



Build Structural Competence and Introduce Harm Reduction Principles

Albert Einstein College of Medicine

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A. Abstract

The substantial gap in treatment engagement and retention for people with substance use disorder (SUD) is perpetuated by stigma towards people with SUD, including stigmatizing attitudes among physicians.¹ While some medical schools have developed SUD-focused clinical training for medical students and residents², the pre-clinical years of medical education are a critical time for developing foundational knowledge of SUD and fostering positive attitudes toward caring for patients with SUD.³ Addressing stigma in the physician workforce requires that medical students learn about structurally competent care and a harm reduction approach to SUD early on in their education.

This 3-hour curricular innovation is designed to build structural competence in SUD care and introduce harm reduction principles to 1st year medical students. First, to build structural competence in SUD care, students will be educated in the socio-ecological framework of the opioid crisis through 1-hour of directed pre-session readings and an accompanying 1-hour didactic session. Second, to introduce harm reduction principles, students will complete a 1.5-hour case-based learning session in small groups focused on example cases of patients with SUD. Cases will prompt the recognition of stigmatizing language, and discussion will be facilitated on the use of a non-judgmental approach. At the conclusion of the case-based learning session, students will be

¹ Polydorou S, Gunderson EW, Levin FR. Training physicians to treat substance use disorders. *Curr Psychiatry Rep.* 2008;10(5):399-404. doi:10.1007/s11920-008-0064-8

² Spangler JG, Shull CN, Hildebrandt CA, et al. Opioid Use Disorder and Assessment of Patient Interactions Among Family Medicine Residents, Medical Students, and Physician Assistant Students. *MedEdPORTAL.* 2020;16:11012.

³ Chappel JN, Veach TL. Effect of a course on students' attitudes toward substance abuse and its treatment. *J Med Educ.* 1987;62(5):394-400. doi:10.1097/00001888-198705000-00004

⁴ Sell J, George D, Levine MP. HIV: A Socioecological Case Study. *MedEdPORTAL.* 2016;12.

required to attend a 0.5-hour harm reduction training workshop focused on overdose prevention with naloxone.

As a result of this learning experience, medical students will be able to:

1. Describe the socio-ecological framework of the opioid crisis, including personal, interpersonal, community, and societal risk factors for opioid misuse and use disorder
2. Recognize harm reduction strategies utilized at the community and society levels to address the structural context of the opioid crisis
3. Identify stigmatizing language enacted in the medical setting as a major barrier to SUD treatment
4. Define a non-judgmental approach to communicating with and about persons with SUD
5. Demonstrate opioid overdose prevention skills with naloxone use

B. Introduction/ Rationale

While curricular innovations teach about the HIV epidemic through a socio-ecological lens,⁴ this framework has yet to be used to prepare medical students to treat patients with SUD. Our pre-clinical curriculum will introduce medical students to the four socio-ecological levels – individual, interpersonal, community, and societal – in order to understand how structural contexts have shaped the opioid crisis. Students will be “hooked” through pre-session readings that will involve lay media representations of persons with SUD. Students will be introduced to harm reduction strategies that combat stigma on the community level, including syringe exchange programs and drop-in centers for persons with SUD. Students will be drawn to the tangible applications of harm reduction principles by highlighting the work of local harm reduction service providers in the surrounding community.

The proposed curriculum is novel not only in the content that it aims to teach, but also in the stakeholders who will be involved in teaching. Medical student leaders of the Harm Reduction and Addiction Medicine Interest Group at the Albert Einstein College of Medicine will lead the design of the curriculum, with mentorship from Einstein’s addiction medicine faculty. Medical students will work closely with faculty to curate directed readings, specify didactic content, and develop case-based learning materials. Students will also partner with local harm reduction service providers to recruit trainers for the opioid overdose prevention workshop. A harm reduction advocate will also be invited to co-lead the didactic session.

Pre- and post-session surveys will assess student knowledge and attitudes regarding SUD, including understanding of how opioid misuse and use disorder fits within the socio-ecological framework, and recognition of how stigmatizing language in SUD care can be addressed with a non-judgmental approach. Surveys will also measure student satisfaction with the curriculum and elicit suggestions

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for curricular improvement. By the close of this curricular innovation, 1st year medical students should gain foundational knowledge related to structurally competent care and harm reduction for SUD, with the broader goal of reducing stigma towards patients with SUD and improving treatment engagement and retention. In addition, student leaders will gain a mentored experience in integrating harm reduction and addiction medicine education into the medical school curriculum.

C. Curriculum Design

Learning objectives should be shared with medical students in the introduction of their pre-session reading assignments, at the beginning of the didactic session, at the start of the case-based learning small group sessions, and at the introduction of the opioid overdose prevention workshop.

