

Effects of psychiatry clerkship's setting and nature on students' attitudes and empathy towards patients with mental illness

Leana Frankul, BA, MA¹, Chunfa Jie, PhD¹, Julia R. Van Liew, PhD¹
¹College of Osteopathic Medicine, Des Moines University,

- Individuals living with mental illness face barriers to receiving competent medical care, contributing to health disparities such as increased morbidity and mortality¹
- Medical education that reduces sustained stigma towards people with severe mental illness (MI) is critical in optimizing healthcare delivery¹⁻³
- Studies report a positive correlation between students' positive clerkship experience and positive attitude changes towards psychiatry^{4,5}
- Studies support that students who complete their psychiatry clerkship in an in-patient are more likely to believe that anxiety disorders could be effectively treated⁴
- Osteopathic institutions are particularly poised to train future physicians to stigma reduction towards MI^{5,6}

The Present Study

The National Alliance on Mental Illness (NAMI) Provider Education Program (PEP) is a program aimed at increasing health care professionals' delivery of patient-centered and collaborative care for patients with MI through direct contact with individuals with lived experience with MI. The fifteen-hour program's goals are to enhance perceptions of patients with an MI through demonstrating and expanding upon ways to improve empathetic and collaborative decision-making.^{6,7} Small groups are taught by a teaching team with lived experience with MI, including:

- 1) A person living well in recovery with a MI
- 2) a family member of a person living with a MI
- 3) a healthcare provider offering a health care provider perspective

This study assesses how the specific nature of setting and location of psychiatry clerkship influences students' attitudes and empathy towards patients with MI diagnoses from baseline to 6-month follow-up.

Methods

Participants

The NAMI PEP is a required curricular event for all OMS-III at Des Moines University. Even though the course is required, participation in this IRB-approved research study is optional. Participants complete surveys assessing their affect, beliefs and behavioral intentions regarding individuals with mental illness. These surveys are administered prior to the start of the program (baseline) and at 1-month, 3-month, and 6-month follow-up to explore longitudinal effects.

Analytic Approach

We calculated change scores for outcomes of interest. Baseline vs 6-month change score association were performed using independent samples t-tests with a significance cutoff of $p < 0.05$. Cohen's d effect sizes were calculated ($d \geq 0.20$ =small, ≥ 0.50 =medium, and ≥ 0.80 =large). Descriptive statistics were calculated for single time-point assessments at baseline.

Predictors

- Inpatient: inpatient psychiatric unit training compared to all other settings of psychiatry clinical rotation
- Clinical setting: training at more than 1 clinical setting during psychiatry clinical rotation

Outcomes

- Medical Condition Regard Scale (MCRS) measures "regard" for patients with various conditions, empathy, and degree to which one finds patients with given condition enjoyable, treatable, and worthy of medical resources. Conditions used: a) psychiatry only, b) comorbid psychiatry and substance use, and c) medical condition only⁸
- Day's Anxiety Scale (DMISS), a 7-item scale, assesses anxiety about interacting with person with MI⁹

| Table 1. Descriptive Statistics | N=142 |
|--|---------------|
| Age | 26.80 (1.834) |
| Gender Identity | |
| Woman | 64 (45.1%) |
| Man | 75 (52.8%) |
| Other | 2 (1.4%) |
| Prefer not to answer | 1 (0.7%) |
| Race | |
| Asian/Asian-American | 25 (17.6%) |
| Hispanic/Latino | 2 (1.4%) |
| Middle Eastern/North African | 2 (1.4%) |
| Multiracial | 4 (2.8%) |
| White/European-American | 106 (74.6%) |
| Other/Prefer not to answer | 3 (2.1%) |
| Current Mental Illness | |
| Yes | 40 (28.2%) |
| No | 95 (66.9%) |
| Prefer not to answer | 7 (4.9%) |
| Help-Seeking History | |
| Yes | 79 (55.6%) |
| No | 58 (40.8%) |
| Prefer not to answer | 5 (3.5%) |
| Specialty Preference | |
| Family Medicine | 36 (25.4%) |
| Internal Medicine | 23 (16.2%) |
| Pediatrics | 7 (4.9%) |
| Emergency Medicine | 17 (12%) |
| Psychiatry | 10 (7%) |
| Other | 46 (32.4%) |
| Psychiatry Rotation Time Spent in | |
| Inpatient Psychiatric Unit | 89 (62.7%) |
| Outpatient Clinic | 46 (32.4%) |
| General Hospital | 40 (28.2%) |
| Emergency Department | 28 (19.7%) |
| Other | 12 (8.5%) |

