

Cato Institute Policy Analysis No. 79: Professional Licensure and Quality: The Evidence

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Executive Summary

The generally stated purpose for licensing and the primary justification for this use of the police power of the state is to ensure quality in services offered to the public. Until fairly recently, the relationship between licensing and quality was rarely questioned; it appeared self-evident that conscientious restriction of entry into a profession would result in protection of the public from quacks and incompetents. In the last decade, though, this conventional wisdom has been questioned by a number of investigators.

The purpose of this paper is to present the evidence about the relationship between professional licensure and quality. First, some of the ways of defining quality are presented. Second, the regulation of professionals by restricting entry is examined in terms of five measures of quality. Third, licensing agency effectiveness is evaluated in terms of functional criteria.

Defining Quality

Defining quality poses complex problems of definition and measurement. It is important to be specific about how the word "quality" is used and in what context. Typically, quality measures are described in three ways: (1) as measures of structural, or inputs into services, such as the provider's educational level or technical competence; (2) as measures of process, or the procedures involved in providing services, such as the patient-provider relationship; or (3) as measures of outcome of the services provided, such as the reduction of problematic symptoms in a population. Researchers and consumers tend to prefer outcome measures, reasoning that the consequences of a service are what matter in the long run. Professionals prefer process measures, believing they are used for peer monitoring and permit professionals themselves to control the determination of quality. Professionals also argue that outcome measures are influenced by variables not under their control.

There is active debate about how to define quality. William E. McAuliffe criticized both process and outcome measures because they are rarely tested for validity.[1] Nonetheless, an evaluation of quality should probably combine both process and outcome characteristics. Spiegel and Backhaut proposed that the quality of health care is directly linked to five characteristics of a health care delivery system: (1) the extent to which the service is actually made available; (2) if available, the extent to which it is accessible to patients; (3) if accessible, the extent to which it is acceptable to patients; (4) if acceptable, the extent to which it was provided with continuity, and at an affordable cost.[2] Milton Roemer suggested that six basic conditions are necessary for the achievement of high-quality medical care for a population: (1) maintaining a safe and hygienic environment; (2) fostering an educated public; (3) developing an adequate supply of physical and human resources; (4) maintaining the population's access to financial

resources; (5) maintaining location and communication access to resources; and (6) maintaining a continuing flow of new knowledge.[3] (Outcome criteria such as these proposed by Roemer and by Spiegel and Backhaus are involved in some of the quality measures in the sections of this paper on research and on licensing agency functioning.)

Taking a different tack, Patricia A. Hamilton proposed that "quality does not mean perfection; neither must it mean the same services by the same kind of providers. Instead, it is a range of acceptable variance in relation to the price charged." [4] Hamilton criticized outcome measures because they are influenced by social, environmental, and hereditary factors that affect patient adherence to medical regimens. She preferred situational measures of the character of the institution in which care is delivered. As far as the quality of physician behavior is concerned, the work setting has been found to be more influential than the physician's formal education.

Avedis Donabedian's six attributes of an effective control system are useful in examining licensing agency functioning.[5] These attributes are: (1) the system provides continued monitoring and reporting of data; (2) the system is regularly in place, not an amalgam of random and ad hoc procedures; (3) the system monitors both the outcomes of services and the processes; (4) when deviations from expected performance are detected, action is initiated that leads to investigation, prevention, and rehabilitation; (5) consumers and allied professionals are involved in the control process; and (6) formal activities take their quality from the shared values and objectives of the informal organization of the professionals being regulated.

Research on Licensing and Quality Measures By preventing incompetent or unscrupulous providers from serving the public, legal restrictions on occupational entry are supposed to result in a higher quality of service than would occur in the absence of such restrictions. (A distinction is made in the following discussion between service offered and service received; there is an assumption widely held that entry restrictions that directly affect service offered also have a positive impact on service received.)

In the last decade there have been empirical studies relating licensing to quality of service that have offered somewhat contradictory findings. The studies reported here represent a beginning attempt to probe the relationship between quality measures and professional licensing, but unfortunately they do not provide profoundly credible results. However, considering the relative crudeness of these studies and the inconsistencies among them, it is worth keeping in mind the prior lack of interest in the subject and the relative newness of any investigation, plus the difficulties of designing the research and measuring the outcomes.

Despite the conclusions of economic and sociological theorists about the financial and social costs of a monopolistic licensing system, as well as questions about the system's effectiveness, much of the public and many professionals are either unaware of the costs or convinced that any cost is worth the price. Many are uncritical, believing that licensing really does protect the public. Although research is not often instrumental in influencing public policy, the illusion of protection and the belief that licensing is worth the price has been, in part, maintained by the lack of evidence on the protection issue and by the fact that recent evidence to the contrary has not found its way out of the scholarly journals. Given below, in compiled form, are findings and conclusions of 26 research studies, most of which have been completed since 1977. The material is presented under five headings according to the type of quality measure used: (1) peer ratings and self-report by professionals; (2) consumer reactions; (3) substitution effects; (4) availability effects; and (5) direct outcome.

Peer Ratings and Self-Report by Professionals

Restriction on entry into an occupation is an attempt to limit entry by removing "low-quality" service suppliers. "Quality" is determined by professions in their own image, and this determination usually involves educational and other qualifications. Following the reasoning about restriction of entry, it would appear that the relationship between restrictions and quality measures of licensed practitioners should be positive-- the more or higher the restrictions, the higher the quality. This seems to be suggested by three studies, even though each one is flawed in a different way.

In the first study, economists Sidney L. Carroll and Robert J. Gaston found that lawyers evaluated one another more highly in those states that restrict the opportunity to take the bar exam to state residents and that have a smaller proportion of lawyers per capita.[6] They did raise a question about bias in the evaluation system since it rated highest those attorneys who came from smaller, nonurbanized states.

In the second study, Arlene S. Holen used participation of dentists in continuing education as the measure of quality.[7] Her study is important for two reasons. First, the survey was conducted between 1966 and 1969, before any state mandated continuing education. Second, continuing education is believed by many to be a valid way to maintain quality in a group of autonomous professionals. Holen's analysis indicated that, in her words, "states that pass a small percentage of applicants in the licensing examination tend to select those who are more likely to participate in further professional education." Given the many questions about continuing education (see the final section of this paper), Holen's use of participation in continuing education as a measure of quality tends to undermine her conclusions.

The third study, by James W. Begun, involved a survey of optometrists.[8] He grouped them according to the restrictiveness of their state licensing laws. These restrictions included a requirement for continuing education, prohibition of price advertising by optometrists, prohibition of optician advertising, and restrictions on mercantile locations. Begun asked the optometrists about their practices with regard to examination length, examination complexity (number of specified procedures used), and office equipment (number of items available). These became his measures of quality. Begun's results supported the association between licensing and his quality measures, although his 54 percent return on questionnaires did contain some nonresponse bias (that is, the people who responded to his questionnaire were different from those who did not).

