives across ethnic groups. Common themes that emerged were the need for privacy/modesty, the perception of traditional cultural norms on sexuality as distinct from American sexual values, experiences of sexual pain related to Female Genital Cutting, and a desire for more education on sexual health. The information was used to create education for clinicians working with refugee women to improve sexual health care in refugee populations.

DIABETES PREVENTION PROGRAM: PARTICIPANT MONITORING AND PROGRAM RECOGNITION. **C. Holiday**. University of Arizona, Tucson, AZ, U.S.A. MPH Internship Committee Chair: J. Foote, Ph.D. Site and Preceptor: Gila River Health Care Diabetes Prevention Program - T. Watson, MEd

The purpose of the public health internship (PHI) was to accomplish 3 goals for a diabetes prevention program (DPP). The 3 goals included developing an electronic participant monitoring tool through the Xerox MIDAS+ software, determining if the PHI site had adequate educational materials to meet the Center for Disease Control and Prevention (CDC) Diabetes Prevention Recognition Program (DPRP) requirements, and preparing the DPP to apply to the CDC DPRP. The MIDAS+ software is an information system that is used to track and monitor patient information and outcomes. The purpose of the PHI goals was to allow the DPP to understand and show participant outcomes and obtain program recognition from the CDC DPRP, which would increase the quality and accountability of the program. As the PHI involved more than one goal, methods included studying the host program and the CDC DPRP. After studying the programs and understanding software capabilities, in efforts to design and build the MIDAS+ monitoring tool, various data components and reporting requirements were analyzed. As a result of the methods, the design of the MIDAS+ was fully completed by the intern, but not built to completion as anticipated by the PHI timeline. Additionally, the DPP had adequate educational materials, but the DPP did not fully utilize the recommended curriculum throughout the entire diabetes prevention intervention. Lastly, the DPP did not fully collect required data needed for the CDC DPRP. Since the MIDAS+ tool was not completed, a contingency plan was put into place to ensure completeness. In conclusion, the newly designed MIDAS+ monitoring tool will improve DPP tracking and reporting. Awareness and new efforts will enable the DPP to fully integrate the recommended curriculum for improving participant outcomes.

Drachman Hall Map



The MPH Internship Experience

From the inception of the Master of Public Health Program in 1993, the culminating experience of the program's curriculum has been the internship. In the fall of 1999, MPH faculty determined that students needed a formal setting for making their oral presentations. A committee comprised of faculty, students, and student services professionals was formed to develop an appropriate presentation venue. In November 1999, the MPH Program debuted its first MPH Internship Conference. The format of the conference, held each fall and spring, is similar to that of a professional or scientific meeting. A keynote speaker opens the meeting and the remainder of the conference is comprised of several concurrent sessions of student presentations grouped by theme.

Since its establishment, the MPH Internship Conference has grown in stature and significance to the Mel and Enid Zuckerman College of Public Health (MEZCOPH). The College uses this event as a public health networking tool by inviting public health practitioners, partners, and alumni throughout the state. The key to its success lies in the student participation. The MPH Internship Conference is a student-run production. Students coordinate the multitude of details involved in its planning, promotion, and culmination; student presentations are its foundation.

Through contributions they have made and the benefits they have gained, the Internship Conference reflects the indelible handprint of MEZCOPH students on public health projects and agencies throughout the world.



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