

# Requiring a One-Week Addiction Treatment Experience in a Six-Week Psychiatry Clerkship: Effects on Attitudes Toward Substance-Abusing Patients

**George W. Christison**

*Department of Psychiatry  
Loma Linda University School of Medicine  
Loma Linda, California, USA*

**Mark G. Haviland**

*Department of Psychiatry  
Loma Linda University School of Medicine  
and  
Department of Psychology  
Loma Linda University Graduate School  
Loma Linda, California, USA*

**Background:** *Medical education shapes students' attitudes toward substance-abusing patients, often in negative ways. Curricular interventions to foster more positive attitudes toward such patients and their treatment can have lasting effects on clinical practice. The nature and duration of such interventions, however, requires clarification.*

**Purpose:** *To test the hypothesis that spending 1 week of a 6-week psychiatry clerkship on an addiction treatment site would improve attitudes toward substance-abusing patients without reducing the clerkship's benefits on attitudes toward, and knowledge about, psychiatry patients.*

**Method:** *Using the Medical Condition Regard Scale, preclerkship and postclerkship attitudes toward patients with alcoholism, major depression, and emphysema (a control condition) were examined in 3rd-year medical students following the conversion of 1 of the clerkship's weeks to an addiction treatment site assignment. Psychiatric knowledge was assessed by comparing scores on the Psychiatry Subject Examination before and after the change.*

**Results:** *Mean regard scores increased significantly for patients with alcoholism and for patients with major depression but did not change for patients with emphysema. Subject examination scores before and after the curriculum change were not significantly different.*

**Conclusions:** *Spending 1 week of a 6-week psychiatry clerkship on an addiction treatment site increased regard for patients with alcoholism without adversely affecting measures of attitudes toward, and knowledge about, psychiatric patients.*

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The natural progression of medical students' attitudes toward substance-abusing patients is to become increasingly negative.<sup>1,2</sup> Negative attitudes toward substance-dependent populations are believed to be important contributors to the low rates of effective identification and management of substance-related disorders by physicians.<sup>3</sup> In light of this, recommendations regarding improving the teaching of substance dependence in medical schools emphasize the need for an integrated curriculum, one that coordinates experiences in both the preclinical and clinical years.<sup>3-7</sup> The

clinical years are seen as particularly critical for the teaching and modeling of appropriate attitudes and approaches to substance-using patients.<sup>4,7</sup> The effects of preclinical curricular interventions have been shown to be enhanced when students also participate in substance abuse curricula in the clinical years.<sup>6</sup>

The optimal model for the clinical years' substance abuse teaching is a coordinated cross-disciplinary approach in which students see faculty in diverse departments effectively addressing substance-related problems in their patients.<sup>4</sup> However, high-quality

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Correspondence may be sent to George Christison, M.D., Department of Psychiatry, Loma Linda University School of Medicine, 11374 Mountain View Avenue, Loma Linda, CA 92354-3842. E-mail: gchristison@som.llu.edu

cross-disciplinary efforts can be difficult to implement.<sup>6</sup> An additional recommended clinical experience,<sup>4</sup> and one that may be more straightforward to implement, is a rotation on an addiction treatment program. Time on an addiction treatment program allows students to have direct, daily interactions with patients in successful recovery, potentially diminishing the pessimism often characteristic of attitudes toward substance-dependent patients.<sup>1</sup> Also available in an addiction treatment clinic experience is active role-modeling by faculty of the appropriateness of the medical model of addictions as well as acceptance, hopefulness, and optimism toward substance-dependent patients.

