

Understanding the Complexities of Illicit Substance Use: A 4th Year Medical Student Elective

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Background

Illicit substance use affects a large proportion of the population served by UCSF faculty, residents and students, especially patients suffering from complicated chronic medical conditions. San Francisco has ranked in the top five in the United States for emergency department drug episodes for all of the last decade. Drug poisoning was the fifth leading cause of death in San Francisco from 1990-1995 resulting in an estimated 33,000 expected years of life lost. During 1999, there were 12,000 drug or alcohol related hospitalizations in San Francisco. At San Francisco General Hospital alone, there were 3945 Emergency Department discharges and inpatient admissions for injection drug use related to skin and soft tissue infections in fiscal year 1999-2000. Skin and soft tissue infection was the number one primary diagnosis for medical/surgical admission at SFGH during the same year.

UCSF needs to teach medical students specifically about the issues related to illicit substance use and abuse. These issues extend beyond the clinical manifestations of disease. There is a need for the clinician to understand the root causes of substance use as well as the historical, behavioral and cultural manifestations. We believe there is a deficiency in the current curriculum regarding the teaching of substance use and abuse issues including causation, cultural and behavioral aspects, co-morbidities, treatment and prevention. Many students have expressed an interest in furthering their understanding of these issues particularly with emphases on the patient and his or her coping with illness, suffering and pain and the cultural aspects of the intermixing of drug use, chronic illness, adherence to treatment, and poverty.

Proposal: We propose a Fourth Year Medical Student elective to increase students understanding of the complexities of illicit substance use in the natural social world outside the clinics and hospitals. This project involves the collaboration of a primary care physician and an anthropologist to develop and pilot a curriculum with an integrated approach to understanding substance use. The clinician has many years of experience in treating substance users in homeless clinics and other primary care settings. The anthropologist has been conducting participant-observation in the natural settings of the homeless substance users (i.e., homeless shooting encampments, street corners, shooting galleries, etc.) in San Francisco since 1994 and is the Principal Investigator on an NIH R01 entitled "The Logics for HIV Risk Among Homeless Heroin Injectors."

The requested funding will provide faculty and administrative time to develop two phases of a proposed curriculum. In the first phase of this curriculum a two-week elective will be developed. This two-week block will contain a weekly seminar, intensive readings, 4-6

site visits, and an independent project. The seminar will cover historical and sociocultural aspects of substance use. Readings, taken from the medical literature, will focus on neurobiology, psychopharmacology, as well as theories of addiction, treatment and prevention. Site visits will be made to the ethnographic research sites of the co-directors. The independent project will involve student research of a specific clinical case or issue, e.g., new alternatives for the treatment of opiate addiction, the prevention of hepatitis C infection, the interface between mental health and substance abuse, etc. The students will be encouraged to take the widest view possible from micro to macro of their chosen topic. We plan on offering this pilot block once during the first year and expect to enroll 12 students.

We plan to develop the curriculum for the second phase of this project during the first year. This second phase will involve expanding the block to four weeks and including 2 days per week of clinic time. One barrier to the development of this phase is the acknowledged shortage of community clinic sites and slots for third and fourth year students. We hope to develop contacts and arrangements for the students in this rotation to spend two days per week in a clinical setting where the focus is on patients with substance use co-morbidity. Such sites might include Bay Area Addiction Research and Treatment (BAART) in San Francisco or OASIS in Oakland. The seminar and site visits will be expanded and will include more diverse faculty as are available at UCSF.

Goals of this Project:

1. To foster the students understanding of the complex interaction of substance use, homelessness and mental illness by brief immersion into the lives of affected individuals.
2. To explore the relationships between over/under-utilization of health care, adherence to care and quality of doctor-patient relationship in a population of chronic substance users.
3. To increase professional competence to treat socially vulnerable populations.

Plan for measurement and documentation of project efficacy and outcome

The effectiveness of this elective block will be measured in two ways. First, a pre/post evaluation, testing fund of knowledge, will be administered. Second, students will be graded on their independent projects. This experience and gathered data will be used to evaluate and redesign the course for subsequent years. As an aside, faculty who participate in this course will be encouraged to also advise students in the Family Practice Clinical Core Clerkship who choose community based projects where substance use is the theme.

Plan for continuation of project at the end of funding cycle

Continued funding will be sought through a grant application to the Russell Sage Foundation. In addition, the Department of Anthropology, History and Social Medicine has committed funds for future faculty time for all Department-sponsored grants that

develop successful pilot projects for Fourth Year Electives. The Department of Family and Community Medicine will also be asked for money to support faculty time in the future should this elective prove viable.

References:

1. Drug Abuse Warning Network, Drug Enforcement Agency, 2001.
2. San Francisco Burden of Disease and Injury: Mortality Analysis, 1990-1995. (Division of Population Health and Prevention, San Francisco Department of Public Health)
3. Overview of Health Status: Who We Are, How We Live, Our Health, 2002. (Report by the Planning and Community Health Epidemiology & Disease Control Sections, Department of Public Health, San Francisco.)
4. Ciccarone D, Bamberger J, Kral A, Hobart CJ, Moon A, Edlin BR, Harris HW, Young DM, Bourgois P, Murphy EL. Soft Tissue Infections in Injection Drug Users San Francisco, California, 1996-2000. *MMWR* 2001; 50:381-384.

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