Commentary

Diversity in Academic Medicine: The Stages of Change Model

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INTRODUCTION

THE BENEFITS OF INCREASING the diversity of leadership in academic medicine have been reviewed and confirmed by a number of expert groups,[1-6] yet women and underrepresented minorities are not rising through faculty ranks or entering leadership in academic medicine at rates predicted by their proportions in medical school over the past 30 years.[7,8] This is an issue that must engage all stakeholders in academic medicine in order to ensure a healthy future for academic medicine as well as a healthy future for our nations.

We have found that smoking provides a useful metaphor for diversity. No one contests the profound change in cultural norms for smoking over the past 30 years. Smoking is an issue to which nearly everyone has some personal connection either as a current or former smoker, the friend or relative of a smoker, or as a witness to the remarkable transformation of institutions—even bars—from smoking to nonsmoking. Many middle-aged physicians, for example, went to medical school at a time when professors lit up cigarettes in the classroom, nurses and doctors smoked in hospitals, and airlines handed candy cigarettes to child passengers. Such behaviors would be unthinkable today because they violate current cultural norms. We submit that the goal in academic medicine is to achieve a similar transformation in cultural norms so that a lack of institutional gender and ethnic/racial diversity, particularly among decision makers, engenders the same response as smoking in a classroom—it is undesirable and unhealthy both for the individual and for the institution.

With liberal interpretation, the stages of change model applied to smoking cessation[9] pertains equally well to diversity. The five stages of change are (1) precontemplation (unaware that a problem exists), (2) contemplation (aware that a problem exists and thinking about making a behavioral change in the future), (3) preparation (feeling confident that making a change is possible and planning to make a change in the immediate future), (4) action (making a change), and (5) maintenance (continuing to engage in the new, desirable behavior and avoiding relapse). The smoking metaphor for diversity can be scaled down to refer to an individual (e.g., Harvard President Lawrence Summers being perhaps in precontemplation) or scaled up to the discussion of whole institutions (e.g., Harvard being perhaps

in contemplation moving toward preparation).[10] We wanted to share with the broader academic community the utility of this simple metric in promoting discussions of diversity.

STAGE 1: PRECONTEMPLATION

In precontemplation, smokers do not perceive smoking as a problem. Regarding diversity, members of an academic community do not see the lack of diversity in their institution as a problem needing to change, nor do they recognize the contribution of their own behavior to maintaining the status quo. They are blind to the benefits—to themselves or to the institution—of increasing the number of women and ethnic/racial minorities on the faculty and in leadership positions. Statements such as those in Table 1 are characteristic of individuals in precontemplation. The behavior of institutions in precontemplation is also identifiable. Despite a lack of diversity, institutions in precontemplation would have no forums sponsored by top level administration for discussing diversity, no working groups charged with gathering and presenting relevant data, and no institutional plan or resources committed to change.

Forty years ago when institutions "smoked," a person asking someone to extinguish a cigarette was not uncommonly met with scorn or derision because ambient cultural norms supported smokers. A person raising diversity issues in an institution in precontemplation might evoke a similar response from colleagues. Interventions to move smokers beyond precontemplation relate to providing data on the issue (e.g., health hazards of smoking) and encouraging a personal connection to the disadvantages of continuing to smoke (e.g., death of loved ones from smoking-related illness, high cost of cigarettes, and stained teeth). In a similar strategy for diversity, data on the issue from respected scientific and professional organizations as well as from the local institution can be cited. A personal connection can be sought by appealing to institutional pride (e.g., not wanting to be outcompeted for the best recruits due to lack of available child care) or to individual beliefs, such as the undisputed value of diversity in a broader sense, including diversity in ideas, disciplines, or faculty from more than one institution.

STAGE 2: CONTEMPLATION

In contemplation, smokers recognize that their behavior is a problem and begin to think about quitting. In academic medicine, administrators, faculty, and staff recognize the lack of diversity as a problem. Attitudinal shifts at the individual and institutional levels are apparent. Statements from deans and chairs acknowledge that existing policies and practices need to be evaluated in terms of their effectiveness in attracting and nurturing the careers of women and minority faculty. Individuals become open to discussing strategies to change their own behavior (e.g., willing to listen when the subject of diversity is raised) and that of the institution (e.g., recognizing the need for and value of a strategic plan related to increasing faculty diversity).

STAGE 3: PREPARATION

In preparation, smokers are ready to take action in the immediate future or have taken small steps toward quitting. For example, they may have set a quit date, purchased a nicotine patch kit, or cut down on the number of cigarettes they smoke. In academic medicine, individuals and institutions in the preparation stage describe specific actions they are planning to take to foster diversity. Such actions at the individual level might include attending a diversity training program or making plans to search aggressively for women and minority candidates when their department has an opening in the future. At the institutional level, preparation might include writing a departmental strategic plan for hiring women and underrepresented minority faculty[12] or developing workshops to train search committees how to attract a broad and diverse pool of applicants.

