Physicians-in-training Attitudes Toward Caring For and Working with Patients with Alcohol and Drug Abuse Diagnoses

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Introduction: Physicians in all specialties commonly encounter patients who abuse alcohol or illegal drugs. Working with these patient populations can be challenging and potentially engender negative attitudes. This study is designed to identify the progression of attitudinal shifts over time of physicians-in-training toward caring for substance abusing patients.

Methods and Materials: A 31-item survey was designed to capture demographic information of participants, attitudes toward treating patients with substance abuse diagnoses, previous participant education, experience in and comfort with diagnosing and treating substance abuse, and satisfaction achieved in working with this patient population. Medical students in their third and fourth years of education as well as residents in training, years one through four, were surveyed. Responses to the survey’s attitudinal items were analyzed across years of training, looking for changes associated with time and experience.

Results: Fifty-seven percent of eligible participants anonymously completed the survey. There was general agreement across all years of training that health care professionals should be allowed continued employment in their professions when in recovery from alcohol abuse (P = 0.424) and drug abuse (P = 0.409). Across years of training there was agreement that patients can recuperate and provide meaningful contributions to society when recovering from alcohol (P = 0.847) and drug (P = 0.859) abuse. From medical school years through residency there were enhanced beliefs that alcohol-abusing patients (P = 0.027) and drug-abusing patients (P = 0.009) overutilize health care resources. Most trainees, despite year of education, believe patients who abuse alcohol (P = 0.521 and illegal drugs (P = 0.356) have challenging medical and social issues from which they can learn. There was consistency across years in the perception that providing care to alcohol-abusing patients (P = 0.679) and drug-abusing patients (P = 0.090) is repetitive and detracts from the care of others. All felt their training was adequate to care for alcohol (P = 0.628) and drug-abusing patients (P = 0.484). Satisfaction achieved in caring for alcohol (P = 0.017) and illegal drug-abusing patients (P = 0.015) consistently diminishes over years in training.

Conclusions: There are positive as well as negative aspects for physicians-in-training to caring for patients with alcohol and illegal drug abuse problems. Combining effective education strategies with the needs of physicians at specific points in their education may be effective in reversing the negative trends seen in attitudes toward caring for patients with substance abuse problems.

Key Words: residency education, attitudes, alcoholism, substance abuse

Each year a large number of individuals who abuse alcohol or controlled substances seek medical attention. Twenty-five to 50% of urban hospital emergency department encounters are related to alcohol or controlled substance abuse.1 Twenty-five to 40% of inpatient hospitalizations occur as a result of alcohol or drug abuse.2

Key Points
- Physicians in all specialties and at all levels of training and experience commonly encounter and work with patients who have substance abuse problems.
- There are degradations in attitudes toward caring for substance abusing patients throughout the years of medical school and residency training.
- Combining effective education strategies with the needs of physicians at specific points in their education may be effective in reversing the negative trends seen in attitudes toward caring for patients with substance abuse problems.

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result of or in relation to abuse and addiction.² The economic costs to society for the treatment of substance abuse and associated complications exceed $185 billion annually.³ Practicing physicians, as well as medical students and residents-in-training, spend considerable time working with these patient populations. Patients who abuse alcohol and controlled substances often bring unique interactions to the patient-physician encounter.

Alcohol and controlled substance-abusing patients are sometimes difficult to diagnose and, because of tolerance and dependence, often problematic to manage and treat.⁴ They are often labeled as being ‘difficult’ patients.⁵ Previous studies demonstrate that physicians’ attitudes toward substance-abusing patients impact the quality of care delivered.⁶ ⁷ Alcohol and controlled substance abuse are common diagnoses; efforts have been proposed to improve the approach to these patients.⁸ ¹¹ Diverse patient-focused and physician-based education programs and interventions have met with varying degrees of success.¹²,¹³

To design effective interventions to diminish the presumed deterioration in attitudes toward caring for alcohol and controlled substance-abusing patients, it is important to identify at what point the education process fails physicians-in-training. Previous studies demonstrate deterioration in attitudes throughout the medical school years,⁶,¹⁴ and suggest continued decline through residency years.¹⁵ Once points of deterioration are identified, a program to access and alter attitudes and care delivery can be designed and effectively implemented.

This study evaluates the potential progressive deterioration of attitudes of physicians-in-training from the third year of medical school through the fourth year of residency training. If such deterioration is confirmed, potential interventions throughout training to optimize the care of patients with alcohol or controlled substance abuse problems can be considered.

