Advocacy, equity, and evidence: Centering the needs of patients and learners

Jeanette M. Tetrault, MD FACP FASAM

Professor of Medicine and Public Health
Vice-chief for Education, Section of General Internal Medicine
Academic Advisor, Office of Student Affairs
Program Director, Addiction Medicine Fellowship
Associate Director for Training and Education, Program in Addiction Medicine

Yale Program in Addiction Medicine
Humble beginnings and privilege
A place to land
Journey to medicine
Mentors, collaborators, and opportunities along the way

- Residency
- Chief Residency
- Fellowship
- Junior Faculty
- Beyond
Mentors, collaborators, and opportunities along the way

Residency  Chief Residency  Fellowship  Junior Faculty  Beyond

Yale Program in Addiction Medicine
Mentors, collaborators, and opportunities along the way
Mentors, collaborators, and opportunities along the way
Mentors, collaborators, and opportunities along the way
APT Foundation
Hepatic Safety and Antiretroviral Effectiveness in HIV-Infected Patients Receiving Naltrexone

Jeanette M. Tetrault, Janet P. Tate, Kathleen A. McGinnis, Joseph L. Goulet, Lynn E. Sullivan, Kendall Bryant, Amy C. Justice, and David A. Fiellin; For the Veterans Aging Cohort Study Team

Table 2. Liver Enzyme Changes Pre-, During, and Post-Naltrexone Prescription

<table>
<thead>
<tr>
<th></th>
<th>ALT (IU/l)</th>
<th></th>
<th>AST (IU/l)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Mean</td>
<td>p</td>
<td>n</td>
</tr>
<tr>
<td>(A) Pre-, during, and post-naltrexone prescription</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-</td>
<td>113</td>
<td>41</td>
<td></td>
<td>112</td>
</tr>
<tr>
<td>During</td>
<td>65</td>
<td>36</td>
<td>0.02</td>
<td>66</td>
</tr>
<tr>
<td>Post-</td>
<td>100</td>
<td>37</td>
<td>0.002</td>
<td>101</td>
</tr>
</tbody>
</table>

Hepatic Safety of Buprenorphine in HIV-Infected and Uninfected Patients With Opioid Use Disorder: The Role of HCV-Infection ★★★

Jeanette M. Tetrault, M.D. a,*, Janet P. Tate, Ph.D. a,b, E. Jennifer Edelman a, Adam J. Gordon, M.D., M.P.H. c, Vincent Lo Re III, M.D. d, Joseph K. Lim, M.D. a, David Rimland, M.D. e,f, Joseph Goulet, Ph.D. b,g, Stephen Crystal, Ph.D. h, Julie R. Gaither, Ph.D., M.P.H., R.N. i, Cynthia L. Gibert, M.D. j,k, Maria C. Rodriguez-Barradas, M.D. l, Lynn E. Fiellin, M.D. a, Kendall Bryant, Ph.D. m, Amy C. Justice, M.D., Ph.D. a,b,i, David A. Fiellin, M.D. a,i

<table>
<thead>
<tr>
<th>Liver enzymes</th>
<th>HIV-infected (N=175)</th>
<th>Uninfected (N=307)</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALT</strong></td>
<td>0.7 (-7.6, 12.5)</td>
<td>1 (-6.9, 12.5)</td>
<td>0.75</td>
</tr>
<tr>
<td><strong>AST</strong></td>
<td>1 (-7.1, 11.2)</td>
<td>0.5 (-5.0, 8.1)</td>
<td>0.52</td>
</tr>
<tr>
<td><strong>Total bilirubin</strong> (N=202)</td>
<td>0 (-0.1, 0.2)</td>
<td>0 (-0.2, 0.1)</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Primary analysis, N=606
Excluding pre-existing liver injury

JSAT 2016, 68: 62-67
Brief versus extended counseling along with buprenorphine/naloxone for HIV-infected opioid dependent patients☆

Jeanette M. Tetrault, MD a,*, Brent A. Moore, PhD b,c, Declan T. Barry, PhD b, Patrick G. O'Connor, MD, MPH a, Richard Schottenfeld, MD b,c, David A. Fiellin, MD a,c, Lynn E. Fiellin, MD a,c

Table 2
Main study outcomes.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Total</th>
<th>PM (n=25)</th>
<th>PM + EMM (n=22)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of opioid negative urines, mean (SD)</td>
<td>66.3 (31.6)</td>
<td>63.6 (33.8)</td>
<td>69.0 (30.6)</td>
<td>.54</td>
</tr>
<tr>
<td>Max duration of continuous opioid abstinence, weeks mean (SD)</td>
<td>5.0 (3.9)</td>
<td>4.9 (4.0)</td>
<td>5.2 (3.8)</td>
<td>.82</td>
</tr>
<tr>
<td>Percent of cocaine negative urines, mean (SD)</td>
<td>59.2 (42.0)</td>
<td>62.4 (40.7)</td>
<td>55.6 (44.1)</td>
<td>.59</td>
</tr>
<tr>
<td>Study completion, % (n)</td>
<td>70 (33)</td>
<td>80 (20)</td>
<td>59 (13)</td>
<td>.10</td>
</tr>
<tr>
<td>Percent of days of buprenorphine/naloxone adherence, mean (SD)</td>
<td>76.8 (27.7)</td>
<td>75.3 (19.8)</td>
<td>78.3 (20.6)</td>
<td>.70</td>
</tr>
<tr>
<td>Percent of days ARV adherence, mean (SD)</td>
<td>55.4 (33.0)</td>
<td>59.3 (27.4)</td>
<td>51.5 (27.5)</td>
<td>.56</td>
</tr>
</tbody>
</table>
The road less travelled
Vietnam addiction medicine training
Yale addiction curriculum threads

