

Making Waves: Preparing the Next Generation of Bilingual Medical Doctors

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Abstract—Introduction: This research describes the existing medical school program which supports a multicultural setting and bilingualism. The rise of Spanish speakers in the United States has led to the recruitment of bilingual medical students who can serve the evolving demographics. This paper includes anecdotal evidence, narratives and the latest research on the outcomes of supporting a multilingual academic experience in medical school and beyond. People in the United States will continue to need health care from physicians who have experience with multicultural competence. Physicians who are bilingual and possess effective communication skills will be in high demand. Methodologies: This research is descriptive. Through this descriptive research, the researcher will describe the qualities and characteristics of the existing medical school programs, curriculum, and student services. Additionally, the researcher will shed light on the existing curriculum in the medical school and also describe specific programs which help to serve as safety nets to support diverse populations. The method included observations of the existing program and the implementation of the medical school program, specifically the Accelerated Review Program, the Language Education and Professional Communication Program, student organizations and the Global Health Institute. Concluding Statement: This research identified and described characteristics of the medical school's program. The research explained and described the current and present phenomenon of this medical program, which has focused on increasing the graduation of bilingual and minority physicians. The findings are based on observations of the curriculum, programs and student organizations which evolves and remains innovative to stay current with student enrollment.

Keywords—Bilingual, English, medicine, doctor.

I. INTRODUCTION

TRADITIONAL U.S. medical schools' admissions rates remain remarkably low and the admission process is still highly competitive; minorities face true obstacles in making their dream come true of becoming doctors. In response to this critical need, a Caribbean medical school in the small republic of St. Kitts & Nevis is impacting who the next generation of medical doctors will be. The active recruitment of a diverse, bilingual and multicultural student body lends credence to the significance of this paper. Unique programs and services are in place to promote the graduation of minorities, bilingual candidates and culturally competent individuals from medical school. The end game is to prepare the next generation of bilingual medical doctors.

Whether we close the United States borders or not, the facts remain that an increasing demand for bilingual medical doctors will continue to grow exponentially. According to the

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[10, p.8, 9], “about 44 million people in the United States—around one in eight— were born in another country” and “the share of Hispanic children is expected to rise from one quarter to one-third”. Regardless who holds the keys to the White House, people residing in the United States will continue to need health care from physicians who have experience with multicultural competence, have some measure of bilingual proficiency and have effective communication skills to provide high quality healthcare.

II. METHODOLOGIES

This research is descriptive. Through this descriptive research, the researcher will describe the qualities and characteristics of the existing medical school programs, curriculum and student services. Additionally, the researcher will shed light on the existing practices and curriculum in the medical school and also describe student services related to: specific programs and instructional support.

III. LATEST FIGURES

The low number of minority doctors and bilingual minority doctors is astounding. Reference [7] shows that the low number of African American men in medicine is now being considered an “American Crisis”. The authors' study showed that although African American males have the same Grade Point Average as their white counterparts, African American males still have a less likelihood of reapplying to medical school if they do not get accepted the first time. The costs associated with applying to medical school can also be a barrier to re-applying to medical school. Future medical students have to spend money preparing for the exams associated with applying to medical school. Other hidden costs include enrolling in test preparation courses to help boost scores. Exams which are factored in, as part of the application packet, are an important component of the application file of a medical school candidate. The costs associated with exams, test preparation courses and the application fees themselves all serve as obstacles for medical school applications. If an individual comes from an economically disadvantaged background, many of the expenses, associated with medical school and the medical school application process, may prevent those potential candidates from abandoning the effort to both apply and enter medical school. Therefore, there should be a concerted effort to encourage under-represented populations to enroll in medical school. In many ways, this is what medical schools outside of the United States do. They provide opportunities for students with diverse backgrounds to represent diverse populations in the medical field.

Additionally, as their research suggests, exposure to a racially/ethnically diverse set of peers allows students to experience different cultural perspectives on a patient's illness, and the results of treatments. Medical innovation and progressive policy initiatives in medicine are dependent upon diversity efforts [7].

