

Medical Student Perceptions of Substance Use Disorders

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Introduction

Studies have shown that medical providers possess negative attitudes towards patients struggling with substance use disorders, which negatively impacts delivery of services and patient health outcomes. By assessing stigma present among pre-clinical medical students, it may help guide current medical educators to put greater emphasis on providing substance use education during students' clinical years.

After doing a preliminary literature review, it seems clear that most medical students, residents and active providers hold some amount of stigma towards patients with substance use disorders. I expect that we will identify a low to moderate level of stigma among students, and I will utilize results to advocate for continuing medical education interventions that could be introduced to provide more knowledge and reduce stigma.

Aims and Objectives

Research Question: What are the varied perceptions and levels of stigma among pre-clinical medical students towards patients with substance use disorders?

Specific Aims (1-3 aims):

1. Identify current perceptions and stigmatizing attitudes that pre-clinical medical students at OUWB hold towards patients struggling with substance use disorders.
2. Use the Medical Condition Regard scale (standardized 11-item survey) or to assess student attitudes towards substance abuse vs other conditions such as cancer and/or diabetes.
3. Propose recommendations for stigma-reducing interventions that could be worked into medical education during both pre-clinical and clinical years.

Method

A cross-sectional survey was administered to 250 first and second year pre-clinical students OUWB medical students via email listserv in an anonymous fashion. The Medical Condition Regard Scale (MCRS), an 11-item validated instrument, was used to assess attitudes toward SUDs and two comparator conditions that have been used in similar studies (i.e. cancer and Type II Diabetes). Demographic data was collected to evaluate potential associations between attitudes and personal or educational background variables. A question was added to assess prior SUD education and experience working with patients with SUD. Responses were analyzed using descriptive statistics, ANOVAs, and Turkey HSD Post-Hoc analysis to compare mean MCRS scores across three conditions: 1) SUD, 2) TIIDM, 3) Cancer.

Medical Condition Regard Scale

1 = Strongly Disagree
5 = Strongly Agree

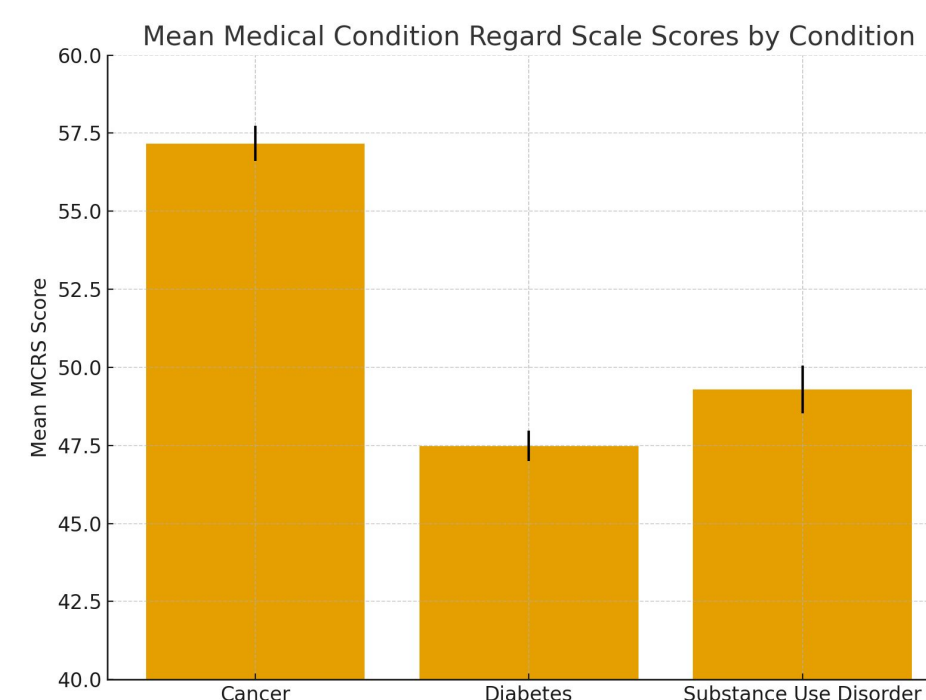
Working with patients like this is satisfying.	1-5
Insurance should cover patients like this to the same degree that they cover patients with other conditions.	1-5
There is little I can do to help patients like this.	1-5
I feel especially compassionate towards patients like this.	1-5
Patients like this irritate me.	1-5
I wouldn't mind getting up on call nights to care for patients like this.	1-5
Treating patients like this is a waste of medical dollars.	1-5
Patients like this are particularly difficult for me to work with.	1-5
I can usually find something that helps patients like this feel better.	1-5
I enjoy giving extra time to patients like this.	1-5
I prefer not to work with patients like this.	1-5

Result

Of 250 eligible students, 62 (24.8%) completed the survey. A one-way ANOVA was conducted to compare mean attitudes toward patients with substance use disorders, patients with TIIDM. The negative worded questions were reverse coded before calculating MCRS averages to retain data fidelity.

A one-way ANOVA was conducted to compare mean Medical Condition Regard Scale (MCRS) scores among three conditions: cancer, diabetes, and SUD. There was a significant effect of condition on MCRS scores, $F(2, 183) = 69.58, p < .001$.

Post-hoc Tukey HSD tests revealed that all pairwise group differences were statistically significant ($p < .05$). Students expressed the most positive attitudes toward patients with cancer ($M = 57.17, SD = 4.46$), followed by substance use disorder ($M = 49.29, SD = 6.02$), and then diabetes ($M = 47.48, SD = 3.84$). The largest attitudinal gap was between cancer and diabetes (mean difference = 9.69, $p < .001$), with smaller but still significant differences between cancer and substance use disorder (7.88, $p < .001$) and between substance use disorder and diabetes (1.81, $p < .05$).



Conclusions

Pre-clinical medical students demonstrated greater empathy and positive regard for patients with cancer than for those with chronic (diabetes) or behavioral (SUD) health conditions.

This finding suggests that stigma and bias may persist even early in medical training, particularly toward conditions perceived as self-inflicted or lifestyle-related. Educational interventions that integrate discussions of stigma, empathy, and social determinants of health could help reduce attitudinal disparities and promote more compassionate, equitable care across patient populations.

References

- Christison GW, Haviland MG, Riggs ML. The medical condition regard scale: measuring reactions to diagnoses. *Acad Med*. 2002;77(3):257-262. doi:10.1097/00001888-200203000-00017
- Yang LH, Wong LY, Grivel MM, Hasin DS. Stigma and substance use disorders: an international phenomenon. *Curr Opin Psychiatry*. 2017;30(5):378-388. doi:10.1097/YCO.0000000000000351
- Lindsay DL, Hagle H, Lincoln P, Williams J, Luongo PF. Exploring medical students' conceptions of substance use: A follow-up evaluation. *Subst Abus*. 2017;38(4):464-467. doi:10.1080/08897077.2017.1342735
- Avery J, Han BH, Zerbo E, et al. Changes in psychiatry residents' attitudes towards individuals with substance use disorders over the course of residency training. *Am J Addict*. 2017;26(1):75-79. doi:10.1111/ajad.12406
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