Universities and Medical Education in Nigeria

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SUMMARY
Formal attempts at Medical Education in Nigeria began in 1927 with the establishment of an institution in Lagos for training medical manpower to diploma level. They were trained to practice only in Nigeria. The program was not popular and was discontinued. Following the report of the Elliot Commissions on higher education in West Africa it was decided to establish the University of London College at Ibadan, with a Faculty of Medicine as one of the initial faculties. This was realized in 1948. The debate on what type of doctor to produce for Nigeria ended with the decision to produce high caliber doctors of the same standing as British trained doctors.
In 1960 the Ashby Commission on Higher Education in Nigeria recommended the establishment of more training institutions, including those for medicine. This led to the establishment of the University of Lagos with the College of Medicine. The three initial regional governments all established their universities with medical faculties.
Medical education has expanded rapidly with the expansion of universities, and we now have Federal and State governments as well as other organizations or private individuals owning universities with medical schools. Regulation of undergraduate medical education has continued to be under the dual oversight of the National Universities Commission and the Medical and Dental Council of Nigeria. The main problems of the medical schools have been the shortage of properly trained staff and poor facilities, curriculum stagnation and lack of modern teaching and assessment instruments. To tackle these problems training in educational methods should be mandatory for academic staff; there should be greater synergy between the NUC and MDCN, and curriculums should be reviewed to reflect modern trends.
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INTRODUCTION

In modern times regulation of the medical profession in most countries includes legal licensure to practice medicine. Part of being able to qualify for such a license involves meeting certain achievement standards in medical education. Usually those standards are met by having some sort of "medical degree" that is obtained in formal study in an accredited professional school. In some countries, there is more than one type of medical degree, depending on the type and extent of medical education. Broadly speaking medical education can be divided into Undergraduate Medical Education where a medical degree is awarded, Postgraduate Medical Education and Continuing Medical Education.

The focus of this paper is Undergraduate Medical Education, with which most universities worldwide are involved. Postgraduate Medical Education, particularly as it relates to clinical practice is usually carried out by professional bodies and colleges rather than by the universities. However training towards the award of higher medical degrees such as MD, PhD and Masters in various fields are also carried out in the universities.

History of Medical Education in Nigeria

Pre-colonial Medical care was essentially provided by traditional practitioners who had their training through apprenticeship usually under relatives, conversant with the art of healing. It is still the mainstay of medical care for some in Nigeria.Though sources differ regarding the first Nigerian to be trained as a medical doctor in the western type of medicine, most sources believe Africanus Horton and William Davies were the first to qualify in London in 1858[1]. The first to be employed in the public service was Dr. Oguntola Sapara in 1896[2].

The first formal attempts at offering Medical Education in Nigeria was in 1927 when the government decided to set up an institution for training medical manpower to diploma level[2]. They were trained to practice only in Nigeria. Though they had the standard five-year training as in British Medical Schools, their facilities and teachers were inadequate to train them to standards acceptable outside this country. They came to be seen as second-class doctors, and they resented the differential in conditions of service they were subjected to compared to foreign- trained doctors. It was therefore of no regrets when the program was abolished.

The background to the establishment of the first medical school was the outcome of the Asquith and Elliot Commissions on higher education in the colonies[2]. The latter was specifically focused on West Africa. Its outcome was the decision to establish the University College, Ibadan, with a Faculty of Medicine as one of the initial faculties. This was realized in 1948. The plan was to train the premedical students at Ibadan,

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the preclinical students in Lagos and the clinical years at Ibadan. The graduates were to be trained to the same level as those in Britain and to be awarded the degree of the University of London. However it became apparent that the general hospital that was to be used as a teaching hospital was inadequate to meet the standards required by the University of London. A decision was then taken to establish an appropriate teaching hospital, the UCH Ibadan.

When the preclinical students were ready for the clinical years in 1951, the hospital was not yet ready for them to undergo their training. This first medical school in the country thus became the first to suffer the fate most medical schools are still suffering! The students were then "farmed out" to hospitals in the UK, some of them ending up with degrees from the universities where they had their clinical posting rather than from the University of London. The first set class to graduate from Ibadan did so in 1960[2]. There were philosophical debates on the type of doctor the university should produce, whether the training should be mainly to cater for the medical needs of Nigeria or of a caliber recognized and accepted worldwide. Perhaps from the negative experience of the training offered earlier in Lagos the decision was that the doctors to be trained should be of international standards. Thus the curriculum of the University of London medical school was adopted, with only slight modifications to stress tropical diseases and pediatrics to a greater extent. This initial decision still influences what is taught in medical schools in this country today, and how the teaching is organized and examined. Most subsequent medical schools simply adapted the curriculum of the University of Ibadan.

