Commentary

Concerns About Substandard Training for Prescription Privileges for Psychologists

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This Commentary on the Muse and McGrath study (this issue, pp. 96–103) refutes its conclusion that the amount of training for prescription privileges for psychologists (RxC2P) is equal to or greater than that for psychiatric nurse practitioners and physicians. First, the sample failed to include only training programs for nurses and psychologists that lead to independent prescribing. Second, training was defined by an arbitrary, nonvalidated list of “key content areas” that excluded much of the standard medical curricula for nurses and physicians to prescribe. Third, the levels of training for which the “key content areas” were assessed omitted undergraduate prerequisites, apprenticeships, supervised practice, and residencies that are a standard part of the nursing and physician programs studied. RxC2P training remains substandard. © 2009 Wiley Periodicals, Inc. J Clin Psychol: 66: 104–111, 2010.

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The Muse and McGrath (this issue, pp. 96–103) study aimed to compare the amount of training required for three types of professionals with the authority to prescribe (i.e., psychiatric nurse practitioners, physicians, and pharmacologically trained psychologists). One purpose of the study was to address assertions that the training model for psychologists to obtain independent prescription privileges (RxC2P), endorsed by the American Psychological Association (APA, 1996, 2008), is substandard and insufficient (e.g., Robiner et al., 2002, 2003; Stuart & Heiby, 2007). For example, it has been estimated that the APA model involves less than half of the amount of medical training required of any other prescribing professions (e.g., Heiby, DeLeon, & Anderson, 2004, p. 340). In contrast, the Muse and McGrath study concluded that the amount of training for pharmacologically trained psychologists is equal to if not greater than that for psychiatric nurse practitioners.

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and physicians. Different definitions of training can account for the two quite
different conclusions regarding the amount of training across these professions. The
Heiby et al. estimate was based upon counting all levels of standard medical training,
including undergraduate prerequisites in the natural and life sciences, graduate
coursework, apprenticeship training, and residencies. In comparison, the Muse and
McGrath study involved a new and arguably idiosyncratic and skewed definition of
training and excluded some standard levels of training.

This Commentary first addresses some aspects of the R×P movement related to
the context of the study. Next, sampling and measurement problems of the study are
explicated. Finally, it is concluded that the study failed to demonstrate that the
amount of R×P training meets society’s standards or protects the consumer.

Context of Evaluating R×P Training

The stated purpose of the Muse and McGrath (this issue) study was to justify the
amount of medical training in the APA (1996, 2008) model R×P curriculum. The
R×P proposal remains controversial within psychology and objections involve
anticipated negative effects of the amount of training (Albee, 2002; Bush, 2002;
Hayes & Heiby, 1996, 1998; Hayes, Walser, & Bach, 2002; Heiby, 2002; Heiby et al.,
2004; McFall, 2002; Pollitt, 2003; Sechrest & Coan, 2002; Wagner, 2002). Proponents of R×P have observed that the major reason for the failure of most
enabling legislation is concern over the quality of the APA model training (Fox et al.,
2009), and the consumer protection reasons given in one governor’s veto of an
enabling bill supports this impression (Lingle, 2007).

For over 20 years, R×P bills have failed dozens of times, probably in part because
some physicians and psychiatric nurse practitioners have declared the training in the
bills substandard. For example, the International Society of Psychiatric-Mental
Health Nurses (2001) concluded it was the ethical responsibility of nurses to oppose
R×P bills because of inadequate training. Moreover, psychologists themselves often
oppose R×P bills based on the training proposed, which can make legislators reticent
to support them (e.g., http://www.nationalpsychologist.com/articles/art7984.htm).

Divisiveness within psychology is partly a consequence of how R×P training
became policy of the APA (1996) in the first place. Unlike the pursuit of prescription
authority among allied medical professions, R×P did not develop based on nearly
universal consensus nor has there ever been a time that it has been without
controversy in the field itself. R×P was adopted as APA policy only after its
proponents resorted to the highly unusual maneuver of suspending the rules of the
APA Council of Representatives that required consultation with constituencies,
thereby circumventing dialogue that might have exposed the limitations of
psychologists’ support for it (DeNelsky, 1996). Indeed, concerns about the degree
of support for R×P have been evident since the R×P movement began, as is reflected
in the ambivalence for R×P revealed in surveys of rank-and-file psychologists
(Walters, 2001). Similar concerns about the processes by which APA promotes R×P
within the profession are evident in their policy to forbid affiliates whose members
oppose R×P to state this opposition on their Web sites. For example, the Society for
a Science of Clinical Psychology adopted a position paper in opposition to R×P but
was required to remove it from its official website (Fowles, 2005). The Society’s
statement, however, is available elsewhere on the internet (e.g., http://
www.mspp.net/SSCPscriptpriv.htm).