Although recently we have seen the continued enrollment growth of women in medical schools and minorities, recent statistics still do not favor bilingual or culturally diverse medical school candidates [4]. One medical school has formulated a medical school program and curriculum to support the success and graduation of diverse medical doctors. Reference [1] reported that medical school graduates comprised of 5.7% Black or African Americans and 4.6% Hispanic or Latinos. Concerns remain about not disaggregating data with regard to specific populations who are often grouped together [1]. These numbers do not adequately reflect all of the minority groups who may be piled together for reporting purposes. Given the complexity of the recruitment, enrollment, admission, retention and attrition process, "Institutions that recognize the value of new approaches to diversity and inclusion data can create meaningfully inclusive communities with responsive and targeted programs and policies, such as recruitment and mentorship" [1].

According to [3], "the US, meanwhile, faces a shortage of doctors. The Association of American Medical Colleges projects that the country will have 130,600 fewer physicians than it needs by 2025". Caribbean medical schools, such as UMHS St. Kitts, provide unique opportunities for students to experience diversity and cultural exchanges which are simply not present in many U.S. medical schools. Reference [4] reports that diversity needs to be increased in the field of health care because many patients will seek doctors with the same background.

IV. EXISTING MEDICAL SCHOOL PROGRAM ENROLLMENT

Presently, the majority of the students enrolled for the first and second year at UMHS-St. Kitts are from Puerto Rico. These students arrive with the rich linguistic ability of having two languages as part of their skill set. The student body also includes students from Canada, the United States and Nigeria. Additionally, the students from all of these countries come with their own ethnic and cultural background which only adds to the opportunities for powerful learning experiences for students and for faculty.

Over the last five years, the institution has embarked on a mission to actively recruit student populations who would otherwise be under-represented in traditional medical school programs. The consistent admission of bilingual and minority students has also led to a larger representation of these populations in residency placements and in graduation rates. To support the inclusive environment and to ensure the academic success of all students, the university includes many innovative programs.

V. UNIQUE CURRICULUM

UMHS St. Kitts has created and integrated the Accelerated Review Program, specifically designed to support non-traditional medical students. These include students who have been away from higher education for several years or those who have had successful professional careers prior to considering medical school. The Accelerated Review Program (ARP) provides a multi-faceted approach to prepare students who plan to go to medical school by exposing students to essential courses, developing essential learning skills and building student confidence. This unique and innovative program allows those who might not otherwise enter medical school be prepared for the academic rigor and intense pace of entering medical school. Additionally, ARP candidates who successfully complete the program are granted admission to the UMHS St Kitts medical school program.

Admission to this program occurs three times a year given that enrollment at the school occurs and functions on a trimester cycle. Students who might otherwise have to wait an entire year to re-apply to medical school or even consider medical school again do not have to wait that entire period of time. They have a tremendous opportunity to apply to the ARP program and to potentially start medical school in May. The medical school offers three semesters during the academic year. These three semesters include, a May admission cycle, which gives highly qualified and driven medical school applicants an opportunity of a lifetime given that many U.S. medical schools do not normally accept students during May. While other candidates are awaiting medical exam scores or application responses, ARP students are actively enrolled in this program and preparing for medical school in September. Moreover, ARP students can include those students who have been out of school for a few years. These candidates can include professionals who have had a career in a related field, such as Nursing or Health Care Administration. These individuals can also include students who came to the medical field from an unrelated field and are now trying to supplement their background knowledge through the ARP program. For instance, the ARP program allows students to have a hands-on learning experience. The Anatomy course and the Anatomy Lab course provide a top-notch experience in terms of receiving instruction from outstanding professors who allow students to use the latest technology and stellar Anatomy Labs to delve into the subject as if they were already medical students. The building of critical background knowledge and maintaining high academic rigor allows these students to solidify their potential for success in medical school.

The ARP program provides a promising curriculum model and one which should be emulated by other medical schools. The program does not fall short in terms of support from the stakeholders who include professors and medical doctors. In essence, the medical school faculty has an opportunity to teach future medical students and to give ARP students insight related to what medical school will be like. Future medical students have an opportunity to see first-hand what medical school curriculum will be like.

VI. GLOBAL HEALTH INSTITUTE

In 2018, the university embarked on a mission to create and support a Global Health Institute. Global Health is defined as "the area of study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide" [5]. The commitment to integrate global health at the university consists of annual trips to rural areas in specific countries to deliver primary health care to families and communities.

Groups ranging from 15 to 18 students participate in guided medical mission trips such as Guatemala, Peru and Costa Rica to deliver basic medical care to under-served populations in high-poverty areas. Medical students use their bilingual skills and their medical school knowledge to provide basic screening services, such as taking individual's blood pressure, taking a person's temperature, and taking vital signs.

