
COMMENTARY

Have Things Changed in Pharmacy Education?

Marcus Droege
H. John Baldwin

ABSTRACT. A shift in focus from the product to the patient has occurred in pharmacy. Despite significant changes in pharmacy curricula, it is unclear if perceptions of the profession of pharmacy have changed accordingly. This commentary questions the presumption that, over time, there would be a change in perceptions to reflect this paradigm shift for which the literature revealed little evidence. We conclude that the ties between professional mandates and perceptions of the practice of pharmacy are loose at best and that further efforts are needed to secure pharmacy's role in a changing and increasingly interdisciplinary health care environment. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2005 by The Haworth Press, Inc. All rights reserved.]*

Marcus Droege, Ph.D., is Assistant Professor and H. John Baldwin, Ph.D., is Professor and Associate Dean of Academic Affairs at Nova Southeastern University, Department of Pharmacy Administration, College of Pharmacy, 3200 South University Drive, Ft. Lauderdale, FL 33328-2018.

Address correspondence to: Dr. Droege (E-mail: droege@nsu.nova.edu).

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“They say that time changes things, but you actually have to change them yourself. . . .”

—Andy Warhol

Increasingly, over the past three and a half decades, the profession of pharmacy has been attempting to undergo a significant transformation involving a shift in focus from the product to the patient. Hepler reviewed this phenomenon in his article “The Third Wave in Pharmaceutical Education: The Clinical Movement (1).” This shift has resulted in pharmacy’s mandate to accept responsibility for providing pharmaceutical care as part of a comprehensive reprofessionalization strategy. From a professional perspective, this movement has translated into a presumed dichotomy characterized by the terms “product-orientation” versus “patient-orientation.” Judging from the literature, the new paradigm has been advocated and adapted by organized pharmacy, by pharmacy education, by the federal government, and, one would assume, by pharmacy practice (2).

Since 1967, when Brodie first related pharmacy’s professional role to patient orientation (3), curricular outcomes and professional mandates have been restructured to reflect this shift toward patient-orientation in pharmacy (4-12). Most recently, the American Association of Colleges of Pharmacy’s Center for the Advancement of Pharmaceutical Education proposed a set of educational outcomes intended to better reflect “evolving roles of the pharmacist in serving patient and public health needs (13).” However, the literature does not reveal convincing evidence that these new mandates and curricular changes have transformed the way the profession is perceived by pharmacists, other health care providers, and the public, at least not of the magnitude that would be expected given the time, effort, and resources that went into impelling this paradigm change. Strand, in her 1997 Remington lecture, put it this way: “We must do more than talk and agree. We must act (14)!” In 1969, Knapp et al. showed that pharmacists are “placed closer to the concept of technician than to the concept of professional by all groups studied (15).” Unfortunately, recent research on related questions presents a similar picture. As Morgall and Almarsdottir concluded in 1999, pharmacy “will continue to shoot wide of its goal to increase public

support and to develop an appreciation of the pharmacist's professional skills (16)."

A substantial amount of research has addressed the question of professional socialization and disillusionment among pharmacy students. It appears as if "disenchantment and negativism are concomitant with increased sophistication" of pharmacy students, an outcome in stark contrast to the intent of educators and certainly not conducive to becoming compassionate professionals (17, 18). In a recent study investigating pharmacy students' perceptions of their profession, Kritikos et al. discussed role ambiguity and related it to a lack of autonomy and professional service orientation in pharmacy practice (19).

Implications of these studies are substantiated by research from outside pharmacy. Merdinger compared social work, management, and psychology students in an effort to understand causal relationships between undergraduate education and professional attitudes. Findings indicate that course sequence and content are linked to professional socialization and that curricula need to have an explicit focus on values considered important to a profession (20).

Furthermore, previously unpublished data by the authors hint to the fact that pharmacy students' perceptions of their profession have not changed over time. More than 400 third-year pharmacy students were surveyed between 1998 and 2003 regarding the role of a pharmacist after pharmacy education had moved to entry-level Doctor of Pharmacy curricula to better reflect the mandate to provide pharmaceutical care (12, 21). The authors presumed that the students had been exposed to pharmacy in an academic setting for some time, but had not yet been acculturated into the realities of the "product-patient dichotomy," which had previously been shown to occur soon after completion of the didactic portion of the curriculum (17, 19, 22, 23). Students in this study used patient-oriented and product-oriented descriptors for their profession in equal proportions, indicating no change in their perceptions over time (21).

These findings, while perhaps not surprising, are alarming. Based on a review of the professional literature (1-12, 14-19, 21, 23), the authors of this manuscript suggest that, despite the efforts of academic pharmacy, it appears that pharmacy education on the whole has not yet been effective in socializing pharmacy students with the attitudes and beliefs needed to bring about the paradigm shift from product-orientation to patient-orientation. In essence, pharmacy schools may attract the same type of student and produce the same type of graduate as thirty years ago.

Although this discussion requires further elaboration and verification outside the educational experience, it raises several relevant questions not only for academic pharmacy:

- What are the values of the profession that we need to model as educators across the curriculum and how are we going to align the educational content with the evolving roles of the pharmacist?
- How are we going to identify and select the type of student that will serve the patient and public health needs of the future?
- In what ways are we going to change society's expectations and how are we going to address the need for pharmaceutical care?

We conclude that the ties between professional mandates, the practice of pharmacy, and actual perceptions by pharmacy students are loose at best and that considerable efforts are needed to secure a leadership role for pharmacy in a changing and increasingly interdisciplinary health care environment. Until educators are successful in changing the attitudes and beliefs of pharmacy students, they will likely be unable to change pharmacy practice.

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