The case-based learning session in small groups draws upon medical students' knowledge of patient-centered interviewing. For example, students may analyze a simulated patient interview using the PEARLS mnemonic in building rapport with patients, which includes partnership, empathy, apology, respect, legitimation, and support.⁵ In this way, this novel curriculum is accessible to and engages 1st year medical students in conjunction with lessons learned from other parts of the pre-clinical curriculum.

Taken together, this curriculum provides a unique introduction to the socio-ecological framework of the opioid crisis and the role of physicians as well as harm reduction service providers in addressing a major public health need.

Learning Experiences, Instruction and Assessment:

1. Directed pre-session readings (1-hour)
 - a. Lay media sources that highlight the devastating impact of opioid use disorder and overdose on individuals, families, and communities
 - b. Jalali et al.'s publication: "The opioid crisis: a contextual, social-ecological framework"⁶
 - c. Scientific publications that examine the role of societal stigma in SUD treatment engagement and racial disparities in SUD treatment access

2. Didactic session (1-hour) co-led by an addiction medicine faculty member and a harm reduction advocate, and will engage students to examine the larger structural context of substance use and the opioid crisis, and pivot to highlight community-level strategies that

⁵ Gabriel J, Dutton G. Basic Interviewing Skills for Medical Students. Basic Interviewing Skills for Medical Students. Published 2009. Accessed 2021. <https://fsu.digital.flvc.org/islandora/object/fsu:208078/datastream/PDF/view>

⁶ Jalali, M.S., Botticelli, M., Hwang, R.C. *et al.* The opioid crisis: a contextual, social-ecological framework. *Health Res Policy Sys* 18, 87 (2020). <https://doi.org/10.1186/s12961-020-00596-8>

improve the care of people with SUD. Students will be activated to examine the role of physicians in promoting harm reduction strategies alongside community members.

Didactic content includes:

- a. Introduction to the socio-ecological framework of the opioid crisis
 - b. Harm reduction strategies used at the community level to address structural context of the opioid crisis, including syringe exchange programs and drop-in centers for SUD care
 - c. Physicians' role in adopting and advocating for community-level harm reduction strategies
3. Small-group, case-based learning session (1.5 hour) with faculty facilitators that focus on the role of stigma toward persons with SUD in the medical setting, engages students to practice patient-centered, destigmatizing language and adopt a non-judgmental approach towards persons with SUD, using two illustrative cases:
- a. Case 1: Students will read examples of real patient care notes from de-identified electronic medical records of a patient with SUD
 - i. Case lead-in will prompt students to identify stigmatizing language within the patient care notes.
 - ii. Case follow-up will prompt students to discuss the potential impact of healthcare provider stigma towards SUD care and examine how a non-judgmental approach could have been applied to this patient case.
 - iii. Students will be challenged to rewrite sections of the patient care note to practice harm reduction.
 - b. Case 2: Students will watch a pre-recorded simulated interview between a physician and a patient with OUD regarding substance use and psychosocial supports.
 - i. Case lead-in will prompt students to discuss ways in which the physician uses (or does not use) destigmatizing language and a non-judgmental approach.
 - ii. Case follow-up will prompt students to discuss possible harm reduction strategies that could apply to the patient's specific scenario.
 - c. General discussion topics will also include student reflections on the pre-session readings and didactic lecture, as well as students' previous experiences with stigma and harm reduction in caring for persons with SUD.
4. Opioid overdose prevention workshop (0.5 hour), led by harm reduction trainers prepares students to identify potential opioid overdose, administer naloxone, and counsel patients and their loved ones about naloxone access. In addition, students will be engaged in learning about harm reduction directly from local advocates.

Workshop topics include:

- i. Signs and symptoms of opioid overdose
- ii. Naloxone pharmacology and the mechanism of overdose reversal
- iii. Administration of naloxone via demonstration

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- iv. Overdose prevention through other risk reduction practices
- v. Access to naloxone under non-patient specific prescription (“standing orders”)

Upon completion of the workshop, Einstein medical students will be eligible to receive Opioid Overdose Rescue Kits with intranasal naloxone (in partnership with the New York City Department of Health) and access to additional training materials. A partnership with a similar local organization is suggested.

Students will be assessed on what they now know, are able to do and have attitudes about through these means:

1. Case-based learning session: Students will discuss the pre-session materials and review their understanding of the socio-ecological framework of SUD and harm reduction principles. They will receive faculty guidance and feedback during their discussion, including on their ability to recognize stigma in the medical setting and apply a non-judgmental approach to provider-patient interactions.
2. Comparison of pre-and post-session surveys: Students will be assessed in their knowledge of the socio-ecological framework of the opioid crisis, harm reduction strategies employed by physicians in partnership with community members, and their own attitudes about treating people with SUD.

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