

# Who Teaches Residents About the Prevention and Treatment of Substance Use Disorders? A National Survey

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**BACKGROUND.** Studies indicate that physicians are poorly prepared to identify and treat tobacco, alcohol, and drug use disorders. Several faculty development programs have been created to increase the number of residency teaching faculty with expertise in this area. There is limited information, however, on those who currently teach residents about these problems and whether there is a need for additional faculty development programs.

**METHODS.** We conducted a 2-stage national survey of faculty who teach residents about substance use problems. First, residency directors from 7 specialties (family medicine, psychiatry, internal medicine, pediatrics, obstetrics and gynecology, emergency medicine, and osteopathy) responded to a mailed questionnaire asking them to identify faculty who teach residents about substance use disorders. Second, those identified were contacted and asked to participate in a telephone interview.

**RESULTS.** Of 1293 faculty identified by the residency directors, 769 participated in a research interview. Most of these teachers were full-time physician faculty, men, white, and based in departments of family medicine or psychiatry. Teaching was primarily conducted in hospitals, general outpatient clinics, and classrooms rather than alcohol and drug treatment programs. Less than 10% of the faculty performed clinical work in alcohol and drug treatment programs, and only 19% were certified addiction specialists. The respondents reported a definite need for additional development programs for themselves and other residency teaching faculty.

**CONCLUSIONS.** We suggest a modest increase in the number of faculty who teach residents about substance abuse disorders, and the creation of additional faculty development programs.

**KEY WORDS.** Faculty; schools, medical; substance use disorders. (*J Fam Pract* 1999; 48:725-729)

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Although studies have found that physician-delivered brief intervention can significantly decrease tobacco, alcohol, and drug use,<sup>1,2</sup> surveys of medical training programs suggest that physicians are poorly trained to deal with substance use disorders.<sup>3,4</sup> In response to deficiencies found in these surveys, numerous faculty development programs were created to increase the number and quality of faculty who teach about the prevention and treatment of these disorders. The programs encompassed several different models: (1) 1- to 2-hour lecture-based programs conducted on-site at local medical schools or residency programs and aimed at clinical faculty teachers;<sup>5</sup> (2) 1- to 2-day skills-based on-site programs for faculty interested in more in-depth programs;<sup>6</sup> (3) 3- to 5-day skills-based courses conducted regionally for faculty interested in developing curricula for their medical schools or residency programs;<sup>7,8</sup> (4) 1- to 3-year part-time fellowships for full-time faculty who wanted to develop careers in substance abuse treatment;<sup>9,10</sup> and (5) full-time fellowships.<sup>1</sup> The skills-based courses usually included the use of role-playing and standardized patients.

Although the total number of faculty who teach about substance use disorders is increasing as a result of these initiatives, very little is known about the characteristics of these faculty or what is being taught. We designed our survey to address these issues for residency faculty in family medicine, psychiatry, internal medicine, pediatrics, obstetrics and gynecology, emergency medicine, and osteopathic medicine. The survey also addressed perceptions of current and future faculty development needs.

## METHODS

We conducted a 2-phase national study during the spring and fall of 1997. The first phase entailed asking 1831 residency directors from family medicine (n = 448), psychiatry (n = 192), internal medicine (n = 406), pediatrics (n = 212), obstetrics and gynecology (n = 261), emergency medicine (n = 113), and osteopathic medicine (n = 199) to complete a 1-page self-administered survey. Four questions were asked: (1) Does the residency program have a required curriculum about the prevention and treatment of substance use disorders?; (2) How many curriculum hours are offered?; (3) What is the curriculum content?; and (4) What are the names and telephone numbers of 3 teachers who train residents about substance use disorders?

The second phase of the study involved a 15-minute telephone interview with faculty identified as the ones who taught residents about substance use disorders. The number of faculty identified included 448 in family medicine, 221 in psychiatry, 213 in internal medicine, 94 in pediatrics, 137 in

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obstetrics and gynecology, 114 in emergency medicine, and 66 in osteopathic medicine. Of the 1293 faculty identified by residency directors, 769 met the eligibility criteria and participated in the interview. Eligibility criteria included a current teaching role in the program and availability for a telephone interview.