STAGE 4: ACTION

In the action stage, smokers engage in the desired action of quitting. In academic medicine, individuals make specific conscious behavioral changes that increase diversity on a small scale (e.g., invite a woman to give Medical Grand Rounds), and institutions take actions on a larger scale (e.g., a woman chair is hired; faculty and

TABLE 1. EXAMPLES INDICATIVE OF CURRENT STAGE

Stages of change	Smoking: Individual statements	Diversity	
		Individual statements	Institutional behaviors
Precontemplation	"Smoking is not a problem and I enjoy it [cough, cough]."	"We've always done it this way, and it seems to work just fine." "Women or minority faculty don't fit into the culture of this department." "We can't afford to lower our standards just to be politically correct." "It's a waste of resources to hire underrepresented minority faculty because they just leave after a few years."	No forums for dialogue promoted despite visible absence of diversity among faculty and institutional leaders. No resources committed to solutions. Individuals feel ucomfortable raising issues of diversity. Decision-making committees continue to be established without women or minority faculty members.
Contemplation	"I am worried that smoking is bad for my health and I want to quit."	"If we want to keep the best and brightest physicians in academic medicine, we must figure out a way to keep the women from leaving." "Diversity *is* excellence, and we want our institution to be a leader in this area of social change." "We need more women role models for the growing number of women medical students."	Workshops convened to stimulate discussion and development of written plans for increasing diversity. Task force charged with reviewing data (e.g., on local recruitment and promotion) and issues (e.g., survey).
Preparation	"I am going to buy a nicotine patch and quit on my birthday."	"I am attending a national workshop on diversity." "I am calling the Dean of a school that has been successful at hiring and retaining women to learn what works so I can adapt it to our school."	Institutional resources committed to the issues (e.g., invited speakers, conferences sponsored, consultant hired). Workshops developed to train search committees on strategies to increase the diversity of the applicant pool.
Action	"I quit!"	"I hired my first woman post-doctoral fellow." "I called the chair and complained that there were no women speakers at the last conference and offered to invite several this year."	Research programs on minority health and sex/gender differences are developed as a means to attract women and minority researchers.[11] Woman chair hired. Number of minority faculty reaches targeted goal.
Maintenance	"Whenever I feel like a smoke, I take a walk instead."	"I find an opportunity to discuss strategies to increase the participation and advancement of women and minority students and faculty whenever I am invited to speak on my research." "I am always in the recruiting mode, reaching out to potential women and minority applicants wherever I go." "I am proud of the advances our school has made in diversity."	Annual examination of diversity of student body, faculty, and staff reviewed by high level committees and made public to all stakeholders. Search committees must provide a convincing explanation if there are no women or minority candidates in the final pool of applicants for any leadership position.

student exchanges with a minority serving institution occur). Although institution-specific actions will vary, the ultimate goal of academic medical centers is to build a faculty that reflects the diversity of the students (approximately 50% women in the United States)[13] and both a faculty and student body that reflect the diversity of the country (30% nonwhite in the United States).[14]

STAGE 5: MAINTENANCE

Just as previous smokers can relapse, so can institutions that sustained gains in increasing gender and ethnic/racial diversity relapse.[15] Efforts in the maintenance stage are aimed at preventing recidivism. With smoking, individuals are given continued positive reinforcement and encouraged to substitute other behaviors, such as exercise, for smoking. In academic medicine, individuals as well as institutions can adopt similar strategies. Successes can be repeatedly and publicly praised and tangibly rewarded (e.g., additional funds to invide conference speakers or new faculty positions). Continued monitoring is also necessary. Institutions need to collect, analyze, and make public data on diversity of faculty hires, retention rates, invited speakers, and the composition of key committees. In former smokers, the experience of improved health and well-being after cessation encourages successful maintenance. In academic medicine, observed institutional benefits similarly will help maintain new practices (e.g., a more diverse faculty facilitates recruitment of diverse students, enrollment of minority populations in clinical research, and development of cultural competence curricula). As with smoking, the goal is to change cultural norms so that reinforcement for desired behaviors surrounds us, and undesirable behavior, whether it be smoking or relapse of an institution to majority-only leaders, becomes socially unacceptable.[16]

CONCLUSIONS

Nicotine is powerfully addicting. Nevertheless, thousands of individuals have quit smoking, and smoke-free workplaces are the norm in many places. Through biological, behavioral, and health policy research, academic medicine led this change.[17] If academic medicine can effect such profound transformation regarding an addictive substance, it should be able to move individuals and institutions through similar stages of change to actions that will ensure gender equity and cultural diversity.

Although the ultimate goal of a smoking cessation program is to convert patients from smokers to nonsmokers, success is also ascribed if participants move through progressive stages of change toward quitting.[18] Similarly, even before a noticeable change in the number of women and minority faculty is realized, a stages of change view of diversity in academic medicine enables those working toward this goal to document the harbingers of actual change. How will we know when academic medicine has achieved the desired transformation? We will have arrived when the sight of a room full of institutional leaders who are all white men elicits the same reaction from all members of the academic community as if these men were in that room smoking cigarettes.

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