T-Test Analyses

| Outcome Measure | 6-month Follow-up Mean Difference | Effect Size (Cohen's d) |
|---|-----------------------------------|----------------------------|
| Affect | | |
| a) <u>Anxiety</u> about interacting with someone with MI | -0.418, $p < 0.042^*$ | 0.44 |
| Beliefs | | |
| b) <u>Regard</u> towards patients with MI | 2.519; $p < 0.005^*$ | 0.643 |
| c) <u>Regard</u> towards patients with MI with comorbid substance use | 2.185; $p < 0.02^*$ | 0.536 |

Table 2. Independent samples t-test. All changes are statistically significant and indicate improvement. Cohen's $d \geq 0.20$ =small, ≥ 0.50 =medium, and ≥ 0.80 =large.)

- In-patient training was associated with better regard for someone with auditory hallucinations and paranoid delusions
- In-patient training was associated with better regard for someone with comorbid hallucinations, delusions, and substance use disorder
- Training at more than one psychiatry site was associated with less anxiety about interacting with someone with MI
- These findings suggest the need for further investigation into the influence of the clinical setting and location of psychiatry clerkship on OMS-III students' attitudes and empathy towards patients with MI diagnoses

- 1) Goodell S, Druss BG, & Walker ER. The Synthesis Project Report: Mental Disorders and Medical Comorbidity. Robert Wood Johnson Foundation Research Synthesis Report. 2011(21).
- 2) Llerena, Adrián, Macarena C. Cáceres and EMP-LI. Schizophrenia stigma among medical and nursing undergraduates. Eur psychiatry. 2002;17(5):298.
- 3) Petkari E, Masedo Gutiérrez AI, Xavier M, Moreno Küstner B. The influence of clerkship on students' stigma towards mental illness: a meta-analysis. Med Educ. 2018 Jul;52(7):694-704.
- 4) Loeb DF, Bayliss EA, Binswanger IA, Candrian C, DeGruy F V. Primary care physician perceptions on caring for complex patients with medical and mental illness. J Gen Intern Med. 2012;27(8):945-952.
- 5) Tucker JR, Seidman AJ, Van Liew JR, Streyffeler L, Brister T, Hanson A, Smith S. Effect of Contact-Based Education on Medical Student Barriers to Treating Severe Mental Illness: a Non-randomized, Controlled Trial. Acad Psychiatry. 2020 Oct;44(5):566-571
- 6) Van Liew JR, Jie C, Tucker JR, Streyffeler L. Reducing stigma and increasing competence working with mental illness: Adaptation of a contact-based program for osteopathic medical students to a virtual, active learning format. Med Educ Online. 2023 Dec;28(1):2151069
- 7) Pettigrew TF. Intergroup Contact Theory. *Annu Rev Psychol.* 1998;49(1):65-85.
- 8) Christison GW, Haviland MG, Riggs ML. The Medical Condition Regard Scale : Measuring Reactions to Diagnoses. Acad Med. 2002;77(3):257-262.
- 9) Day E, Edgren K, Eshleman A. Measuring Stigma Toward Mental Illness : Development and Application of the Mental Illness Stigma Scale. J Appl Soc Psychol. 2007;37(10):2191-2219.

This project was made possible by a generous grant from the Iowa Department of Public Health (#115-1806). The authors would like to thank the following Des Moines University faculty and staff for their contributions to and support of this work: Sue Huppert, Chief External and Government Affairs Officer; Dr. Lisa Streyffeler, Chair of the Department of Behavioral Medicine, Medical Humanities, & Bioethics at Des Moines University Des Moines University; Dr. Noreen O'Shea, Assistant Professor in the Department of Behavioral Medicine, Medical Humanities, & Bioethics; and Doreen Chamberlin, MPH, former NAMI Project Program Manager. We would also like to thank student researchers on the project: Sonia Kumar, Kaylee Rowe, and Matthew Mahoney. Finally, we would like to thank our local and national NAMI partners: Dr. Teri Brister, Director of Information, Support, & Education at NAMI; Peggy Huppert, Executive Director of NAMI Iowa; and all of our NAMI Provider Education Program instructors for their contributions to and support of this work.