SUMMARY. The purpose of this article is to give the author's views on the B.S. vs. Pharm.D. debate from the perspective of the Dean of one of the four historically Black Colleges of Pharmacy. Data seem to indicate that all colleges/schools of pharmacy offer or soon will offer the Pharm.D. degree in the near future. The rhetorical question and criticism by many in the pharmacy profession is whether or not all graduates need the Pharm.D. degree. The author concludes that they do, and the reason is they can better market themselves.

The author states that the entry-level Pharm.D. program will have a significant impact on the African Americans and other minority pharmacists. It is predicted that given current trends, there may be a decline of African American and Hispanic pharmacy students enrolled as schools convert to the entry-level Pharm.D. The author concludes that minority pharmacists, in the future, without a Pharm.D. could face racial discrimination with the lack of a Pharm.D. being used as a potential "legitimate" excuse to not hire them in key administrative, clinical or other nontraditional roles.
African-American pharmacists could find themselves as a "double minority"—vis à vis, with a B.S. pharmacy degree and African American.

The purpose of this article is to give my views on the B.S. vs. Pharm.D. debate from the perspective of the Dean of one of the four (4) Historically Black Colleges of Pharmacy. At the outset, let me state that these are my personal views, and do not necessarily reflect the views of the entire faculty of Xavier University's College of Pharmacy, nor that of the other three Historically Black Colleges of Pharmacy. However, the faculty unanimously adopted the entry-level Pharm.D. as our only degree.

As far back as 1948, it was suggested by the Elliott Commission that colleges establish the six-year Pharm.D. degree as the entry-level degree for all pharmacists. Two years later, the University of California became the first school of Pharmacy to adopt the Pharm.D. program. The University of Southern California followed suit, and until the early 1970s these were the only two schools offering the six-year Pharm.D. degree exclusively. By 1965, all schools had moved from a four-year B.S. to a five-year B.S. degree.

Today, 63 schools offer the B.S. in Pharmacy. Twenty-three (23) schools offer the Pharm.D. as the first professional degree; at 13 of these schools the Pharm.D. is the only Professional degree. Forty (40) schools offer the Pharm.D. as a Post B.S. degree (1). Clearly, these data indicate an indisputable trend that the Pharm.D. will eventually become the sole, entry-level degree in Pharmacy.

In a statement dated September 17, 1989, the American Council on Pharmaceutical Education Board of Directors provided notice of its intention to propose revision of accreditation standards in the 1990s within the framework of a doctor of pharmacy program. On February 15, 1990, the Executive Director of ACPE, Dr. Daniel A. Nona, published the Procedures and Schedule for the Revision of Accreditation Standards and Guidelines (Ninth Edition) years: 1990-2000. Part of this declaration of intent contains the following statement.

Based upon the Council's analysis and assessment of current practice developments, future practice challenges and the corresponding educational preparedness needed, the Council foresees the time when the accreditation standards will focus upon a doctor of pharmacy program as the only professional degree program evaluated and accredited. This new direction may become adopted as soon as the year 2000.(2)
With the release of this statement, the Pharm.D. vs. B.S. debate has been set off again. The two main retail pharmacy organizations wasted no time in speaking out on the entry-level Pharm.D. program.

In a December 10, 1990 National Association of Chain Drug Stores (NACDS) News Release, a summary of the analysis on the future role of the community pharmacist was presented, along with the profound effect that policies now being debated would have on the practice of pharmacy and the provision of health care services in this country. The study was conducted by SRI International and it indicated that the most likely role of the future community pharmacist would be an expansion of the current role to one of a "drug use counselor." According to this scenario, pharmacists would spend the majority of their time counseling patients on the use of prescription and over-the-counter medications and overseeing drug distribution and control. SRI further determined that the education necessary for a community pharmacist to gain the needed competencies to play an expanded role in drug use counseling should take no more than five years to complete (3).

The National Association of Retail Druggists (NARD) conducted a survey in October 1990 of nearly 2,000 of its members. The results were released on January 16, 1991 (4). A full two-thirds of survey respondents indicated that they prefer the B.S. degree or believe that schools should be able to offer both the B.S. and Pharm.D. as entry-level degrees. Sixty-two (62) percent of the respondents indicated that five years should be sufficient to earn the entry-level Professional degree with another 10 percent expressing the view that schools should continue to offer both five and six-year, entry-level degree programs (4).