We focused this paper on the results of these telephone interviews with residency teachers conducted by the University of Wisconsin Survey Center in the fall of 1997. The interview included questions on sociodemographic characteristics, faculty status, current teaching activities, residency curricula in the substance use area, and faculty development needs of residency teaching faculty. The faculty were also presented with 4 types of development models and asked to rate the usefulness of each for their fellow faculty and the value of an additional set of training models for themselves.

The characteristics, teaching opportunities, and training development needs of residency teaching faculty are presented in this paper. Our analysis was limited to descriptive statistics and univariate analysis.

RESULTS

Sixty-nine percent of the residency directors responded to the mailed survey. The presence of a required substance use disorders curriculum varied widely by specialty. Psychiatry reported the highest rate, with 96% of the responding programs having a required curriculum. Family medicine was second, with 75%. Family medicine and psychiatry also reported the highest median curriculum hours devoted to substance use disorders with 10 and 8 hours, respectively. The other specialties

reported that 55% or less of their residencies had a required curriculum, and their median hours were also very low, ranging from 3 to 5. The primary topics covered in most programs were screening, intervention, and detoxification. The results of the curriculum survey are reported in more detail in reports by Isaacson<sup>16</sup> and Kraus.<sup>17</sup>

The faculty who participated in the telephone interviews were primarily from 2 specialties, family medicine (n = 270) and psychiatry (n = 190). Specialties with fewer participants included internal medicine (n = 107), obstetrics and gynecology (n = 81), and emergency medicine (n = 51). Pediatrics (n = 42) and osteopathic medicine (n = 28) had the fewest teachers who participated in the interviews. The mean faculty age across the 7 specialties was 45 years (Table 1). A higher percentage of women taught this topic in family medicine, pediatrics, and obstetrics and gynecology. Although most of the sample was white, 34 teachers were African American, 26 Asian American, 22 Hispanic, and 2 Native American.

Most faculty were paid, full-time residency teachers. Osteopathic medicine had a greater percentage of volunteer faculty teachers (39%) than the other specialties (mean of 12%). The faculty primarily worked as clinicians and educators. Those conducting clinical research varied from a low of 12% in family medicine to a high of 27% for internal medicine. A small percentage had completed formal training programs in addiction medicine. Ninety-two teachers (12%) had successfully completed the American Society of Addiction Medicine certification exam. Fifty-three faculty (7%) had passed the requirements for the Certificate of Added Qualifications in Addiction Psychiatry offered by the American Board of Psychiatry.

TABLE 1

Characteristics of Sample, by Specialty

Characteristic	FM (n = 270)	IM (n = 107)	Peds (n = 42)	DO (n = 28)	Psych (n = 190)	Ob/Gyn (n = 81)	EM (n = 51)	Total (n = 769)
Mean age, years	46.3	44.8	45.5	48.1	46	45.3	40.8	45.5
Men, % (no.)	85 (176)	76 (81)	60 (25)	86 (24)	77 (146)	70 (57)	88 (45)	72 (554)
Race, % (no.)								
Caucasian	92 (240)	91 (97)	81 (34)	89 (25)	88 (162)	77 (60)	96 (49)	89 (667)
African American	3 (8)	4 (4)	7 (3)	4 (1)	3 (5)	15 (12)	2 (1)	5 (34)
Asian American	2 (5)	3 (3)	10 (4)	7 (2)	4 (7)	5 (4)	2 (1)	3 (26)
Hispanic	3 (8)	2 (2)	2 (1)	0	5 (9)	3 (2)	0	3 (22)
Native American	0.4 (1)	0	0	0	0.5 (1)	0	0	0.3 (2)
Paid Faculty, % (no.)								
Yes	85 (229)	83 (89)	95 (40)	61 (17)	81 (151)	84 (68)	100 (51)	84 (645)
No	15 (41)	17 (18)	5 (2)	39 (11)	19 (36)	16 (13)	0	16 (121)
Certified, % (no.)								
ASAM	13 (36)	16 (17)	5 (2)	18 (5)	15 (28)	5 (4)	0	12 (92)
APA	0.4 (1)	3 (3)	0	0	25 (48)	1 (1)	0	7 (53)
Neither	86 (233)	81 (87)	95 (40)	82 (23)	60 (114)	94 (76)	100 (51)	81 (624)

FM denotes family medicine; IM, internal medicine; Peds, pediatrics; DO, osteopathy; Psych, psychiatry; Ob/Gyn, obstetrics and gynecology; EM, emergency medicine; ASAM, American Society of Addiction Medicine; APA, American Psychiatric Association.