In summary, although each of these three studies is flawed, they confirm the conventional wisdom. The more entry into a profession is restricted, the more likely it is that those who get in will be well-regarded by their peers and behave in ways designed to maintain that regard.

Consumer Reactions

Gaining the reactions of consumers has appeal as a measure of quality. Consumers presumably know what they have experienced. It follows that consumer reactions should be more positive if licensing is working to enhance quality. The justification for licensing rests, however, on the inadequacy of consumer judgment. As sociologist David Mechanic argued, "Professional-client relationships, particularly in medical care, are characterized by great inequality in knowledge." [9] What appears closer to the truth is that the different points of view represent different perspectives on quality; that is, consumers and professionals look for different things in determining quality. To try to say which is more important sets up an endless argument. Any definition of quality should probably include both perspectives. The nine studies covered here used five types of quality ratings: (1) number of consumer complaints; (2) consumer ratings of professional behavior; (3) malpractice insurance rates; (4) number of malpractice cases; and (5) number of disciplinary actions. Although six of the studies reported data indicating that consumer reactions are better when entry is restricted, two are flawed by the attorney peer-rating measure previously discussed, and one offers mixed results.

In one study economist Alex Maurizi compared consumer complaints for 32 licensing boards in California with a measure of restrictiveness (the examination pass rate).[10] He found that when the pass rate was low (high restrictiveness), there was a higher number of complaints. Maurizi himself, however, suggested caution about this result because several assumptions he made, which were essential to his analysis, were found to be inappropriate. In a second study Maurizi studied the Structural Pest Board.[11] He found that the number of complaints per licensee declined when entry was less restricted. This study was criticized by Richard G. Harris for selecting a measure that biased the study toward accepting the hypotheses, so caution is advised here also.[12] In a third study, on contractors, Maurizi was forced to reject his assumption that licensing boards were restricting competent people from entering the field.[13] Instead, he found that the growth in the number of schools teaching contractors how to pass the exam explained the increased number of complaints because the exam did not screen out incompetent contractors. Maurizi's studies of complaints cannot be said to indicate anything about a relationship between complaints and licensing, but they do suggest a direction for future studies of this relationship.

In a study of consumer ratings, Timothy J. Muris and Fred S. McChesney compared lawyers who advertised with those who did not.[14] Since in the past advertising had been often prohibited by licensing statutes, it was used here as a substitute for licensing. The flaw in this study was that Muris and McChesney had a very small response, only an 11 percent return of a mailed survey of clients. The responses showed no difference between law firms that did not advertise and a legal clinic that did on consumer ratings of such behaviors as promptness, concern, honesty,

explanations, keeping clients informed, and attending. The clinic was rated higher than the law firms on being fair and reasonable in its fees. A similar study for the Federal Trade Commission (FTC) found that when nonadvertising optometrists were compared to advertisers, nonadvertisers were rated by clients as giving more thorough examinations.

Malpractice insurance rates are a very crude measure of consumer reactions because they are affected by many factors besides the frustrated expectations of consumers. Such factors include the willingness of attorneys to represent aggrieved clients, the size of damage awards, and statutory restrictions on size of awards, as well as provider effectiveness. One study, however, presented data relating entry restrictions to malpractice insurance rates.[16] In this study Holen did find low pass rates on entry examinations to be related to low malpractice insurance rates for dentists. Carroll and Gaston may have given some support to Holen's use of malpractice rates as they found their peer measure of attorney quality to be related positively to malpractice rates.[17]

Samuel C. Martin's results, on the other hand, were mixed.[18] Using the number of pharmacist malpractice suits as his quality measure, he found that high examination fail rates and nonissuance of reciprocal licenses had little relationship to the incidence of malpractice. Two other restrictive measures--citizenship requirements and requirements for reciprocity--were negatively related to malpractice incidence, indicating a positive relationship between licensing and consumer satisfaction.

Formal disciplinary actions against attorneys are also a crude measure of quality in that they are subject to some of the limitations cited earlier about malpractice claims and peer ratings. Carroll and Gaston did find, however, that the higher the peer rating, the fewer the number of disciplinary actions.[19] In another study, Carroll and Gaston summarized these results by suggesting that they show "licensing restrictions [to be] performing the task of increasing the quality of practitioners, or at least having no deleterious effects." [20]

Despite the flaws of some of these studies and the crudeness of the measures used in others, the general trend in these results appears to be consistent with the attitude of most of the public when evaluating the performance of professional practitioners.

Substitution Effects

The studies considered in the preceding two subsections took the views of professionals and consumers as measures of quality. The flaws in some of these studies are reason enough to question the trend implied in the studies of a positive association between licensing and quality. Further, it is appropriate to question the use of self-report as a valid quality measure in that bias, self-interest, or self-deception may shape the results. In this subsection and the following one, therefore, quality measures are used that are unobtrusive in the sense that the subjects are ordinarily unaware of the meaning of the behavior studied. Carroll and Gaston argued that licensing creates a substitution incentive for consumers; that is, consumers react to the fewer and more expensive providers by either utilizing unorthodox providers or "doing it themselves." [21] (Those studies in which consumers instead chose a "no service" option and those in which the service was simply less available are reviewed in the next subsection, on availability effects.) In the instance wherein substitution occurs, Carroll and Gaston argued, a lower quality service results.

In their study of plumbers, Carroll and Gaston used retail sales of plumbing supplies per household as the do-it-yourself measure and the proportion of plumbers in the population as the measure of restrictiveness of entry.[22] In this case another restrictive factor, unionization, was more of a factor in plumber density than licensing. In their study of electricians, Carroll and Gaston used a rather macabre do-it-yourself measure--accidental death by electrocution.[23] In this case, there was a substitution effect: as the number of electricians per capita rose, death by electrocution declined. Thus, this study showed a decidedly negative consequence of licensing.

Availability Effects

Availability measures assume that quality is a function of the amount of service received by the public. Availability involves situations in which either consumers react to fewer or more expensive providers by choosing not to seek service or service is not available. This point is buttressed by several studies that (with one exception) indicate that low restrictiveness-high availability is associated with measures of quality, contradicting the conventional wisdom.

In the Carroll and Gaston study of the real estate business, a "duration of vacancy prior to sale" rate was used as the quality variable.[24] The authors concluded, "In states where overall numbers of brokers per capita are low, urban service quality suffers; [and] where either pass rates are depressed by licensing authorities or where there are specified prior educational requirements, the result is lower quality service in rural areas. "[25] In their study of sanitarians, Carroll and Gaston associated low availability with an absence of health inspections. [26] They found restrictive licensing to reduce the numbers of sanitarians in rural areas and the inner city but not in suburban areas or small towns. Using a U.S. citizenship requirement and limitations on the number and enrollment in schools of veterinary medicine as their measures of entry restrictions, Carroll and Gaston studied the per capita distribution of veterinarians.[27] They found that the greater the number of veterinarians, the more the reported cases of rabies and brucellosis in animals. They indicated that in states with low density of veterinarians, there was a "systematic underdiscovering of existing cases" and a consequent risk to other animals and to people. [28] In a study of optometrists Carroll and Gaston concluded, "smaller numbers of optometrists per capita, for whatever reason, are strongly associated with a measure for poor eye care. "[29] Holen, on the other hand, associated the number of visits to dentists per capita (an availability measure) with the percentage of dentists reporting continuing education, and she concluded that "the more stringent licensing standards may be beneficial to consumers. "[30] Her use of reports of continuing education as a quality measure, though, is questionable. The Carroll and Gaston studies show that service availability (less restrictive) measures are associated positively with measures of quality.