Core Curricula

School of Medicine

School of Nursing

Physician Associate Program
Stitching a solution to the addiction epidemic: A longitudinal addiction curricular thread across four years of medical training

Srinivas B. Muvvala, MD MPH\textsuperscript{a}, Michael L. Schwartz, PhD\textsuperscript{b}, Ismene Petrakis, MD\textsuperscript{a}, Patrick G. O’Connor, MD MPH\textsuperscript{c}, and Jeanette M. Tetrault, MD\textsuperscript{c}

\textsuperscript{a}Psychiatry, Yale School of Medicine (YSM), New Haven, Connecticut, USA; \textsuperscript{b}Neuroscience, Yale School of Medicine (YSM), New Haven, Connecticut, USA; \textsuperscript{c}Medicine, Yale School of Medicine (YSM), New Haven, Connecticut, USA

ABSTRACT

\textit{Background:} Despite the enormous burden and public health impact, addiction continues to be one of the most under-treated chronic diseases primarily because of the lack of adequately trained workforce of medical providers. To address this issue, medical schools should greatly expand education on addiction. \textit{Methods:} The six-step Kern model of curriculum development was used as a framework to create an addiction curriculum which includes didactic activities, workshop exercises, practice-based learning activities, clinical simulations, and clinical experiences. \textit{Results:} The authors and other members of the addiction thread committee conducted a comprehensive needs assessment, developed curriculum goals and objectives, and worked with course and clerkship directors to develop and enhance educational strategies and implement a longitudinal curricular thread woven across all four years of medical school curriculum. \textit{Conclusion:} Development and implementation of a comprehensive addiction curriculum is feasible, and this model could lay the groundwork for implementation at other institutions.

KEYWORDS

Medical education; addiction; teaching; curriculum development

SAj 2020;41(4):475-479
Substance Use Disorder Education in Medical Schools: A Scoping Review

Andrew Muzyk, PharmD, MHPE, Zachary P.W. Smothers, MS, Dennis Akintbi, Jennifer Ruiz Veve, Mark MacEachern, MLIS, Je

Interprofessional Substance Use Disorder Education in Health Professions Education Programs: A Scoping Review

Andrew Muzyk, PharmD, MHPE, Zachary P.W. Smothers, MS, Kathryn M. Andolsek, MD, MPH, Melissa Bradner, MD, MSHA, Jeffrey P. Bratberg, PharmD, Seth A. Clark, MD, MPH, Kathryn Collins, Gerard A. Greskovic, BSPharm, Larry Gruppen, PhD, Mark MacEachern, MLIS, Susan E. Ramsey, PhD, Jennifer Ruiz Veve, and Jeanette M. Tetrault, MD

Abstract

Purpose
As medical schools adapt their curricula to prepare future physicians for the opioid crisis and for treating patients with substance use disorders (SUDs), educators should refer to courses described in the literature. This scoping review aimed to (1) provide a comprehensive evaluation and summation of peer-reviewed literature reporting on SUD education in medical schools globally and (2) appraise the research quality and educational outcomes reported in SUD education studies in medical schools.

Method
The authors searched 6 databases (3 Ovid MEDLINE databases, Embase, ERIC, and

Ahead of Print), Embase.com, ERIC via FirstSearch, and Clarivate Analytics Web of Science from inception through December 7, 2018. The authors used the Medical Education Research Study Quality Instrument (MERSQI) to assess included studies’ quality.

Results
The authors screened 1,402 unique articles, and 14 met inclusion criteria. Publications dated from 2014 to 2018. Ten (71%) included students from at least 3 health professions education programs. The mean MERSQI score was 10.64 (SD = 1.73) (range, 7.5–15). Interventions varied by study, and topics included general substance use (n = 4, 29%), tobacco (n = 4, 29%), alcohol (n = 3, 21%), and opioids (n = 3, 21%). Two studies (14%) used a nonrandomized 2-group design. Four (29%) included patients in a clinical setting or panel discussion. Ten (72%) used an assessment tool with validity evidence. Studies reported interventions improved students’ educational outcomes related to SUDs and/or interprofessionalism.

Conclusions
Interprofessional SUD educational interventions improved health professions students’ knowledge, skills, and attitudes toward SUDs and interprofessional collaboration. Future SUD curriculum design should emphasize assessment and measure changes in students’ behaviors and patient or health care outcomes. Interprofessional SUD education can be instrumental in preparing the future workforce to manage this pressing and complex public health threat.