**IS THERE A NEED FOR AN ALL PHARM.D.?**

The rhetorical question and criticism by many in our profession is, do all pharmacists need a Pharm.D. degree? Dr. John Gans' answer is the best that I have heard to date. His answer, in part, is . . . "No, not in all settings. But no one can guarantee where a student is going to practice" (5). Dr. Gans goes on to make the point that today's Pharmacy B.S. graduates practicing into the year 2030 and beyond will be limited. The Pharm.D. degree will enable our graduates to market themselves better. "Then, whether a student achieves or not will be based on his or her competency, postgraduate experiences and motivation" (5). I agree wholeheartedly with this statement. The degree should not be the limiting factor in any of our graduates achieving their pharmacy career goals.
The entry-level Pharm.D. program will have a significant impact on African Americans and other minority pharmacists. The production of Pharm.D.'s has been going up consistently since AACP began to gather data on the degree in 1960. Since 1985, the production of entry-level Pharm.D.'s had increased an average of 18.8 percent per year (6). It is quite interesting when one does an analysis of trends of Pharm.D.'s among minority graduates. From 1976 to 1989, there were 7,258 Pharm.D.'s awarded as the first degree, of these only 274 (3.8%) were African American and 242 (3.3%) were Hispanic. From 1973 to 1989 there were 3,321 Pharm.D.'s awarded as second degrees (post B.S.), only 119 (3.6%) were African American and 51 (1.5%) were Hispanic. All total, both first and second degree Pharm.D.'s were 10,579; three hundred ninety-three (393) or 3.7 percent were African American and two hundred ninety-three (293) or 2.8 percent Hispanic (6).

To do a comparison of B.S. and Pharm.D. degrees conferred on minorities, I totaled the number of B.S. degrees conferred from 1972 to 1989 which came to 110,350. Of these, 3,898 (3.5%) were African Americans and 4,405 (4%) Hispanics. It is interesting to note that the percent of B.S. and Pharm.D.'s for African Americans is exactly the same (3.5%). For Hispanics, there is a higher percentage for B.S. (4%) vs. 2.8 percent for Pharm.D.'s.

Even though there have been slight increases in enrollment among African American students since the mid-1970s, it seems as though the percentage receiving degrees, both B.S. and Pharm.D., has remained constant at around 3.5 percent. With the trend towards the entry-level Pharm.D. degree, most schools have reduced their enrollments when they converted to these programs. This might suggest that one can predict a decline proportionately of African Americans and Hispanics in our schools of pharmacy in the future.

Another troublesome fact is that even in 1988 only 4,800 pharmacists were African American (7). This is estimated to be about 3 percent of the pharmacists in active practice. While the data is unknown, my best estimate is that only approximately 450 of these pharmacists (9.4%) hold Pharm.D. degrees. The trend is quite disturbing when you consider that in 1950 only 1.4 percent of the pharmacists were African American, in 1980 this increased to 2.3 percent (8). So in a period of over 40 years we've only been able to increase the number of African American Pharmacists by only 1.6 percent.
Already, many positions such as clinical coordinators, directors of hospital pharmacies, clinical trial monitoring, etc., require a Pharm.D. degree. While one does not hear of any flagrant or overt discrimination against the hiring and promotion of African-American pharmacists, the lack of a Pharm.D. could, in fact, be used as a potential "legitimate" excuse not to hire African-American pharmacists for certain key administrative, "clinical" or other nontraditional pharmacist practitioner roles. If one is not careful, African-American pharmacists could conceivably find themselves as a "double minority"—vis-à-vis a B.S. pharmacy degree and African-American. Think ahead to the year 2030 or so and a significant number of African-American pharmacists could be relegated to the lower level B.S. dispensing pharmacy jobs while many other higher level and diverse practice settings and career opportunities could potentially be denied to them because of the lack of a Pharm.D. degree.

WHAT HAS XAVIER UNIVERSITY DONE TO ADDRESS THIS ISSUE?