In the following studies, availability was used as the quality measure. Holen's measure of availability was the number of visits to dentists per capita. [31] She found that visits per capita were not related to her measure of restrictiveness, examination pass rate. Carroll and Gaston found that the fewer the number of dentists per capita (the result of entry restrictions), the more dentists felt that they were too busy (a low availability measure). [32] A higher number of dentists per capita was associated with dentists feeling that they were not busy enough (a high availability measure). Long work weeks and long delays in seeing patients (both low availability measures) were related to entry restrictions.

Availability measures are thus shown to be related to independent measures of quality and to associate licensing with lowered quality. When used as a quality measure, they show licensing to be not associated or negatively associated with quality.

Direct Outcome

Direct-outcome studies assume that some condition or situation is related to the existence of restrictions on entry resulting from the licensing of professionals. Holen used the presence of dental disease among naval recruits as a quality measure and the examination fail rate as a restrictive measure.[33] She found more dental disease to be associated with lower fail rates, which she interpreted to indicate that stricter licensing requirements are related to dental health. Her second quality measure was edentulousness (absence of teeth), which she found not to be related to entry restrictions.

Carroll and Gaston used an oral hygiene index for naval recruits constructed by the Naval Medical Research Command as their quality measure.[34] They found that the states that permit dentists to move in from other states to practice have more dentists per capita and the recruits from those states have better oral hygiene. They also reviewed census data and found that in those states with fewer dentists per capita (high restrictiveness), there is a greater likelihood among people who own false teeth not to wear them, indicating to Carroll and Gaston that the dentures may not have been satisfactory.

Kathryn Healey's 1973 study is the earliest empirical study of licensing quality found in this review.[35] She compared proficiency data between laboratories in a state with restrictive licensing and those in a state without such restriction. She did not find personnel licensure to significantly improve the output quality of a laboratory. Unfortunately, she used a measure of clinical laboratory proficiency that she believed had questionable validity.

John J. Phelan's study of the television repair industry reported on the comparative incidence of fraud in three contrasting jurisdictions: one licensed jurisdiction (New Orleans), one registration jurisdiction that had unannounced investigations of television service dealers for fraud (San Francisco), and one jurisdiction that had no statutory entry restriction (Washington, D.C.).[36] Approximately 20 repair dealers in each location were given identically

malfunctioning television sets. Parts fraud (the unnecessary replacing of parts or charging for parts not actually replaced) occurred in 50 percent of the cases in both New Orleans (licensed) and Washington, D.C. (unlicensed), and in only 20 percent of the cases in San Francisco (registration and investigations). Investigation activities rather than licensing appeared to influence the incidence of parts fraud.

In a study done for the Federal Trade Commission, advertising of services by optometrists was related to several direct-outcome measures of quality.[37] The extent of restrictions on advertising is comparable to licensing, as indicated previously, because it is often associated with licensing. The results are suggestive. There was no observed difference between optometrists who advertised and those who did not on the following quality measures: obtaining the correct prescription and producing adequate eyeglasses; the quality of workmanship of the eyeglasses; and the incidence of unnecessary prescription of eyeglasses.

Another study, by Muris and McChesney, compared lawyers who did or did not advertise.[38] The dollar amount of child-support awards was used as the direct-outcome measure. Better service when the client was the husband was defined as a lower award of child support, and when the client was the wife, as a higher award. The representation of the husband by lawyers who did not advertise did not affect the size of the award. When advertisers represented the wife, there was a positive effect on the size of the award. Muris and McChesney concluded that firms that advertise do "not necessarily produce lower quality service" and that the "one clinic studied actually provides better quality than its traditional competitors." [39]

The limitation here is that the study focusing on one firm is not necessarily a basis for generalizing. It is important to note, though, that the expected association between advertising and lowered quality did not occur. There is something for everyone when considering the direct-outcome studies; taken together, however, they do not show a relationship between licensing and quality.

Summary

The studies of the relationship between licensing and quality certainly present a confusing array of conclusions. It is important to bear in mind the previously stated limitations-- prior disinterest in the subject, newness of investigation, and difficulties in design and measurement--as explanations for the relative crudeness of and inconsistencies among the studies. These studies constitute an exciting opening of an area of investigation more than they represent observations on which policy may be based. Finally, it should be added that these are studies of association; therefore, causation should not be presumed.

With these caveats, what can be said at this point? Removing the studies involving the questionable peer review procedure[40], conflicting quality data[41], and assumptions and methods that the authors themselves questioned[42], three studies remain that suggest a positive association between licensing and quality. Begun's study is impressive because of the care he took in defining his criteria and in controlling his variables and design. Ignoring that this is a self-report study with admitted nonresponse bias, his results do show some positive relationships between licensing and quality.[43] Optometrists in more restrictive states did spend more time with their patients. However, they did not use more procedures or have more equipment available. In the FTC study, optometrists who did not advertise gave more thorough examinations than advertisers, according to client investigators.[44] There were, however, no other observed differences on direct-outcome measures, including obtaining correct prescriptions and producing adequate eyeglasses. Martin had two of his restrictive measures positively relate to the number of malpractice claims, plus two measures that did not.[45] The positive connection, then, between licensing and measures of quality offered to the public is suggested but not clearly established by these studies.

The remaining client-reaction studies show no association.[46] Similarly, direct-outcome studies primarily show no association[47], with the exception of the Carroll and Gaston study that found that states that permit dentists to move in from other states have not only more dentists per capita but also better oral hygiene.[48]

Four studies by Carroll and Gaston show the presence of substitution and availability effects. These indicate a negative relationship between licensing and quality.[49] In the two remaining studies in this area, substitution and availability effects were not demonstrated.[50] Although substitution and availability effects indirectly complement the high quality of orthodox service providers when they are readily available, they also point to an undersupply of orthodox

providers as a negative consequence of restriction on entry.