Ninety-six percent of curriculum deans in a recent survey endorsed the benefit of an integrated substance dependence curriculum.<sup>3</sup> However, in the same survey, the deans cited lack of curricular time as the leading barrier to implementing such a curriculum. If a school were to establish a required clinical addiction treatment experience, how long would it need to be to accomplish changes in attitudes? We have previously reported data on the effects of a 3-week addiction treatment experience.<sup>8</sup> At the time of that study, about one third of students on our psychiatry clerkship rotated on an addiction treatment program for 3 weeks as one of their two site assignments. Regard for patients with alcoholism rose significantly in students assigned to the addiction site but did not change in students who did not receive that as a site assignment.<sup>8</sup> There is evidence that shorter clinical experiences also produce positive change. An impressive finding comes from Seigel and colleagues<sup>9</sup> at Wright State University School of Medicine who reported that a mandatory intensive weekend of participation in a 3-day residential clinical program for addiction assessment, education, and referral was associated with graduates reporting increased ratings of comfort and confidence in discussing substance abuse issues with patients 6 to 10 years after graduation. They also found that practitioners who, as students, received the brief intensive addiction treatment experience were twice as likely to discuss concerns about substance use with a significant percentage of their patients as were practitioners who had graduated before the inception of the clinical addiction practicum. These findings suggest that clinical experiences of a few days duration in addiction treatment can have lasting benefit. Improvement in attitudes has also been reported with a 1-week intensive clinical elective in addictions<sup>6</sup> and a 2-week mandatory experience that included one clinical week on an addiction treatment site.<sup>10</sup>

Inserting even a brief mandatory addiction treatment experience into the clinical curriculum usually means some other clinical experience must be shortened. Possible negative effects of this shortening must be examined alongside the potential positive effects of

the addiction experience. In August 2000, the 6-week psychiatry clerkship at our school was changed to give all students rotating through the clerkship a 1-week addiction treatment program experience and 5 weeks of general psychiatry placements. We hypothesized that this change would be sufficient to produce increased regard for patients with substance dependence but would not reduce the benefits of the psychiatry clerkship. In this report we describe the effects of this change on attitudes toward patients with alcoholism and patients with major depression and on psychiatric knowledge.

## Method

### Participants

Participants were 153 third-year medical students rotating through our psychiatry clerkship from August 2000 to August 2001.

### Addiction Curriculum and Sites

Before the clerkship, students had received 5 hours of lectures on substance dependence in their psychopathology course in the fall of their 2nd year. In the clerkship, students spent either the 3rd or the 4th week on one of two addiction sites. Students were at the sites Monday through Friday, with no night call. The primary site used was an intensive outpatient Veterans Administration (VA) addiction treatment program located within a VA hospital. Most veterans served there have alcohol dependence, and many of these are also dependent on illicit substances. In the mornings, students observe therapy groups and team rounds. In the afternoons, they interview patients and participate actively in a primary care clinic located on the site of the addiction treatment program. In addition to having general primary care health problems, the patients in this clinic have substance abuse or dependence and are in varying stages of readiness to address this as a problem. Also served there are former treatment program patients who continue to have their medical needs met in that clinic. The students receive a 1-hour lecture each day on addiction topics and are required to attend an Alcoholics Anonymous (AA) meeting and write up a brief report of that experience. The faculty giving the addiction lectures are an internist and a psychiatrist who are American Society for Addiction Medicine (ASAM) certified, are the addiction program and primary care clinic codirectors, and have had long-standing interests in addiction and teaching. Approximately 70% students rotating between August 2000 and August 2001 were assigned to this site.

The second site was an addiction treatment program in a private university-based psychiatric hospital. The program includes a relatively brief inpatient component and an extended partial hospital component, as well as a specialized track for patients dependent on prescription pain medications. It is directed by an ASAM-certified emergency medicine physician who makes rounds with the students. The students interview new patients, attend therapy groups in both the general and the pain program track, observe AA meetings, and go to the VA hospital for the addiction lecture series given there. Approximately 30% of students rotating between August 2000 through August 2001 were assigned to this site.

### Attitude Assessment

The attitude outcome measure used in this study is the Medical Condition Regard Scale (MCRS), a reliable and valid attitude scale that is not condition specific: respondents are asked to rate the items "regarding patients with [medical condition]," and the investigator designates the condition of interest.<sup>8</sup> "Medical condition regard," the construct captured by this unidimensional 11-item scale, reflects the degree to which respondents find patients with the given medical condition to be enjoyable, treatable, and worthy of medical resources.