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After concerns and objections by opponents of R\times P were neglected and explicitly censored by the APA (Fowles, 2005), an independent advocacy organization of psychologists formed in 2007 to oppose legislation based upon the APA (1996, 2008) psychopharmacology training model: Psychologists Opposed to Prescription Privileges for Psychologists (POPPP; http://psychologistsopposedtoprescribingpsychologists.org/). POPPP undertakes diverse efforts to educate the profession, public, and policy makers regarding a range of concerns about R\times P, such as deficiencies in the current training model and its implementation, the lack of external review of training programs, and how these create potential risks to consumers. Were there large-scale and well-designed studies generating data that revealed that R\times P based on the current training model was safe, then psychologists and other health professionals, and organizations such as POPPP would need to reconsider their objections to R\times P bills based upon these concerns. Unfortunately, the Muse and McGrath (this issue) study failed to provide evidence that R\times P training is comparable to that of other prescribing professions and, thereby, failed to provide support for R\times P legislative efforts.

Methodological Problems with the Muse and McGrath Study

Comparison of the amount of training in the APA (1996, 2008) model to that received by other professionals who have the authority to prescribe independently would require consideration of the great variations in the scope of practice within nursing and psychology, and the fact that medical training for nurses and physicians occurs at various levels. The method used by Muse and McGrath (this issue, pp. 96–103) failed to adequately control for these qualitative differences.

Sampling Issues

Quantifying the amount of medical training for three of the professions with independent prescription authority requires a sampling of only those programs designed to train for such authority. Although the training and scope of practice for physicians is fairly standardized, this is not the case for psychiatric nurse practitioners. Jurisdictions vary a great deal in terms of scope of practice and training regulations for nurse practitioners in all specialties. For example, although physicians have independent prescription authority in all 50 states, psychiatric nurse practitioners have independent authority in only 14 states (Fox et al., 2009). The Muse and McGrath study sampled five programs that train psychiatric nurse practitioners whose eligibility for independent prescription authority in those 14 states is unknown.

For psychology, of course there is no accepted societal standard of medical training given that R\times P has been adopted in only two states (Louisiana and New Mexico). The benchmark used by the Muse and McGrath study for pharmacologically trained psychologists is a new degree, the master’s of science in psychopharmacology, which is designed to follow the APA (1996, 2008) curriculum. This new degree is offered by only five institutions in the United States, is of unknown quality, and receives no accreditation oversight. Use of the MS degree for quantifying the medical training of prescribing psychologists may be justifiable in light of the enabling law in Louisiana that essentially created this degree as the required training for independent R\times P in that state. However, it is unknown if the graduates of the five sampled MS programs would meet Louisiana’s credentialing criteria for independent R\times P. Moreover, the authors’ assertion that the MS degree
yields competency to practice medicine is mere conjecture. The competency of graduates of these MS programs has not been evaluated and cannot be assumed, as Muse and McGrath appeared to do by the statement, “The current study sought to compare the training of psychologists who are competent to prescribe medication...”

For the Muse and McGrath study to compare training for the three selected professions, it would have been necessary to restrict the sampling of psychiatric nurse practitioner programs to those leading to independent prescription authority and of MS in psychopharmacology programs to those that satisfy credentialing criteria for RxC in Louisiana or New Mexico. Of course, the generalizability of the findings would then have to be restricted to such training programs.

Definition of Training as Key Content Areas

The Muse and McGrath study defined training relevant to prescription authority by a list of eight “key content areas” proffered for the comparison of training across three professions. No rationale or evidence of this new definition is presented in support of its content or ecological validity. This is an odd state of affairs given there are training standards for the fields of nursing and medicine that could have been used in defining key content areas (e.g., http://www.iime.org/documents/gmer.htm). The Muse and McGrath study’s key content areas appear to blithely omit much of the medical training required of nurses and physicians (e.g., anatomy, genetics, pathology, and pathophysiology) as if those domains of knowledge were irrelevant to developing a firm foundation for what essentially is a medical activity.