Economist H. E. Frech supported this point:

Under licensing, by preventing entry of those with lower qualification, the quality of care rendered by licensed professionals may rise, but consumer substitution of other services such as chiropractors, the advice of friends and self-treatment, plus provider substitution of lower-skilled personnel for expensive licensed individuals could result in lower quality of care actually received.[51]

Carroll and Gaston concluded about the relationship between licensing and quality for the professions they studied:

Restrictiveness was carried far enough to encounter negative results in at least some states. Further, no professions were encountered that demonstrated a significant relation in the opposite direction. Finally, some professions . . . show no significant relation.[52]

Although some relationship is suggested between restrictiveness and quality offered, the opposite is suggested by some studies for quality received, whereas still other studies suggest there is no relationship. In summary, the most acceptable conclusion is that no adequate relationship between licensing and quality has been effectively demonstrated.

Examining Licensing Agency Functioning

If licensing agencies are doing their job, there should be evidence of five functions being fulfilled, according to Harris S. Cohen and Lawrence Miike: (1) effective initial assessment of competence; (2) monitoring continuing competence; (3) discipline of errant practitioners; (4) facilitation of the distribution of licensed professionals to needy areas and persons; and (5) utilization of allied professionals where such persons are more competent and less costly than professionals.[53] The remainder of this paper considers these licensing agency functions, as well as its role in discriminating against minorities and disadvantaged groups.

Initial Competence

Evaluation of the characteristics and abilities of candidates is the method by which licensing agencies assess initial competence. Four types of qualifications are examined: personal characteristics such as age, citizenship, and residency in the jurisdiction; educational credentials; work experience, such as internships or supervised practice; and the results of written and oral examinations.

How to define competence and how to evaluate it are controversial issues. Theoretical problems of clarifying the nature of competence are confused by the interests of those affected.[54] Altering operational definitions of competence, no matter how faulty they may be, can change the existing division of labor or the dominance of certain groups. Examples come from the field of psychotherapy. Family therapist leader Jay Haley reported the disruption occurring in a mental health facility upon the introduction of the then-new version of psychotherapy called family therapy.[55] As a method, Haley concluded, family therapy was incongruent with the hierarchical way in which medical services were organized. There is, in Haley's words, a

shift in the status of the professions which comes about . . . [when] all the professions do the same work. . . . No profession has any more knowledge or training in family therapy than any other, and so the status hierarchy dissolves without a new one to take its place.[56]

When organizations follow a hierarchical model, as often occurs in mental health facilities, it has been found that differences in income received by psychotherapists are attributable to whichever of psychologist Dorothy Tennov's seven academic credential routes are taken to qualify for the position (psychology, psychiatry, psychoanalysis, social work, clergy, nursing, or education).[57] Nevertheless, as Tennov reports, "Distinctions . . . tend to be fictional since psychotherapists from different professions practice in much the same way." [58] Even differences among schools of psychotherapy have been found to be negligible.[59]

H. L. Summerfield also discounted the superiority of one training route over another.[60] Instead, he found poor

practice in psychotherapy frequently to be "the result of the therapist's own inability to understand and to relate to his patients." [61] The source of clinical errors has more to do with the personality limitations of the therapist than the credential route.

Similarly, such requirements as citizenship, local residence, and good moral character have little relevance if one is estimating competence. Nonetheless, discrimination is found against out-of-state applicants. [62] In 1975, for example, the state of Washington failed 51 percent of out-of-state applicants for dental licenses but only 9.3 percent of in-state applicants. [63]

Licensing agencies are competence measures on the basis of what can be measured easily despite the lack of empirical validation. Consider psychologist Paul S. Pottinger's report that the sheer amount of knowledge of a content area "is generally unrelated to superior performance in an occupation . . . [or] even to minimally acceptable performance," yet knowledge of content is predominantly what is measured in the multiple-choice format of written licensing exams. [64] It was psychologist-lawyer Dan S. Hogan's judgment that "standardized national examinations have not been shown to have anything more than face validity." [65] Furthermore, according to Pottinger,

Professions vary greatly in the quality of tests being used, but there are too many instances of certification tests that are poorly designed, constructed, validated and interpreted. The wide use of shoddy tests and the lack of accountability to test-takers in many occupations invites regulation of all certifying agencies, not just those whose practices warrant it. [66]

Hogan found work experience to be an excellent predictor of competence. [67] Morris B. Parloff found that although the "therapist's experience is related to the quality of the relationship . . . evidence regarding its association with outcome is far less clear." [68] Knowing that more experienced people are more competent is not a sufficient guideline for licensing, yet numbers of years' experience are what one finds in licensing statutes. [69]

Similarly, although academic credentials are universally required, training does not identify the competent psychotherapist, [70] nor are grades or degrees found to be related to professional accomplishment generally. [71] Hogan wrote, "A wide range of research indicates that academic grades predict nothing but future grades or results on tests similar to those used in establishing grades." [72]

Benjamin Shimberg of Educational Testing Service reviewed studies that compared dentists with persons receiving as little as seven weeks of training in common dental procedures. [73] He found few or no differences. Gary L. Gaumer reviewed research showing that nurse practitioners can competently provide many services that according to law can be provided only by physicians. [74]

The comparable psychotherapeutic effectiveness often reported for paraprofessionals and for lay persons trained on the job raises a great deal of doubt about the importance of theoretical and technical knowledge for minimal level competency. [75] Professional psychologists are also no more able when it comes to certain types of psychological diagnostic activity. Hogan indicated that in terms of differentiating those who are mentally ill from those who are not, some paraprofessionals and patients are superior to professionals. [76]

Academic training is compromised as a basis for restricting entry if outcome measures, such as psychotherapeutic effectiveness and diagnostic accuracy, indicate such training makes little observable difference. This line of reasoning suggests that non-academic routes to competence be recognized and that the assessment of competence relate directly to performance and practice. There is little reason to believe that initial assessment of candidates for licensing has anything to do with the assessment of competence. Gerald Koocher concluded "that whatever existing credentials in psychology do measure, they are clearly not highly valid measures of professional competence." [77] Mechanic took a similar position when viewing academic training in medicine:

The effectiveness of long medical training as a screening device is an illusion. While of academic competence, retention rates are extraordinarily high compared with most other types of graduate or post-graduate training and ensure little "weeding out" of undesirable candidates. Similarly, although supervision and negative appraisal during internship or residency may affect the ability of the candidate to obtain the most desirable positions, such supervision and evaluation almost never exclude the candidate from medical employment. In short, the image of a highly selective

screening process that ensures quality and ethicality is a mirage, protecting the autonomy of the professional more than the public.[78]

In a similar vein and from within a professional organization is this statement approved by the American Medical Association's house of delegates:

Possession of a license in itself does not directly bear upon professional competence.... In its bureaucratic context, licensure lags well behind the state of current practice.... It is costly and difficult to implement and continuous surveillance of standards is negligible.[79]

Hogan reported that about one-quarter of all medical boards do not believe that they screen out inept practitioners.[80]

Continuing Competence

The primary means by which licensing agencies attempt to maintain continuing competence is through continuing education. The provision of continuing educational opportunities and, particularly, the mandatory requirement of a set number of study hours of continuing education for recertification recognize that the knowledge on which professional practice is based becomes dated rapidly. Although it seems reasonable to suppose that continuing education would have a positive impact on the practice of some providers, there remains a question whether continuing education should be mandated and whether it is, in fact, an effective corrective to incompetent practice.