Students were surveyed during orientation on the 1st day of the clerkship and then again just before an examination on the last day of the clerkship, each time completing the MCRS for three conditions: "patients with alcohol dependence;" "patients with a major depressive episode;" and, as a general medical control condition, "patients with emphysema." Each student was anonymously identified by a self-chosen password to allow matching of preclerkship and postclerkship responses. Also recorded for each student were gender, addiction treatment site assignment, and when in the 3rd year the psychiatry clerkship was taken.

### Knowledge Assessment

All Loma Linda psychiatry clerkship students are required to take and pass the Psychiatry Subject Examination provided by the National Board of Medical Ex-

aminers. Subject examination scores were available for all 153 students rotating through psychiatry between August 2000 and August 2001. These scores were compared with the scores received by students rotating through psychiatry between August 1999 and August 2000 who had been assigned to general psychiatry sites for all 6 weeks of the clerkship ( $N = 107$ ).

### Analysis Plan

To evaluate students' preclerkship and postclerkship MCRS scores for all three conditions—alcoholism, major depressive episode, and emphysema—we used  $t$  tests for matched samples. To evaluate MCRS change scores (Time 2 minus Time 1) by gender, addiction site (VA vs. private), and time of clerkship (first vs. second half of the year), we used  $t$  tests for independent samples. To evaluate Psychiatry Subject Examination scores by clerkship cohort we used a  $t$  test for independent samples. We set alpha at .05 for all tests of statistical significance.

## Results

### Medical Condition Regard Scores

First- and last-day surveys were completed by 134 of the 153 students rotating through psychiatry (88% response rate). Students' preclerkship and postclerkship MCRS scores are shown in Table 1. Higher scores represent higher regard. A statistically significant ( $p < .05$ ;  $d = .37$ ) increase in regard for patients with alcoholism was observed. Students' MCRS change scores for alcoholism did not differ by gender, by addiction site assignment, or by whether they took their psychiatry rotation in the first or second half of the year ( $p > .05$ ). Individual students' change scores ranged from  $-17$  to  $+22$  (mean = 2.7,  $SD = 7.2$ ).

A statistically significant increase in regard for patients with depression also was observed ( $p < .05$ ;  $d = .52$ ). Students' change scores ranged from  $-25$  to  $+18$  (mean = 3.8,  $SD = 6.4$ ). Preclerkship and postclerkship emphysema means were nearly identical, and the small difference was not statistically significant ( $p > .05$ ;  $d =$

**Table 1.** MCRS Scores Pre- and Post-Psychiatry Clerkship

Condition	MCRS Scores				$d$	$p$	MCRS Change Scores			
	Pre		Post				Low	High	M	SD
	M	SD	M	SD						
Alcoholism	44.4	6.5	47.1	8.1	.37	.00	-17	22	2.7	7.2
Major depression	48.3	6.6	52.1	7.9	.52	.00	-25	18	3.8	6.4
Emphysema	47.0	6.4	46.9	8.0	.01	.89	-31	19	-1	6.3

.01). Change scores for emphysema ranged from -31 to +19 (mean = -0.08, *SD* = 6.3).

### Psychiatry Subject Examination Scores

The mean Psychiatry Subject Examination score for the students rotating on psychiatry from August 1999 to August 2000 who received 6 weeks of general psychiatry site assignments (*N* = 107) was 74.4 (*SD* = 8.3). The mean score for the 153 students rotating from August 2000 to August 2001, all of whom received 5 weeks of general psychiatry site assignments, was 73.9 (*SD* = 8.3). The difference was not statistically significant.