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TABLE 2

## Interest in 4 Development Models for Residency Faculty

Question/Answer(s)	FM (n = 270)	IM (n = 107)	Peds (n = 42)	DO (n = 28)	Psych (n = 190)	Ob/Gyn (n = 81)	EM (n = 81)	Total (n = 769)
<i>Are faculty development programs on substance abuse needed at your institution?</i>								
Yes, % (no.)	78 (204)	83 (87)	84 (32)	84 (21)	80 (145)	67 (52)	50 (24)	77 (555)
<i>How many faculty at your residency program would attend the following?</i>								
1-hour program, on-site (mean)	9.32	16.1	17.07	8.44	11.85	11.75	9.48	11.65
Half-day program, on-site (mean)	5.59	8.54	8.05	9.38	9.23	7.38	4.91	7.31
Half-day program, off-site (mean)	2.74	4.67	4.09	4.38	5.08	3.9	2.5	3.83
All-day program, off-site (mean)	2.25	2.89	2.2	4	3.36	2.42	1.89	2.72

FM denotes family medicine; IM, internal medicine; Peds, pediatrics; DO, osteopathy; Psych, psychiatry; Ob/Gyn, obstetrics and gynecology; EM, emergency medicine.

Only 102 (13%) of the faculty conducted clinical work in alcohol and drug treatment programs. As a result, most taught residents about alcohol and drug problems while doing rounds in hospitals, staffing residents in general medical or psychiatric outpatient clinics, or in the classroom. One-on-one consultation during routine patient care was an important teaching activity. Twenty percent of faculty reported being consulted about a patient with an alcohol or drug problem by a resident 1 to 3 times per month; 41%, 4 or more times per month, and 25% were consulted on a daily basis.

When surveying faculty about potential participation in faculty development programs, we used 2 different sets of models: one for the teachers being interviewed and one for their colleagues. Because the respondents already had teaching experience in substance use issues, we offered a set of faculty development models designed for a more in-depth, intensive experience. The models suggested for their colleagues were briefer, less intense, and designed to raise consciousness and generate a supportive climate for teaching about substance use.

Table 2 summarizes the development needs of general teaching faculty as perceived by the faculty interviewed. Interviewees were asked to estimate the number of faculty in their residency programs who would be willing to participate in 4 different development models commonly used to teach general faculty about substance abuse. The 4 types of development training models included 2 on-site programs and 2 off-site courses. The respondents reported

that the greatest number of their peers were likely to attend a 1-hour or half-day on-site program at their hospital or residency program. Across all 7 specialties, as many as 17 faculty members from each program would attend a 1-hour on-site program and 9 would attend a half-day on-site program. Although there was some enthusiasm for off-site training at national specialty meetings and for free-standing courses, the anticipated number that would attend such programs was between 2 and 4 faculty teachers per residency program.

In addition to programs for their fellow residency faculty members, respondents were asked which of 4 types of training models would be helpful in their own teaching activities with residents. The 4 models selected were created using past successful faculty development programs. The first was an all-day off-site program similar to those that occur at national specialty meetings.<sup>3,6</sup> More than 90% of the sample reported that this type of model would be helpful in their work (Table 3). The second model was a 3- to 5-day intensive course patterned after national faculty development projects conducted in the specialties of family medicine, internal medicine, and pediatrics.<sup>10,16</sup> Across the 7 specialties, 68% of those interviewed felt this type of course would be helpful.

The third model was a yearlong part-time fellowship. This included 4 weekend meetings and a project conducted independently between meetings. The 4 meetings included didactic presentations, skills workshops, and consultation with a mentor. This model has been success-

TABLE 3

Respondent Preference for Faculty Development Training Models

How much would the following types of faculty development programs help you with your work?