The move from voluntary to mandatory continuing education was stimulated by the belief that all professionals are not equally conscientious in keeping up with their fields. But to mandate something so loosely conceived as "continuing professional education" is an invitation to abuse. There is no assurance that professionals will take courses related to their practice. Even if they do, to expect an effect on performance assumes that professionals will know what they need to learn, will participate in such a way as to learn something, and then will be able to apply that learning to their practice. Such assumptions stretch credence. Since most courses focus on knowledge and since there is not necessarily a connection between knowledge and performance, it is unlikely that these courses would have an impact on Practice.

Shimberg and Rick Carlson separately reviewed the research and concluded that there are no demonstrated relationships between participation in continuing education programs and either job performance or measures of medical care outcomes.[81] In the same vein John W. Williamson reported:

The track record regarding learning achievement for traditional continuing education courses is very low. Such courses may facilitate a momentary gain in knowledge, which often has short retention. However, there is little or no evidence that these educational offerings change anyone's behavior.[82]

Shimberg found that state licensing boards mandated continuing education as a requirement for relicensure, despite "the lack of evidence that continuing education is necessarily related to performance on the job." [83] State legislatures appear to have no other acceptable response to the problem of maintaining continuing competence. Despite some resistance, the political appeal of continuing education is leading legislators to require it.[84] Some things are done because they are "something to do," make it possible to avoid doing something else, or fulfill some other function. For example, an Arizona state senator who was also a chiropractor led the effort to drop mandatory continuing education requirements. In his opinion:

Continuing education is one more way the professions protect themselves and restrain trade. In the chiropractic profession the association could not get everyone to join, but was able to use mandated continuing education to force practitioners to fund the association.[85]

Alan B. Knox's review showed that continuing education programs can and do have some impact, but many evaluators use participant satisfaction as their impact measure.[86] There is, at best, only mixed evidence of any relationship between participant satisfaction and a positive change in performance. One study reported by Carlson showed that the more recent medical school graduates are more likely to participate in continuing education.[87] This study suggests that those most in need of continuing education may be the least likely to pursue it. The conclusion seems obvious that mandating continuing education has dubious value in providing consumers with protection against providers who fail to

keep up to date. Licensing boards do little more to stimulate the maintenance of competence.

Discipline

Discipline occurs both formally and informally in professional circles. Informal processes are both powerful and problematic. Because unethical, negligent, or exploitive behavior is often difficult to prove, and because investigating professionals fear countersuit as a result of formal procedures, peer discussion is often relied on to enforce professional norms. Because a good reputation is critical for success and a professional can be frozen out by failure to receive referrals and consultation, a polite word in passing will sometimes curb questionable practice. If that is not effective, the personal boycott is the backup control measure used. A boycott, however, avoids dealing with the problem and gives no guidance or direction for a change in a provider's behavior.

Another problem with the informal process is that it can also be used to control those professionals whose behavior is merely different or to smear those who threaten the professional status quo. In the absence of formal proceedings, it is difficult for professionals to restore their reputations, once damaged. The lack of accountability to the public, the infrequent and potentially capricious nature of the informal procedure, and the impossibility of measuring its extent or effect removes informal discipline from serious consideration as a way of encouraging or maintaining professional competence.

The State Licensing Boards. Licensing does not seem to be effective in preventing incompetent practice. Attorney Jethro K. Lieberman reviewed studies of medical practice and surgery and found that "professional incompetence is nearing epidemic proportions in some areas." [88] Looking at his own profession, he stated, "Cases of lawyers who continue to practice in spite of unethical conduct directly related to the lawyer's function are legion." [89] Writing eight years later, he concluded, "The disciplining of lawyers for incompetence and often outright fraud, for example, is in a shockingly bad state of repair." [90] Milgrom reviewed several studies of dental competency. [91] In one, "only 63 percent of the newly placed amalgams observed were satisfactory . . . two percent needed immediate replacement . . . (35 percent) had sufficient defects to require continued observation." [92] Two other studies involving more than 6,000 patients showed faulty amalgams in 44 and 45 percent of the cases.

Hogan reviewed several studies of physician competence. [93] In one study less than 10 percent of the physicians were found to do reasonably thorough patient histories or were adequately skilled at interviewing. Almost one-third did not recognize emotional problems. Another study evaluated physicians in terms of whether they were up to date on diagnostic and treatment techniques, drug therapy information, and record keeping. Hogan concluded that patients could not be reasonably sure a physician was competent. Gaumer reviewed studies that showed medical mismanagement for 29 to 62 percent of patients receiving hospital care; deficient care for obstetric patients in 8 to 22 percent of cases; and physician-inflicted injury in 7.5 percent of cases. [94] In studies of laboratory practices, technicians missed evidence of carcinomas 30 percent of the time. When the same test was given to pathologists (M.D.'s), according to Gaumer's review, they missed the evidence 37 percent of the time.

In the case of medicine, there appears to be little interest in the disciplining of incompetent practitioners. Robert C. Derbyshire, a former president of the Federation of State Medical Boards, has studied the problem of discipline for some time. He stated in 1979 that despite his estimate that 5 percent of the doctors in the United States were unfit to practice, only 26 states specified professional incompetence as a reason for disciplinary action. [95] Only 12 U.S. physicians lost their licenses during 1975 because of incompetence or malfeasance. [96] Hogan's review of psychology legislation showed that as a basis for discipline, only 4 states specifically cited incompetence, 10 states cited practice outside area of competence, 23 states cited negligence, and only 19 states cited mental illness. Alcoholism and drug addiction were the leading personal disqualifiers cited in the laws of 44 states. [97]

Milgrom found that dental boards generally impose discipline for reasons having to do with advertising, conviction for a criminal offense, substance abuse, unsanitary conditions, and such vague concepts as physical or mental incapacity and professional misconduct. He concluded, "Though few would challenge the fact that these are serious conditions and no doubt affect the quality of care a dentist provides, they are very indirect reflections of that quality." [98]

In general, licensing boards tend to be more zealous in prosecuting unlicensed practitioners than in disciplining those already licensed. Derbyshire concluded, "Many disciplinary bodies seem more interested in protecting their medical

colleagues than in safeguarding the public." [99] Hogan found that complaints against the unlicensed brought by licensed personnel tended to increase when economic conditions worsened. [100] Forty percent of the complaints received by California's psychology board related to practice without a license, according to Summerfield. [101] He believed that what he judged to be an "incredibly" small number of complaints was caused by patients who did not know where to complain (the Psychology Examining Committee was not even listed in city telephone books in California) and by those who did not want the stigma connected with being "mental" patients to reflect on their personal adequacy.