Much of the required medical training for psychiatric nurse practitioners and physicians recognizes that medications can affect the entire body. Opponents of the RxC movement underscore that the systemic nature of psychotropic drugs is overlooked in proposed RxC training (e.g., Kingsbury, 1992; Robiner et al., 2002, 2003; Stuart & Heiby, 2007). Similarly, the aspects of medical training that take the systemic actions of medications into account seem to be omitted from the key content areas asserted by Muse and McGrath. At the same time, the key content areas outlined by Muse and McGrath include many of the courses offered by APA-accredited professional psychology doctoral programs (e.g., behavioral assessment, psychometrics, basic behavioral sciences, and other psychology) that do not overlap with the curricula of nursing and medical schools. The key content areas do, however, seem to include the courses required in the APA (1996, 2008) model psychopharmacology curriculum represented in the MS in clinical psychopharmacology degree. Therefore, the definition of training in terms of the selected key content areas rendered an underreporting of psychiatric nurse practitioner and physician medical training as well as a circular validation of RxC training. The Muse and McGrath study’s conclusion that pharmacologically trained psychologists receive more education in the “key content areas” than psychiatric nurse practitioners and physicians was assured by this inappropriate, tautological approach to defining “key content areas.” If there were a convincing argument for a new definition of training for the practice of medicine, then it would be critical to provide cross-profession content validity evidence for that new definition.

Level of Medical Training Assessed

When assessing the amount of training in “key content areas,” the Muse and McGrath study excluded undergraduate-level prerequisites, apprenticeships, and post-degree
supervised practice and residencies. This omission is a major confound given the three professions sampled differ drastically regarding the amount of medical training that occurs at these levels. For psychiatric nurse practitioners and physicians, over a year of medical training takes place at the undergraduate prerequisite level. At least some of the nurse practitioner master’s degree programs studied by Muse and McGrath appear to require a BS degree in nursing for admission (e.g., http://www.sjcny.edu/Academics/Admission-Requirements/728/ and http://www.nursing.vanderbilt.edu/msn/bsnmsn.html). Nevertheless, highly relevant undergraduate medical training is excluded from the total amount of training they counted. The amount of undergraduate training for physicians is fairly standard. Sechrest and Coan (2002) surveyed undergraduate prerequisites in the natural and life sciences for admission to 45 medical schools, and they found the mean admission requirement to be 31 semester credits or 465 contact hours. They also reported that only three of 168 PhD and PsyD programs surveyed had any natural and life sciences requirements for admission. Sechrest and Coan go on to ask the following questions about the proposed RxP training:

- What has professional psychology discovered that these other [prescribing] professions clearly do not know?
- That undergraduate training in science can be bypassed?
- That psychology graduate students are so smart that they can learn the science they need in almost no time?
- Or maybe that it is possible to learn pharmacology, at least psychopharmacology, as a manualized, technical activity that simply makes deeper understanding, e.g., of organic chemistry, unnecessary? (p. 657)

In addition to neglecting the BS in nursing degree, post-master’s degree training for psychiatric nurse practitioners also was omitted by Muse and McGrath’s assessment of the amount of training in “key content areas.” This, too, is a critical omission given that ongoing physician supervision is required for psychiatric nurse practitioners to prescribe in 33 states (Fox et al., 2009). Granted, identifying how such supervision covers each of the key content areas would be difficult. As noted earlier, regarding sampling issues, this problem might have been circumvented by limiting the nursing programs studied to ones that train psychiatric nurse practitioners for independent prescription authority, which is the current scope of practice for physicians and the stated goal of the RxP movement.

The Muse and McGrath study also omitted both apprenticeships and residencies when measuring the amount of training received by physicians. Although the authors recognized that most medical school curricula comprises at least 2 full years of apprenticeship-type training that could cover the “key content areas,” there was no adjustment for such in the method, which restricted measurement of training to explicit coursework. The last 2 years of the 4-year medical school curriculum typically involves not coursework but rotations that provide both didactic and practical training in areas such as internal medicine, obstetrics, pediatrics, and psychiatry. Neglecting these rotations resulted in omitting at least 2 full years of training in the key content areas that could have been counted by surveying the five medical programs studied.