Methods

A 31-item survey was designed to capture demographic information of participants, attitudes toward treating patients with substance abuse problems, previous education, experience in and comfort with diagnosing and treating substance abuse, and satisfaction achieved in working with this patient population. Third year medical students from the University of Connecticut School of Medicine and first through fourth year residents in the University of Connecticut Emergency Medicine, General Surgery and Internal Medicine Residency Programs were surveyed anonymously. The survey completion rates from each group included:

- Medical students: 53 completed surveys from 79 students (67.1% rate of return);
- PGY-1 residents: 49 completions of 104 residents (47.1% rate of return);
- PGY-2 residents: 48 completions of 84 residents (57.1% rate of return);
- PGY-3 residents: 41 completions of 71 residents (57.7% rate of return);
- PGY-4 residents: 16 of 28 residents (57.1% rate of return); generating an overall completion rate of 56.6%.

Seven items (Fig. 1) reflecting personal views related to patients who abuse alcohol or other controlled substances were studied. Each item was considered separately for alcohol and controlled substance abuse (including but not limited to narcotics and cocaine). Those surveyed were advised that drug use excluded the use of tobacco products for the purpose of this study. Each item was rated as “strongly agree,” “agree,” “disagree,” or “strongly disagree.” While considered separately in analysis, for the purpose of data presentation, strongly agree and agree responses were combined as were strongly disagree and disagree responses. Two additional items asked those surveyed to rate their overall satisfaction achieved by treating patients who abuse alcohol and those patients abusing controlled substances. Participants were asked to rank this care as “very satisfying,” “satisfying,” “dissatisfying,” or “very dissatisfying.” While considered separately in analysis, for the purpose of data presentation, very satisfying and satisfying responses were combined as were very dissatisfying and dissatisfying responses.

Statistical analysis was performed using SPSS 12. Where the data was nominal by ordinal, a cross-tabulation using a chi-square, Phi, or Cramer’s V was computed. A simple cross-tabular analysis was completed for comparisons across years and a Gamma statistic was employed for cross tabulation when data was ordinal by ordinal.

The survey design and completion was reviewed and approved by the hospital’s institutional review board.

Results

The Table summarizes the demographics of the group surveyed. The majority of participants were male (except among the medical students where female respondents predominated) and Caucasian or Asian. There were no significant differences in age, gender distribution or ethnicity across years of training.

The opinion that a healthcare professional should be permitted to practice in their profession after recovery from a substance abuse problem was universally high across all groups (Fig. 2). The overall selection of disagree and strongly disagree with the statement “A healthcare professional who has recovered should not be allowed employment in their profession again” was 95.4% for alcohol abuse (P = 0.429) and 91.0% for drug abuse (P = 0.109). A positive attitude was likewise shared across all years of training for the statement “These patients can be salvaged and provide meaningful
contributions to society" (Fig. 3). Agree and strongly agree represented 97.1% ($P = 0.847$) of the responses for alcohol-abusing patients and 97.4% ($P = 0.859$) of drug-abusing patients.

Distinct and steady deterioration in attitudes from the third year of medical school through the fourth year of residency training were observed for the statement "These patients over-utilize healthcare resources and provide nothing in return" (Fig. 4). For alcohol-abusing patients, only 23.1% of medical students agreed/strongly agreed with the statement, the number rising to 43.8% by the fourth year of residency training ($P = 0.027$). A more distinct increase in agreement/strong agreement was observed when asked about drug-abusing patients, rising from 22.4% agreement/strong agreement for third year medical students to 53.9% for fourth year residents ($P = 0.009$).

There was strong and persisting agreement that "These patients have challenging medical and social issues from which I learn." Overall agreement/strong agreement when the patient abused alcohol was 88.0% ($P = 0.521$) and 88.2% ($P = 0.356$) when drug abuse was involved (Fig. 5). Response to the item "Caring for these patients is repetitive and takes time from my other responsibilities" was equivocal (Fig. 6). When considering alcohol-abusing patients, agreement/strong agreement rose from 47.2% for third year medical students to 68.8% for fourth year residents, with an overall agreement/strong agreement of 56.1% ($P = 0.679$). For the same statement concerning drug-abusing patients, agreement/strong agreement rose from 48.0% to 84.7%, overall agreement/strong agreement of 58.5% across all groups ($P = 0.090$).

Response to the item "The care of other patients suffers because of time and resources spent on these patients" significantly differed when alcohol abuse or drug abuse were considered (Fig. 7). The overall agreement/strong agreement was stable across all groups at 42.0% for this statement in regard to alcohol-abusing patients ($P = 0.216$). However, when drug abuse was considered, agreement/strong agreement rose from only 38.6% for medical students to 61.6% for fourth year residents, 43.8% across all groups ($P = 0.003$).

There was general agreement across all years that "My professional training curriculum provided the education that prepared me to diagnose/treat my patients who abuse."
prepared me to diagnose/treat my patients who abuse alcohol/drugs” (Fig. 8). When the education to diagnose and treat was associated with alcohol abuse, the agreement/strong agreement was 73.6% across all training groups ($P = 0.628$). When drug abuse was considered, agreement/strong agreement was 71.0% ($P = 0.484$).