Differing views of the problem of discipline are revealed by the use of the differing modifiers underscored below. Derbyshire conducted two studies of state board disciplinary actions. In the first study his material was vague about the actual number of incompetents, but of the 1,000 disciplinary actions taken over a five-year period, he said many were because of incompetence. [102] Referring to the same study, Shryock thought the number was not large. He wondered how effective the board actions were but concluded that "the medical members of the boards were making some effort at professional self-discipline in the public interest" (emphasis added). [103] Harris S. Cohen, on the other hand, referring to Derbyshire's later study of 938 board actions over a four-year period, said "only 400 were based upon some form of incompetence" (emphasis added). [104] Carlson discovered Derbyshire's 1974 updating of studies of medical discipline covering the years 1968 through 1972, [105] indicating that 1,034 disciplinary actions were taken. According to Carlson, when these were

combined with his earlier findings, one in 1,500 physicians had been disciplined by state licensure boards in each of the years studied. . . . The most important point, however, is not evident from the data. Since the grounds for action against a physician under licensure statutes only rarely, if ever, go to the question of the performance by that physician in the duties for which he or she was trained, the actions taken by licensure boards against physicians are related to quality only in the most indirect sense. [106]

Derbyshire reviewed the problem of physician competence in 1979 and reported that the profession was beginning to recognize it as a real problem but was not squarely facing it. In the years from 1969 to 1979 the number of states specifying incompetence as cause for disciplinary action more than doubled, from 12 to 26, but the charge was rarely invoked. Of the 1,768 disciplinary actions reported to the Federation of State Medical Boards between 1974 and 1977, only 48 were for incompetence. [107]

Derbyshire later compared the years 1963-67 with 1981 and found that although the proportion of physicians who had been disciplined more than doubled, from 0.06 percent to 0.14 percent by 1981, the number was still small. He also noted that a 5 percent incompetence rate for a total population of 450,000 physicians comes to a total of 22,500 incompetent physicians. Very little improvement occurred for over 10 million Americans treated by these physicians annually. [108] Derbyshire, however, said he had hoped in 1979 that "sick doctor" laws and laws requiring physicians to report incompetent colleagues would improve matters. Although he also had hope for the Joint Commission on the Accreditation of Hospitals' required annual physician reviews and professional review activities, Derbyshire rates some of these approaches as "commendable if not yet fully effective, while those of others rate from poor to zero." [109] Later, in 1983, he said, "On the basis of the evidence I must conclude that, on the whole, medical self-regulation is ineffective and the whole process is in a state of disarray." [110]

Elliott A. Krause reviewed studies of discipline and found little policing of peers, "even in cases of extreme malfeasance." [111] Because physicians are autonomous, they can and do determine the extent to which professional incompetence is defined as a social problem. The lack of action on this problem suggests that it is in their self-interest to obscure the problem. Lieberman explained that when the reputation of a profession is involved, there is activity in those areas relevant to the public image of the profession but little where image is not involved:

The theory of discipline is also tied to the public image of the professionals. . . . In fact, discipline is for any unorthodoxy of a public nature.... When the public does not know about the misdeeds of one of their fellows, there is no need to act since that would only call attention to it. Nor is there reason to disbar or eject a member permanently if the public is likely to forget. [112]

Board staffs, according to Cohen, are ordinarily inadequate to carry out investigations, and the statutory provisions for

such investigations are often marked by ambiguity and a lack of precision.[113] In 1978 it was reported that one new licensing "watchdog" agency in the District of Columbia was specifically set up to reduce physician abuse.[114] Despite having been given sweeping powers, including the legal authority, it could not keep pace with the complaints. The agency director cited lack of funds and staff in telling the public, "You're not protected here." [115]

A comprehensive legal study by Frank P. Grad and Noelia Marti found that medical boards suffer, as far as disciplinary proceedings are concerned, from having inadequate staffs, insufficient budgets, only part-time board members, and inadequate records, if records are kept at all.[116] In a nine-state survey they were often told that running a licensing program left little time for anything else, including managing a discipline program. All of this accounted for the "minimal record of accomplishment in investigating and following up complaints and in dealing with disciplinary matters." [117] A study by Arkansas Consumer Research is a case in point:

Response to an ACR survey by 113 boards [out of 175] indicate that one-third of the boards do not investigate complaints against service providers. . . . [A] lackadaisical attitude about enforcement responsibilities . . . is not solely the fault of the boards. By law, disciplinary options available to boards are limited. Enabling laws usually empower boards to suspend and revoke licenses, but the laws don't specify authority to utilize lesser methods.

Only a handful of boards explicitly have power to impose less than severe sanctions.[118]

The authors of the study concluded that the boards with more options can be more effective enforcers than those that have only severe sanctions available because they need not overlook less-than-severe transgressions. Many of these boards were also remiss in record keeping, with only 27 out of 113 having records about complaints in 1979. Only 67 of the board phone numbers could be found in the phone book for Little Rock, the state capital. With regard to public notice, 25 boards said they did not believe they had to provide public notice of meetings, while only 29 reported that they did so.

Because licensing boards mostly respond to complaints rather than pursue their own investigations, and because there is only a remote chance that any substantial penalty will be imposed, there is no support for the claim that licensing agencies hold practitioners accountable to high ethical standards. Andrew K. Dolan and Nicole D. Urban reviewed other studies and also undertook their own studies.[119] They concluded, "Average board effectiveness for the country, as measured by the various disciplinary actions per thousand active, nonfederal physicians has increased very little since 1960." [120]

Cohen and Miike explained that the ineffectiveness of licensing boards is based on four factors:

- a) There is a natural reluctance on the part of board members to invoke disciplinary action against their fellow practitioners;
- b) disciplinary actions often result in lawsuits against the boards, thereby causing boards to drop certain actions if an adverse ruling by the courts is anticipated;
- c) board members function both as rule makers and rule adjudicators in deciding disciplinary matters, thereby causing confusion and overlap of roles: and
- d) statutory provisions delineating the grounds for board sanctions generally are ambiguous, leading to judicial reluctance to enforce them.[121]

Summerfield's review of California's system of regulating psychotherapy concluded, "The existing system seems quite close to the practitioner's ideal." [122] The rule is, as Shimberg quipped, "Once licensed, forever competent." [123] Hogan concluded, "The formal disciplinary mechanism exercised by the state is not a significant factor in bringing about adherence to ethical norms and in ensuring minimal competency." [124]

Peer Review. One recent attempt to take a different approach to discipline has been the formalization of the peer-review process. It is noteworthy that this innovation was stimulated by federal rather than state authorities. Peer-review is based on the belief that a knowledgeable third-party role, put in place to monitor the work of professionals, is

an adequate deterrent to unethical, negligent, incompetent, and exploitive practice. Peer review is a retrospective process in which data relating to performance, cost, or outcome may be monitored.

Professional standards review organizations (PSROs), authorized by federal law in 1972, monitor the necessity for and quality of inpatient care provided to beneficiaries of federally funded programs (for example, Medicare). Organized by areas containing a minimum of 300 physicians, each PSRO brings physicians together in an organization separate from the medical society and the federal government to use peer-review procedures.