Objectives of Medical Education in Nigeria

These have remained more-or-less the same over the years as can be seen from the handbooks of most medical schools. Of course there have been modifications here and there, but the objectives have remained practically the same. The greatest modification followed the emphasis on primary health care as recommended at Alma Ata stressing the importance of primary health care as the cornerstone of training[3]. This is reflected in most schools, as shown in table 1

Table 1: Objectives of medical education in Nigeria

1. To provide a sound scientific and professional basis for the training of doctors capable of working anywhere in the country;
2. To provide training to equip these health personnel to render primary health care (PHC);
3. Teaching of PHC should be multidisciplinary, involving all clinical and some pre-clinical departments;
4. The training of doctors should be more community-based. In keeping with the concept of social responsibility, all health-training institutions should make a definite commitment to provide a community bias to their training;
5. To produce doctors who would satisfy internationally recognized standards, and who could undertake further training towards specialization anywhere in the world;
6. To produce doctors with sufficient management ability to play a leadership role in health care delivery.

There have been broadly two types of medical schools: the traditional ones exemplified by Ibadan (and most of the older schools) with less emphasis on early community involvement in training, and the more community- oriented ones such as Ilorin, with community involvement early in their training. Ile-Ife seems to vacillate between the two at different times[4].

Growth of Medical Schools in Nigeria

In 1960 the Ashby Commission on Higher Education in Nigeria recommended the establishment of more training institutions, including medicine[2]. It was therefore decided to expand the facilities at Ibadan for increased intake, to establish a new medical school in Lagos and another in Northern Nigeria. Thus the College of Medicine of the University of Lagos was established. The regional governments, decided to establish their universities and with them medical faculties at Zaria, Enugu and Ile-Ife. The Mid-West region, which came later, followed with its university and Medical School at Benin. These latter four were all taken over by the Federal Government and, together, can be said to be the first generation (Ibadan) and second generation (the other four) medical schools. (Some would prefer to include Benin in the group of eight that were later established by the Federal Government[3].

The military government later established more universities in 1975-76, and with them more medical schools, these being the third generation schools. The first private medical school was established in 1990 and more State and Religious-sponsored institutions have been established since then so that as of now we have over 28 fully or partially accredited medical schools in existence in the country[5]. The fourth generation medical schools would comprise these ones that have been established subsequently. Many are still struggling to find their feet. There are also others that are yet to receive even partial accreditation and so are not included in this list.

The Role of Universities

The Universities have been the mainstay of medical education in Nigeria. The government policies on medical education are translated into reality through the universities and regulatory bodies.

1. Regulation of Medical Education in Nigeria

Regulation of undergraduate medical education has continued to be under the dual oversight of the National Universities Commission (NUC) and the Medical and Dental Council of Nigeria (MDCN). While the former establishes academic standards and all that go with it, the latter is more concerned with the quality of the graduates that come from the training institutions. The NUC has produced what it regards as the minimum allowed academic standards and does periodic

monitoring to see that they are being adhered to by training institutions while the MDCN usually makes sure all facilities and staff are adequate for accreditation at inception, but after the final accreditation for the first final examination in the school it appears not to carry out any more inspection on a regular basis.

The NUC and MDCN have historically differed in their approach to medical education because of differing priorities and targets. While the NUC wants universities to grow in their intake on a yearly basis, the MDCN does not want its quota to be exceeded unless it comes back to re-assess and give a new quota. This places universities in a dilemma since many university administrators would like to increase medical admissions to meet the NUC science: arts ratio of 60:40

Whereas the NUC wanted a course credit system adopted, the MCDN has not been in favor of this. The few universities that went the way of the NUC at the beginning had harrowing experiences and probably have all abandoned the course credit system, at least for now. The NUC wants medical teachers to mandatorily have a PhD before becoming senior academics, however the MDCN is satisfied with the professional-cum-academic training currently offered by the postgraduate colleges. The two bodies usually carry out their accreditation exercises independent of each other, even though the actual persons carrying out the exercise are qualified to do so for either body, and sometimes the same persons actually at different times go to the same institution, representing either of the two bodies.

2. Entry requirements

Worldwide there are roughly three methods of entry into medical schools. These are:

1. Through matriculation or similar examinations straight after secondary schools or equivalents. A modification of this is the entry after advanced level courses such as IJMB in Nigeria.
2. Graduate Medical Program (GMP) or sometimes also known as Graduate Entry Program (GEP) or Graduate Entry Medicine (GEM). These are terms generally used to refer to medical programs usually of 4-years duration where applicants are university graduates who have taken aptitude tests. In Nigeria a small number of graduates of science-based courses are admitted into medicine at the second year, thus spending five instead of six years.
3. Medical programs in the United States technically do not require the completion of a previous degree, but do require the completion of 2-3 years of pre-medical sciences at the university level and so are thus classified as second entry degrees because the student had previous entry into a degree program and studied there for some years before second entry into another degree program. There have been debates in Nigerian universities on whether or not the possession of a first degree should be a requirement for entering medical school. No definite decision applicable to all schools has been implemented as yet. Many would consider this a waste of time and resources considering our need of doctors. If experience from other countries is to be considered, one wonders whether this is even worth considering at all. The countries like the UK who admit students after A level for a five-year program and Australia who now admit after first degree for four year have not shown a difference in the quality of the graduates. In Nigeria I think the present practice will remain for a long time to come, until we have the unlikely evidence that graduate medical admissions offer greater advantage.