	FM (N = 270) % (no.)	IM (N = 107) % (no.)	Peds (N = 42) % (no.)	DO (N = 28) % (no.)	Psych (N = 190) % (no.)	Ob/Gyn (N = 81) % (no.)	EM (N = 51) % (no.)	Total (N = 769)
<i>An all-day program, off-site, focused on how to educate residents in the area of substance abuse:</i>								
A lot/some	89 (241)	86 (92)	90 (38)	85 (24)	93 (173)	88 (71)	80 (41)	90 (680)
Not much/not at all	10 (25)	10 (11)	10 (4)	11 (3)	7 (13)	12 (10)	20 (10)	10 (76)
<i>A 3- to 5-day intensive, off-site course:</i>								
A lot/some	68 (182)	66 (70)	59 (25)	72 (20)	77 (141)	67 (53)	30 (15)	68 (506)
Not much/not at all	31 (82)	31 (33)	36 (15)	25 (7)	23 (42)	33 (26)	70 (35)	32 (240)
<i>A 4 yearlong fellowship involving weekend meetings with an on-site faculty development project:</i>								
A lot/some	62 (167)	56 (60)	55 (23)	71 (20)	70 (130)	62 (48)	33 (16)	63 (464)
Not much/not at all	34 (92)	38 (40)	39 (16)	21 (6)	30 (56)	38 (30)	66 (32)	37 (272)
<i>A yearlong fellowship, on-site, that would commit at least 30% of your time to the fellowship:</i>								
A lot/some	39 (107)	37 (40)	41 (17)	37 (14)	57 (100)	33 (25)	24 (12)	44 (315)
Not much/not at all	52 (142)	65 (69)	65 (23)	64 (24)	43 (77)	57 (51)	76 (37)	56 (398)

FM denotes family medicine; IM, internal medicine; Peds, pediatrics; DO, osteopathy; Psych, psychiatry; Ob/Gyn, obstetrics and gynecology; EM, emergency medicine.

fully used in family medicine in 3 previous projects.<sup>18,20</sup> The level of interest in it was quite high, considering the commitment such a course requires, with 33% to 70% of the respondents across specialties reporting such a model would be helpful in their teaching.

The final model was an on-site program in which participants would devote at least 30% of their time. This is the classic fellowship model used for the Career Teachers Program<sup>13</sup> and the faculty development program sponsored by the National Institutes of Health.<sup>14</sup> This model received the least support from the respondents, with 25% to 57% reporting interest.

There were no significant differences between the specialties for any of the data presented in Tables 2 and 3.

DISCUSSION

This is the first national survey of faculty who teach residents about the prevention and treatment of substance use disorders in these 7 medical specialties. The teachers, all of whom were identified by residency directors, were pri-

marily full-time physician faculty who teach residents in their own specialty. The majority were not certified addictionologists; only 12% were certified by the American Society of Addiction Medicine and 7% by the American Board of Psychiatry. The largest number of substance use teaching faculty were based in departments of family medicine and psychiatry. In addition, a large number of faculty were also identified in departments of obstetrics and gynecology and emergency medicine. The numbers identified are a dramatic increase over the number of faculty teachers reported in previous surveys.<sup>4,13</sup> Most teaching seems to occur through consultation and informal teaching around patients in outpatient and inpatient settings.

Our study has a number of strengths. These include a high response rate and a national sample of residency programs. The persons interviewed were identified by the residency directors as the faculty responsible for teaching residents about substance use disorders. Telephone interviews allowed the investigators to ask complex questions about faculty development needs that are difficult to assess with a self-administered written questionnaire. The

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inclusion of 7 specialties increases the generalizability of the findings.

Results from the 769 interviews suggest that a large number of faculty in the 7 specialties would participate in a variety of development programs. The 4 models presented included a 1-hour on-site program, a half-day on-site program, a half-day off-site program at a national meeting, and an all-day off-site freestanding program. The data suggest that all 4 models should be made available at a national level to all faculty in all 7 specialties. Although we are beginning to develop substantial numbers of faculty who train residents about the prevention and treatment of substance abuse disorders, we need multiple faculty in all residency programs with the skills to teach residents about this area.

In addition to developing expanded programs for all faculty who teach residents, we need additional development programs to enhance the skills and knowledge of the faculty who are currently teaching residents. Most current teachers are not certified by the American Society of Addiction Medicine or the American Psychiatric Association, suggesting that they have received limited formal training and course work in the addiction area. There was a high level of enthusiasm for off-site programs ranging from daylong courses to yearlong part-time fellowships. Our study supports the development of federal and nonfederal initiatives for new faculty development programs in substance abuse teaching.

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