When professionals discuss quality-control measures, they typically cite a particular provision for such control (for example, a grievance committee) and assume that because it is in place, it works. The failure to separate potentiality from actuality thus tends to confuse discussion in this area. There is no question that in the best of all possible worlds, if professionals seriously decided that it was in their best interest to maintain quality, peer-review methods could significantly advance the achievement of such a purpose. A study conducted for L'Office des Professions in Quebec revealed that some of the older professions had the power to do so.[125] The study found that professional associations that were large, founded before 1922, wealthy, made up of members engaged mainly in private practice with individual clients, and regulated by practice acts showed a higher level of peer control than other professional associations. However, the study did not examine whether this power was used in the public interest.

The critics of peer review point to an absence of will. In an unusually candid comment, a dentist attached to the National Academy of Sciences indicated he knew from personal experience the difference between "can" and "will":

In 1954 I was the neophyte chairman of the Practice Plans Committee of the Seattle District Dental Society. . . . Our first contract was with the International Long-shoremen's and Warehousemen's Union--Pacific Maritime Association (ILWU-PMA) to care for their children up to age 15. The late Goldie Krantz was the ILWU-PMA negotiator. I'll never forget the rude shock when Mrs. Krantz asked, "How are you going to police your members?" "Police," we answered, "what do you mean police?" "Look," said Mrs. Krantz, "we're agreeing to pay out good money for dental care for our kids. You're not naive enough to think we won't expect some strong measures for controlling quality?" We were.... They wanted a high level committee written into the contract--to sit in judgment of their peers; and if the quality of a dentist's treatment was found wanting, he was to be dropped from the program. "We don't intend to haggle over fees," the Union said, "so in turn, we expect quality care for our money." And quality they got, though more than a few dentists were censured and/or dropped from the panel.[126]

The PSRO concept, which represents the most comprehensive cooperation between a profession and the federal government to attempt to achieve effective peer review, works when properly applied. In various PSRO areas, according to Jack H. U. Brown, hospital stays were reduced by 20 percent; there was a 20 percent reduction of the need for surgery after a second opinion was given; an increase from 18 to 55 percent was noted in the effectiveness of disease pathology diagnosis related to appendicitis after a medical audit; and there was a decline in antibiotic use from 60 to 30 percent.[127]

Critics of peer review generally suggest that the process maintains the autonomy of professionals while giving the appearance that behavior injurious to the public is being eliminated. In general, Donabedian's criteria for an effective control system are not fulfilled. The voluntary involvement of professionals, the advisory nature of most reports, and the general lack of agreement on standards testify to sporadic monitoring and ad hoc procedures. Professionals generally are reluctant to comment on each other's practice. Their failure to do so voluntarily has caused 15 states to require individual physicians to report instances of other physicians' abuse of patients; eight states require medical societies to do so. The medical peer-review process focuses on the business concerns of professionals, fraud, and cost to the public, thereby indicating an avoidance of concern for the quality of care or outcomes. Referring to the dual function of the PSRO--utilization and quality control--Anne R. Somers and Herman M. Somers concluded, "As long as the costs of Medicaid and Medicare continue their astronomical rise, it is likely that the government will increasingly stress the utilization aspects." [128]

Peer review responds to complaints, and when there is action, it is punitive in orientation; peer review is rarely concerned with preventive or effective rehabilitation. When public members or related professionals are included in review processes, they are usually treated as tokens and are easily co-opted. The substantial amount of information

developed by PSRO is not shared with the public, so there is very little external influence. In fact, George J. Annas alleged that physicians and hospitals would not cooperate voluntarily with the PSRO if the data were to be made public.[129] The difficulty consumers have in discovering to whom to complain testifies to the low esteem in which peer re-view is held in professional circles. Judith F. Rosner reported on structured interviews with 89 Fort Worth, Texas, dentists.[130] She found that 51 percent judged peer review as not being useful. Claiming differences of opinion among dentists, dislike of criticizing one another, or unfamiliarity with conditions of work, the dentists expressed their reluctance to exert influence on one another. This triumph of form over substance in peer review results from the need to maintain the reputation of the profession and by so doing ward off public scrutiny that might limit autonomy and freedom from lay control. In summary, Gaumer concluded:

The evidence indicates that the current competency control systems are not sufficient to eliminate errors in judgment, obsolete practices, and undisciplined, careless practice. . . . This suggests that our mechanisms of control need overhaul, that there may be undue emphasis on the quality of resources and on tests of competence and too little emphasis on actual patient outcomes.[131]

Negative Effects of Entry Restrictions

Shortages of licensed personnel, underutilization of allied personnel, and discrimination against minority-group members seeking licensing are problems that are rarely considered by licensing agencies. Yet these problems are exacerbated by the licensing process.

Interstate Mobility

In economic terms, mobility is a mechanism by which the labor supply adjusts to changing conditions of demand. For individuals, mobility is one way to advance toward a career goal or to choose a job. The flexible use of human resources to meet societal needs for service would require the free movement of practitioners from one location to another. Free movement from one state to another is facilitated by reciprocity agreements whereby a licensee in one state can be granted a license in another. When licensing boards place impediments in the way of reciprocity, such action has a negative effect on the ability of occupations to respond to service needs. Thus it negatively affects the quality of service received by the public.

Four studies show the effects of professional licensing arrangements on interstate mobility. Holen used 1950 census data and a 23-state, 1949 survey of medical, legal, and dental income.[132] Although she did not take note of actual reciprocity arrangements, she presented evidence of interstate mobility in medicine, law, and dentistry. She concluded, "empirical evidence is consistent with the hypothesis that licensing professional arrangements and practices in dentistry and law restrict interstate mobility among dentists and lawyers and distort the allocation of professional personnel in these disfields." [133] Lee Benham, Alex Maurizi, and Melvin W. Reder compared physicians and dentists in terms of the consequences of barriers to migration.[134] They found physicians tended to move where demand and income were high, while interstate movement by dentists was impeded by state licensure arrangements. Lawrence Shepard reported that 25 dental boards that did not have reciprocity agreements with other states failed an average of 22 percent of out-of-state recent dental school graduates, while states with reciprocity failed an average of only 9 percent.[135] B. Peter Pashigian compared 24 occupations and concluded:

The most pronounced effect of licensing is the reduced interstate mobility of members in licensed occupations. Restrictions on the use of reciprocity reduce interstate mobility still more. While licensed occupations have about the same within-state mobility as unlicensed occupations, they have significantly lower interstate migration rates. The evidence suggests that licensing is the primary reason for this difference. Licensing also appears to reduce the interstate mobility rates of older members more than it reduces that of younger workers.[136]

The geographical maldistribution of professionals also discriminates against certain consumers, including the elderly, those geographically isolated, the urban poor, and migrant workers.[137] Roemer reported that because of the concentration of medical practitioners, patients living in less populated areas were required to travel to distant medical centers for treatment.[138] The actual likelihood of such travel depended on each patient's socioeconomic status.