A post-doctoral residency of up to 6 years is completed by almost all graduates of medical schools, according to the U.S. Department of Labor (http://www.bls.gov/oco/ocos074.htm), regardless of specialty. It is well known that this is more than a full-time didactic and experiential training activity, which in recent years has been
limited to 80 hours per week. Although physicians may be licensed to prescribe independently after 4 years of graduate-level medical training (i.e., the M.D. or D.O. degree), nevertheless most obtain supervised training for their area of intended practice and indeed 90% obtain sufficient additional training to acquire board certification (Boukus, Cassil, & O’Malley, 2009). To omit up to 6 years of residency training artificially truncates the total amount of training physicians received in the “key content areas.” Given the apparent goal of the R×P movement is to obtain the rights, privileges, and legally recognized scope of practice of psychiatric physicians, it would be necessary to count the hours of coverage in the key content areas during the years of residency they complete.

In sum, the Muse and McGrath study reported data that artificially deflate the amount of medical training received by psychiatric nurse practitioners and physicians to independently prescribe medications by neglecting the fundamental training deemed critical in these fields. When standard training for nurse practitioners and physicians is considered, others have concluded that R×P training is less than half the amount required of those professions (e.g., Heiby et al., 2004). Even if one were to accept Muse and McGrath’s non-validated definition of the training necessary to prescribe independently as being the proposed “key content areas,” these areas were not fully assessed for the three professions compared. By including the psychology training that overlaps with the key content areas and by excluding much training in nursing and medicine that possibly covers these “key content areas,” the methodology used in the Muse and McGrath study resulted in a biased outcome.

Conclusions

The R×P movement would benefit from evidence that the APA (1996, 2008) model curriculum meets society’s standards for the practice of medicine (Fox et al., 2009). Muse and McGrath (this issue) attempted to provide such evidence. Unfortunately, their data are biased and failed to refute assertions that the APA curriculum is substandard (e.g., Heiby et al., 2004; Lingle, 2007; Robiner et al., 2003). Future comparisons of the amount of training required for prescription privileges would benefit from a more representative sampling of programs and a more cross-profession content valid measurement approach. Greater rigor, including adopting definitions that are accepted across professions rather than being unique to members of one (i.e., psychology) is essential for true cross-disciplinary comparisons. However, it would be surprising if future studies demonstrated that the APA model comprises the same amount of medical training that is standard for nurse practitioners and physicians. Indeed, it has been a theme of the R×P movement to articulate an amount of medical training that is less than that required for other professions (Fox et al., 2009). Otherwise, the R×P movement would be encouraging joint degree programs with nursing and medical schools that would obviate the need for R×P-enabling legislation.

In a review of the history of R×P training proposals, Robiner et al. (2002) noted a devolution in the amount of training that was finally adopted by the APA (1996). Proposals by APA task forces (e.g., Smyer et al., 1993) and independent evaluations of an R×P training program in the military (e.g., American College of Neuropsychopharmacology, 2000) recommended training far more similar to what is required of nurse practitioners with independent prescription authority than what the APA adopted. That the APA model represents a reduced standard is explicitly acknowledged by Fox et al.’s (2009) statements that the R×P training has “the least overlap
with traditional medical curricula” (p. 258) and that implementing such training relies upon “the public sector … as an experimental laboratory for society” (p. 263).

Given the RxP movement is based upon an experiment of a reduced amount of medical training to prescribe, it would be productive to demonstrate that this amount of training yields competency and protection to the consumer. Such an outcome evaluation study was conducted on a military RxP program (e.g., American College of Neuropsychopharmacology, 2000), which suggested that the Department of Defense–trained psychologists were functioning more at the level of medical students than fully trained physicians. Nevertheless, similar, rigorous evaluation of the treatment provided by psychologists who have been granted the authority to prescribe independently would need to be undertaken to suggest that the abbreviated training model yields competence comparable to physicians. Such objective consumer safety evidence could have major implications for the regulation of all prescribing professions. Whereas some may argue that the current training standards in medicine and nursing are excessive (which would then presumably justify curtailing training), the data suggesting unacceptably high rates of medication errors (Kelly & Rucker, 2006), even with higher levels of training in those fields, urge caution against any dilution of training standards. Meanwhile, the most prudent avenue for psychologists who wish to prescribe at levels of competence and knowledge comparable to other health practitioners (nurse practitioners, physician assistants, and physicians) is to actually complete the training required of them.

References
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