Academic Medicine. 2020 Mar;95(3):470-480
Innovation Report

The Addiction Recovery Clinic: A Novel, Primary-Care-Based Approach to Teaching Addiction Medicine

Stephen R. Holt, MD, MS, Nora Segar, MD, Dana A. Cavallo, PhD, and Jeanette M. Tetrault, MD

Abstract

Problem
Substance use is highly prevalent in the United States, but little time in the curriculum is devoted to training internal medicine residents in addiction medicine.

Approach
In 2014, the authors developed and launched the Addiction Recovery Clinic (ARC) to address this educational gap while also providing outpatient clinical services to patients with substance use disorders. The ARC is embedded within the residency primary care practice and is staffed by three to four internal medicine residents, two board-certified addiction medicine specialists, one chief resident, and one psychologist. Residents spend one half-day per week for four consecutive weeks at the ARC seeing new and returning patients. Services provided include pharmacological and behavioral treatments for opioid, alcohol, and other substance use disorders, with direct referral to local addiction treatment facilities as needed. Visit numbers, a patient satisfaction survey, and an end-of-rotation resident evaluation were used to assess the ARC.

Outcomes
From 2014 to 2015, 611 patient encounters occurred, representing 97 new patients. Sixty-one (63%) patients were seen for opioid use disorder. According to patient satisfaction surveys, 29 (of 31; 94%) patients reported that the ARC probably or definitely helped them to cope with their substance use. Twenty-eight residents completed the end-of-rotation evaluation; all rated the rotation highly.

Next Steps
The ARC offers a unique primary-care-based approach to exposing internal medicine residents to the knowledge and skills necessary to diagnose, treat, and prevent unhealthy substance use. Future research will examine other clinical and educational outcomes.
Turning clinical questions into evidence....
Yale Addiction Medicine Fellowship
Fruits of the shift

Onsite treatment of HCV infection with direct acting antivirals within an opioid treatment program

Jenna L. Bumr, Neel Gupta, Chris Fabian, Susan Henry, Julia M. Shi, Jeanette M. Tetrault

SOAPs and SUDs: Patients With Substance Use Disorders and What Clinicians Should Know About the Cures Act

Carolyn A. Chan, MD, Jeanette M. Tetrault, MD, David A. Fiellin, MD, and Melissa B. Weiner, DO, MCR

ORIGINAL RESEARCH

Substance Use Disorders in Recently Hospitalized Patients With Cirrhosis

Lamia Y. Haque, MD, MPH, Simona Jakab, MD, Yanhong Deng, MPH, Maria M. Ciarello, PhD, and Jeanette M. Tetrault, MD

Low Dose Initiation of Buprenorphine: A Narrative Review and Practical Approach

Shawn M. Cohen, MD, Melissa B. Weiner, DO, MCR, Xinmea A. Levander, MD, Alyssa M. Peckham, PharmD, BCPP, Jeanette M. Tetrault, MD, and Kenneth L. Morford, MD

The impact of benzodiazepine exposure on treatment retention in an open-access methadone program: A retrospective cohort study


Yale Program in Addiction Medicine

S L I D E 25
American College of Academic Addiction Medicine (ACAAM)
Expanding training opportunities
Expanding training opportunities
REACH
Recognizing and Eliminating disparities in Addiction through Culturally informed Healthcare
Yale-University of Jordan Joint Training Program in Addiction Medicine
Mentors, collaborators, and opportunities along the way

Residency  Chief Residency  Fellowship  Junior Faculty  Beyond
Unconditional love
Most important thing I have learned.....

....Don’t take yourself too seriously.
AFTERGLOW
I'd like the memory of me
To be a happy one. I'd like
To leave an Afterglow of
Smiles when day is done.
I'd like to leave an echo...
Whispering softly down the
Ways of happy times and
Laughing times and bright
And sunny days. I'd like
The tears of those who
Grieve to dry before the
Sun of happy memories
That I leave behind when
Day is done.
Acknowledgments

- David Fiellin, MD
- Patrick O’Connor, MD MPH
- Lynn Fiellin, MD
- Gail D’Onofrio, MD
- Will Becker, MD
- Jen Edelman, MD
- Stephen Huot, MD PhD
- Jeffrey Samet, MD
- Rich Saitz, MD
- Dan Alford, MD
- Alex Walley, MD
- Julia Shi, MD
- Susan Henry, CARN
- Ayana Jordan, MD PhD
- Kenny Morford, MD
- Melissa Weimer, DO
- Stephen Holt, MD
- Emma Biegacki, MPH
- Becca Minahan-Rowley, LMSW
- Mayyada Wazaify, PhD
- Srinivas Muvvala, MD
- Kevin Kunz, MD
- Yale Addiction Medicine fellows and fellowship grads
- ACAAM Board of Directors and Staff
- Entire APT Foundation Staff
- The numerous patients I have had the privilege to care for
Thank you!