The GHI partnered with the student organization "Med 4 You" to include students on these trips to help provide students with clinical experience. Medical students had the opportunity to have enriched experiences beyond textbook scenarios and lectures. The GHI trips enriched the learning experience by combining theory and practice. Additionally, first and second year students learned empathy, interpersonal communication skills and responsibility through these shared experiences and under the mentorship of faculty members. The participation in these types of trips allowed students to grow both professionally and as medical students.

Another important consideration is that the GHI provides a real-world experience for medical school candidates. Medical students generally spend four years of their lives entrenched in studying materials and theoretical concepts. GHI allows students to see the world through a wider lens with more compassion and empathy because students are able to see what challenges under-represented populations face in different parts of the world. For first and second-year medical students, the opportunity to have hands-on and clinical experience in an international setting is invaluable. Medical students who participate in GHI then become competitive candidates when they begin to apply for residencies later on in the United States and elsewhere.

VII. BECAUSE WE CARE

Among the multiple student organizations available to increase student engagement, "Because We Care" was created. Founding members recognized a need and a desire by medical students to increase community engagement and service in St. Kitts and Nevis. The student organization's mission statement centers on building a relationship between the UMHS community and St. Kitts, widening the impact the university has by promoting healthy living and providing education on high-risk health topics. "Because We Care" holds outreach events, such as community health fairs, on a regular basis. At the same time, these organized and targeted activities help students foster their interpersonal communication skills [2].

Aside from independently volunteering and recruiting classmates for activities, the idea behind establishing this club

was to create an organizational context towards volunteering in community engagement activities. Medical students are often burdened with limited amount of time. The time constraints associated with performing well in academic settings usually limits the amount of time students can spend engaged in extracurricular activities. However, through this student organization, students can complement their academic studies with serious and committed involvement to serving the local community and at the same time, maintaining good grades while in medical school. Organizations have the ability to further extend the reach and impact of volunteerism through agendas and campus wide initiatives to eventually support the mission statement [11].

VIII. LANGUAGE EDUCATION AND PROFESSIONAL COMMUNICATION

Recently, the medical school created a Language Education and Professional Communication Program to support linguistic diversity. This latest move is in line with what other innovative medical school programs are doing, such as the University of Arizona and Johns Hopkins. A key component of the University of Arizona's program is that "During the two-year track, qualified participants will have the opportunity to become certified bilingual providers" [8].

The institution has partnered with a private company to help foster bilingualism to support the demographics of the surrounding communities. Additionally, Hopkins has incorporated mandatory cultural competency workshops to support a better understanding of communication with culturally and linguistically diverse populations. Identity and inclusion are critical components of these concerted efforts [6].

The language opportunities for UMHS-St. Kitts students are extensive given that many of the medical school candidates arrive with Spanish native fluency. The newly created program helps Spanish-speaking students to further refine their professional communication skills in English. All students have the opportunity to take advantage of rich language opportunities and also study Spanish while they are completing their first two years of Basic Sciences course work. One program with similar language programs is the Latin American Medical School in Havana, Cuba-ELAM-which frontloads Spanish language instruction. Students arrive a few months before the medical school program begins; they learn Spanish and then enter medical school courses which are taught completely in Spanish [12].

IX. FIFTH SEMESTER IN MAINE

Before students move into their clinical rotation experience, UMHS students complete a fifth semester at the UMHS campus in Portland, Maine. This semester consists of required courses which include Introduction to Clinical Medicine II and Biological Basis of Clinical Medicine. Students look forward to this semester. They work side by side with local physicians who prepare them for the United States Licensing Examinations (USMLE). This semester is critical and serves

as a safety net for students who might need the added support before moving forward. Virtual clinics provide students with simulated scenarios to foster interpersonal communication skills.

The idea of actively recruiting a diverse student body and supporting diversity in medical schools is something all medical schools should be striving for regardless of potential challenges. Having a diverse student body gives voice both to patients and to under-represented members of society. Although the demographics in the United States continue to change, the representation of those demographics also needs to be visible in the health care profession in terms of culture and in terms of language.

UMHS-St. Kitts provides a snapshot of what may be possible in terms of diverse student populations in medical schools.

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