### Discussion

Medical students who, in their psychiatry clerkship, rotated for 1 week on an addiction treatment site showed a significant increase in their mean ratings of regard for patients with alcoholism and for patients with a major depressive episode. The students' mean regard scores for patients with severe emphysema showed no change, suggesting that the changes seen with alcoholism and major depression were due to factors specific to those conditions.

We have previously shown that students in our psychiatry clerkship who have no exposure to addiction treatment show no change in their MCRS scores for alcoholism.<sup>8</sup> Therefore, the increase in regard scores for patients with alcoholism observed in this study appears directly related to the 1 week of exposure to an addiction treatment site. Similar increases in regard scores for patients with alcoholism were observed for students assigned to the private treatment site and to the VA site. These sites differ in patient demographics and characteristics, in the structure of the clinical experience, and in some elements of treatment philosophy. The fact that both produced significant increases in regard suggests that these attitude changes are related to educational experiences that these programs have in common. Possible contributory experiences include the opportunity to interview and follow patients who are serious about overcoming addiction, seeing patients who have achieved significant sobriety, and being exposed to attendings and staff expressing optimism and operating out of the medical model of addiction.

It is also noteworthy that the increases in regard scores for alcoholism were no different between students in the first and the second half of the year. Many students with an intrinsic interest in psychiatry at our school try to take their psychiatry clerkship earlier in the 3rd year, and students generally seem more open and enthusiastic in the first half of the year. It is en-

couraging that 1 week of addiction treatment exposure still produced positive attitude change in the students rotating in January through July, who may be more cynical<sup>11</sup> and less intrinsically interested in behavioral issues.

Because there are no follow-up data in this study, the durability of the attitude changes observed here remains unknown. Also not addressed in this study is the relation between the observed attitude shifts and clinical behaviors. Others have reported, however, that practitioners who, as medical students, were given mandatory brief clinical exposure to addiction treatment reported increased rates of communication about and querying for alcohol and drug use in their practices 6 to 10 years later.<sup>9</sup>

The conversion of one of the six psychiatry weeks in our clerkship to an addiction experience had no adverse effect on students' Psychiatry Subject Examination scores. Also, the increase in regard for patients with major depression seen in this study is similar in magnitude to what we observed previously in students who spent all 6 weeks on psychiatry placements.<sup>12</sup> These measures suggest that this curricular change did not diminish the clerkship's benefits on knowledge about, or attitudes toward, general psychiatry patients. It is premature, however, to make a general recommendation endorsing converting one of a psychiatry clerkship's weeks to an addiction treatment experience. Taking such an action with psychiatry clerkships of less than 6 weeks duration may have untoward effects not observed here. Moreover, placing the addiction treatment experience in the psychiatry clerkship may reinforce notions that addiction is primarily a concern for psychiatry. Placement of an addictions week within a primary care rotation might better serve to underscore the high prevalence and morbidity of substance dependence in general medical patients.<sup>13,14</sup>

In this study, the MCRS proved to be a useful tool for examining the effects of a curricular change on students' attitudes toward patients with specific diagnoses. With the MCRS we were able to use the same tool to follow attitudes toward two conditions of interest and a control condition. It is interesting that, even with the control condition, a few students showed large positive or negative shifts in their MCRS ratings. The factors contributing to this variability remain unclear.

In summary, 1 week on an addiction treatment site produced significant increases in regard for patients with alcoholism. These changes are not seen in students at our school who have no such exposure. This finding lends further encouragement to medical schools to make time for required brief clinical addiction treatment experiences, especially given the findings that without such efforts students' attitudes toward substance-dependent patients grow increasingly negative.<sup>1</sup> Our curricular change did not diminish the benefits of the psychiatry clerkship on regard

for major depression and on psychiatric knowledge. The advisability of placing the addiction experience within the psychiatry clerkship for a given school likely depends on the nature and duration of the existing clerkship and on whether time for an addiction week could be made in contexts more closely tied to primary care. Finally, the MCRS proved to be a useful tool for assessing the effects of a curriculum change on students' attitudes.

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