In the spring of 1986, Xavier University's Board of Trustees approved the implementation of a twenty-three (23) month post-baccalaureate Doctor of Pharmacy program. We took four students in the fall of 1987, and in May, 1990, we graduated our first class of four students. Recognizing the impending movement to an all Pharm.D. program by the year 2000, I charged the faculty in the Fall of 1989 to develop a six-year, entry-level program and revise the 23-month, post-baccalaureate program to a 13-month program. In the spring of 1990, a final curriculum was overwhelmingly approved by the Xavier faculty.

Therefore, beginning in the Fall of 1991, Xavier will admit its first, entry-level Pharm.D. class. The revised, 13-month, post-B.S. Pharm.D. program will also begin then. The last B.S. class was admitted in the Fall of 1990; these students are expected to complete their degrees by May 1993. The first all Pharm.D. class should graduate in May 1995. In 1994, there will be a B.S. class of all students who were unable, for various reasons to complete their curriculum by 1993. However, I should hasten to add that all students who entered in the last B.S. class were told by a formal letter and verbally when they enrolled, that B.S. course offering availability beyond the Spring of 1993 would be very limited.

At Xavier, we have projected budgets over the next five to six years to phase in the entry-level program. The greatest impact will be the need to add approximately seven FTE, clinical faculty to cover the additional year of clerkships.
One major argument presented by the opponents of the all Pharm.D. degree is that it will have an adverse effect on an already short supply of pharmacists. In Xavier's case, it is true that the class of 1994 will be a relatively small class, but we expect to admit at least 100 students or more in the Fall of 1991, and we just admitted 100 students in the last B.S. class. We are projecting a graduating class for 1991 of approximately 109 students. Therefore, we feel that we will actually be able to increase our class sizes rather than decrease them. It is important to note that this Fall, Xavier experienced a 13% enrollment increase from last Fall to a record breaking total of 341 pharmacy students and some 300 in prepharmacy.

Our enrollment success can be attributed to having two full-time recruiters with adequate travel funding to do targeted national recruiting. Xavier is still the number one ranked pharmacy school in the country, in terms of enrolling some fifteen percent of all African-Americans studying pharmacy. We have also produced approximately twenty-five percent of the 4,800 African-American pharmacists in practice today.

While we feel at Xavier our enrollments will increase with increased recruiting efforts, this enthusiasm has to be tempered with the realization of some negative factors. The first major concern overall is the drop in African-American youth who are entering college. In 1976, almost 33 percent of African American and white youth who graduated from high school moved on to college. By 1987, the rate increased to 37 percent for whites but fell to 29 percent among African Americans (9). The second major factor facing future minority pharmacy students will be their ability to finance their education. At Xavier, some 85-90 percent of our students receive some form of financial aid. The debt burden continues to increase each year, as tuition and related cost rise; the amount of financial assistance continues to diminish and is shifting more and more towards loans. Many Xavier pharmacy students are graduating currently with loans which average $32-35,000. The cost for the one additional year could discourage some students from entering pharmacy programs.

In spite of these potential obstacles to our future students, it is my personal opinion that a minority college of pharmacy like Xavier can ill afford to run the risk of producing a "soon to be obsolete degree." In spite of the current debate, I feel that the entry-level Pharm.D. is eventually going to happen. Therefore, I feel that my faculty and I have made the correct decision to move forward with the entry-level degree. As such Xavier will be able to continue its 64-year history of graduating well-trained pharmacists who will be prepared to practice pharmacy in the year 2030 and beyond.
CONCLUSION

In conclusion, Xavier University’s College of Pharmacy has taken the challenge to prepare African American pharmacists for the future at the all Pharm.D. level and feels prepared to continue our 64-year history of distinguished pharmacy education.

For the practitioners who want to upgrade their B.S. credentials to our Pharm.D. level, the post-baccalaureate, 13-month program will offer part-time courses, television courses, future plans for home study, and potential academic credit for previous experiences.

We also have a moral and ethical responsibility to make sure that none of our African American graduates will ever be in a situation where the lack of a Pharm.D. would prevent them from realizing any career opportunities that they desire.

REFERENCES