Utilization

Hogan's review of the effect of licensing on the utilization of paraprofessionals indicated that licensing has had a profoundly negative effect.[139] "By defining in extremely broad terms the practices restricted to fully licensed practitioners, and by making no provision or very rigid or narrow provisions for delegating functions to others, licensing laws unnecessarily limit those who can provide auxiliary services." [140] Hogan also indicated educational requirements:

Many requirements are unrelated to ability, especially citizenship, residency, age, and other personal requirements. The amount of schooling and experience demanded is often excessive. Many of the laws regulating the paraprofessional do not allow alternative routes to licensure, such as through equivalency or proficiency testing or through giving credit for related work experience. Often, no credit is allowed for formal education in a degree program different from the one licensed, even if the courses are identical.[141]

Hogan cited the example of military training programs that require less of a time commitment without sacrificing quality when compared to hospital and technical institute training programs.[142]

The limitations restrict the number of paraprofessionals available to practice, as well as their effective functioning on the job. These individuals are prevented from performing many tasks of which they are capable either because of exclusionary language in licensing statutes or because fully licensed practitioners (for example, physicians) fear violating the law or malpractice suits in the absence of specific permission to delegate functions. Gaumer cited the proliferation of credentialed professions in the health-care field, which has led to interoccupational conflict over so-called turf issues and is a cause of poor utilization of personnel.[143] Hogan found that despite some tinkering with medical practice acts to allow physicians to delegate some tasks, and despite separate licensing laws for auxiliary personnel, "Auxiliary personnel are still not allowed to perform functions of which they are capable; and the degree of supervision is often excessive." [144] Summing up, Roemer believed there were

serious questions about the constraints against innovation in the laws governing licensure of nurses and paramedical disciplines, which have special importance in coping with the increasing demands for medical care that cannot be met by our supply of doctors.[145]

Discrimination

Although there is only a smattering of direct evidence that licensing discriminates against minorities and disadvantaged groups, Hogan reported that these groups have had unusual difficulty in obtaining appropriate credentials:

The reliance of licensing laws on academic credentials --which are less frequently possessed by the poor, minorities, women, and the elderly--has a deeply pernicious and discriminating effect, especially when evidence does not exist that these credentials are positively correlated with competence.[146]

Randall Collins concurred: "Since the evidence strongly shows that credentials do not provide work skills that cannot be acquired on the job, and that access to credentials is inherently biased toward particular groups, the case for discrimination is easy to make." [147]

Economist Stuart Dorsey's investigation indicated that "written licensing examinations for cosmetology licenses appear to be biased against the less educated, apprentices, blacks, and nonnatives." [148] Explaining, he indicted credentialism:

The attributes important in passing the written test were essentially unrelated to a measure of productivity, the practical test score. Thus, occupational licensing appears to be similar to private-sector "credentialism"--defined as the tendency of employers to choose workers on the basis of characteristics unrelated to job performance.[149]

In contrast, economist Richard B. Freeman's study concluded that the pre-1960 pattern, which showed the use of licensing to discriminate against blacks, no longer held.[150] "Licensing laws were a barrier to black economic advancement during the period when licensure was explicitly for discriminatory purposes but are now a barrier only in a limited set of occupations when licensure is not a tool of discrimination." [151]

In medicine, Frech documented the assertion that historically entry restrictions had the impact on medical schools of creating a "sellers' market," so that medical schools could begin to turn away students in large numbers.[152] This permitted medical schools to discriminate against blacks, women, Jews, and other groups in their admission policies. The 1910 Flexner report caused the number of black medical schools to drop from seven to two, halted a steady increase in the percentage of black physicians (0.9 percent in 1890 to 2.7 percent in 1920), and indeed caused a decline in the percentage of black physicians (1.4 percent by 1969).[153]

Alan L. Sorkin reported in 1977 that the proportion of women enrolled in medical schools peaked in 1910.[154] The proportion and absolute number of women physicians was greater in 1910 than in 1950. Among Jews, medical school admissions declined by 30 percent during the depression of the 1930s, while total admissions fell by only 13 percent. Although subsequent external pressures and federal statutes have begun to create some positive changes for women and minorities, it appears that the historical effect of licensing entry restrictions on these groups has been discriminatory.

In summary, licensing agencies do not appear to function to protect the public. Assessment of initial competence relies on invalid criteria. The monitoring of continued competence has not progressed beyond the questionable mandating of continuing education. Discipline of errant practitioners is confined mostly to prosecuting unlicensed practitioners rather than those already licensed. Licensing is seen as creating rather than ameliorating the problems of distribution of professionals, the utilization of paraprofessionals, and the inclusion of minorities in the professions. Hogan has agreed:

In the first place, licensing has not accomplished its stated purposes. Little evidence suggests that the quality of professional services has improved as a result of licensing laws. . . . In the second place, even if licensing laws do assure competent practitioners, the price may not be worth it. . . . In the third place, even if the net benefits of licensing outweigh the costs, equally beneficial but less expensive alternatives may be available.[155]

Conclusion

The justification for professional licensing involves the use of the police powers of the state to protect the public from quacks and incompetents. The professional monopolies that result cause the loss of one aspect of economic freedom--namely, the right to choose an occupation.[156] Given the high value that political and economic freedom have in the United States, the burden of proof should be on the states and the professionals they regulate to show that the loss of freedom is justified by the protection given to the public. Further, the costs of licensing, which include higher costs of professional services, resistance to innovation in education, training, and services, and maldistributions in the supply and use of professional and paraprofessional resources[157], make the price paid by the public for protection even higher and necessitate the requirement for justification.

Two forms of evidence have been brought to bear on the question of whether licensing is justified. First, there is the empirical research literature, which is rather new, dating for the most part from 1977. There is some support for the proposition that entry restrictions result in more qualified professionals to serve the public, as judged by the somewhat questionable ratings of peers, the self-reports of professionals themselves, and crude measures of consumer satisfaction (reduced malpractice claims and rates). However, measures of quality that tap the availability of professional services, the extent to which consumers choose to substitute other practitioners, and the direct outcomes of service primarily show either no relationship between entry restrictions and quality or a negative relationship.

Second, there is the evidence that comes from the evaluation of the functioning of state licensing boards. It has been shown that licensing boards do not effectively determine initial competence of licensees; they do not help to maintain the continued competence of licensees; they are ineffective in the disciplining of errant practitioners; and they do not properly address the needs of underserved populations. Instead, as has been shown, the licensing system has exacerbated the problems of maldistribution and underutilization of professionals, and it has supported a "licensing for life" system. The evidence presented does not justify the loss of economic freedom or the costs associated with professional licensing. Neither the licensing boards nor the professional associations that desire licensing can be said to have made their case.

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