Finally, satisfaction with treating these two patient populations diminished over time (Fig. 9). Those satisfied/very satisfied with treating patients who abuse alcohol decreased from 60.4% for medical students to 26.7% for fourth year residents ($P = 0.017$). The satisfied/very satisfied rate for those treating patients who abuse drugs likewise decreased from 50.9% for medical students to 28.6% for fourth year residents ($P = 0.015$).
Discussion

Caring for patients who abuse alcohol and controlled substances is a common aspect of medical practice. Quality of care may be impacted if the physician develops a negative attitude toward these patients. The results of this survey confirm that, despite current education efforts, attitudes toward these populations deteriorate from medical school throughout residency training.

As physicians progress in training from medical school through their fourth year of residency, their beliefs increase that patients with abuse problems over utilize healthcare resources and provide nothing in return. The enhancement of these beliefs appears to be more significant in the consideration of drug-abusing patients than for the alcoholic patients. This dichotomy in beliefs between alcoholic and drug-abusing patients is also suggested when asked about feelings regarding repetitiveness of care and being detracted from the care of their other patients. The majority of those surveyed felt care of substance-abusing patients does become repetitive and does detract from the care of other patients. The increase over time in this belief for care delivered to drug-abusing patients approached, but did not achieve, statistical significance. There was a strong increase in the belief that care of other patients suffers because of time and resources spent on drug-abusing patients. The same increase in belief was not seen when the question was addressed concerning alcohol-abusing patients. This may reflect an increased level of comfort in working with alcohol-abusing patients as opposed to drug-abusing patients or the fact that alcohol is a legal substance while other drugs are not.

All physicians-in-training believe that alcohol and drug-abusing patients have challenging medical and social issues that provide educational opportunities. They also believe that they have been well educated in the techniques and approaches to diagnosing and managing patients with abuse problems. Despite feeling that they have an appropriate fund of knowledge and skills and despite believing these patients offer challenging opportunities in care, a significant decline in satisfaction achieved in caring for these patient populations is observed between the third year of medical school and the fourth year of residency training.

Students and residents-in-training agree that alcohol and controlled substance-abusing patients can be salvaged and provide meaningful contributions to society. Likewise, there is a persistent belief across all years of training that any healthcare professional with a substance abuse problem who is in recovery should be allowed the opportunity to resume their practice. Taken together, these attitudes represent a positive base on which to build education and experience. If the possibility of recovery and return to function at any point of addiction and abuse can be maintained and believed by phy-
sicians, the possibility of reversing the negative trends in other attitudes and satisfactions in caring for these patients exists.

This survey suggests several problems as well as positives in the approaches of physicians-in-training toward caring for patients with substance abuse problems. Over the years of training, frustration with these populations appears to rise, leading to enhancement of beliefs of over utilization of the health care system resulting in compromise to the care of other patients. It remains unproven whether the care of others suffers as a result of substance-abusing patients, but previous studies have indicated that the care of patients with abuse problems does suffer because of negative attitudes on the part of physicians. Despite increased awareness of the effects of negative attitudes and enhanced education of students and residents in caring for these populations (resulting in student and resident appreciation of their didactic education), little impact has been achieved in reversing the deterioration in satisfaction in caring for these patients.

The persistent belief that alcohol and drug-abusing patients can be salvaged, as well as the belief that physicians who suffer from a substance abuse problem should be allowed to return to practice are positives that can be built upon. The perception that these patients have challenging medical and social issues can also be utilized to develop programs to improve attitudes and care of substance-abusing patients.
This study is limited by its small size and being from a single university program. However, the residents-in-training are a diverse group, representing medical schools from throughout the United States and other nations. This diversity lends strength to the generalization of these results to other programs.

While this study demonstrates the persistence of deterioration of some attitudes and the preservation of other beliefs across years of training, it does not examine what happens once residency is completed and the physician enters practice. It will be important to document further declines or emerging positives with added experience to help design continuing educational opportunities. This study does not look at the changes relative to the type of training received. Future studies will require direction toward differences experienced by those training in emergency medicine, internal medicine, surgery and other specialties. This will allow identification of specific positive aspects as well as areas that will require increased attention. Additional consideration will also need to be directed to where physicians feel most comfortable diagnosing and caring for substance-abusing patients and what support services would aid them, possibly enhancing their attitudes toward providing care. Finally, it will be crucial to define why physician attitudes differ toward caring for alcohol-abusing patients and drug-abusing patients.

Once defined, the more positive aspects of caring for the alcohol-abusing patient may be exportable to future educational opportunities.

The need for physician education and experience in treating patients with addiction problems has been outlined and the efficacy of various education approaches has been explored. Combining effective instructional strategies with the needs of physicians at specific points in their education and practice experience may be effective in reversing the negative trends seen in attitudes toward caring for patients with substance-abuse problems. Further research needs to be directed toward the causes and timings of these deteriorations to optimize experimental educational programs.

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**Nature uses only the longest threads to weave her patterns, so that each small piece of her fabric reveals the organization of the entire tapestry.**

—Richard P. Feynman