3. Issues in medical education delivery

a) Bedside teaching

Issues in bedside teaching have been debated world wide, but this continues to be the main method of clinical teaching in Nigeria. In the absence of clinical skills centers, it is really the only means by which we can transmit clinical skills.

b) Rote memorization

Much of undergraduate medical education is rote memorization. Rote memorization, and evaluation on it, may lead to interpersonal difficult relationships among students and faculty, which are not necessarily in the best interest of patient care.

c) Lectures

Perhaps due to the role of rote memorization, one medical school noted that only 17% of students reported routinely attending lectures[6]. Other schools have reported similarly[7]. Approximately 16% of attendees may nap during lecture[8]. In Nigeria many schools have to resort to taking roll calls to improve attendance at lectures. The teaching in most medical schools is teacher focused, and not student focused. The students play relatively passive roles.

d) Grading

Pass-fail grading as is the case in most Nigerian medical schools may reduce stress, increase group cohesion and increase quality. Most medical schools do not classify their degrees so pass/fail is the norm in Nigeria

Problems of Medical Education in Nigeria

1. Staff shortage

When the decision to increase enrolment into medicine in Nigeria in the 1960s was taken, one of the main concerns was how to get the required staff and students. As far as staff were concerned one consideration was to get more teachers from the UK as well as other English-speaking countries[2]. There were only two Nigerians serving as heads of department at Ibadan back then. A great need of teachers in pediatrics, anesthesia, ophthalmology and all the pathological sciences existed. Those involved with establishing medical schools at present will agree that today, fifty years on, we face the same challenges. While the number of candidates wanting to study medicine has increased and we cannot meet the demand for places, the number of qualified teachers to teach them has remained a problem, particularly in those same areas mentioned above. The shortage has led to "nomadic teachers" who rove from place to place, just waiting to get promotion in one institution to use as bargaining chip to move to a higher post in another institution. Then there are those whose addresses are in one institution but who service several

others to varying degrees of usefulness. We must accept that as much as they are providing needed services the trade off may be inefficient, unreliable service, which is ultimately deleterious. Their efficiency cannot be guaranteed since they are limited humans and cannot be omnipresent and cannot maintain efficiency in all the places where they work.

2. **Staff quality**

Another problem facing medical schools is the quality of staff available. Whereas the medical schools are expanding at an exponential rate to meet demands for intake, the production of teachers is at a lower rate, and so we end up having so many who should otherwise not be medical educators entering the universities to teach. There are many departments headed by very junior academics whose only exposure to teaching is that obtained during their residency training in the teaching hospitals. Worse still there are those who trained in specialist hospitals or medical centers and who were not exposed to undergraduate teaching of medical students while training, but who now hold teaching positions in the medical schools.

Opportunities for exposure to training institutions outside Nigeria became limited for a period, denying many of the additional benefit of diversity of learning and teaching methods, and so there is now a large cohort of such people, due to no fault of theirs, who undertook their training wholly in Nigeria and never knew how training is done in more established and equipped places. All they know is what they went through while training and that is all they can give. This may negatively influence how certain policy and implementation decisions are undertaken.

A few years ago the government decided that a qualification in education should be a requirement for teaching at all levels, including the universities Academic Staff Union of Universities (ASUU) was against this, and many in medical schools also vehemently opposed this. The matter needs to be given some consideration, as all professional bodies including medicine require professional training. It is apparent that someone not trained as a doctor cannot practice appropriately as one. If he tries he will be a quack, even though he may help some people. It should be apparent to us that if we want to be better teachers we need some training in teaching to improve our output. This will make us more useful to our students, improving their outcome. In addition, there might be a case to be made for professional educators who can contribute positively to our profession. I personally wish I had some training in education before I joined the medical faculty, or that such training was provided in my earlier years as a teacher.

3. **Lack of modern learning and assessment facilities and methods**

As mentioned above most schools continue to depend on the traditional methods of teaching—lectures, practical sessions, clinical teaching, etc, all promoting rote memorization. One reason for this is the lack of training of most lecturers in modern educational methods so they do not even know what to ask their institutions to provide to aid their teaching process.

Quality of graduates of Nigerian Medical Schools

In spite of the challenges of poorly trained teachers, some degree of overcrowding in classes, clinics and wards and lack of modern teaching and assessment facilities, we have not done badly with respect to producing doctors that in most cases are able to serve the purpose of their training. Many who go outside this country to pursue postgraduate training are a testimony to the acceptable training we give. They do very well, showing the acceptable foundation of Nigerian undergraduate medical education. Some factors may have been responsible for this:

- Unlike most other disciplines, we do not shorten the postings of our students at the end of strikes. We make sure they complete the mandatory number of weeks for each posting. This ends up prolonging the time our students spend in school before they graduate, but it makes it possible for them to cover most of what we require of them
- The rigorous accreditation exercise by NUC and the MDCN helps to maintain the level of facilities and staff at least at the minimum required level. The further accreditation by the PG Colleges helps to maintain our departments at reasonable level.
- The system of external examiners helps to create some level of uniformity in our graduates across the country. This is shown in their level of performance at the PG colleges' examinations.

Suggestions for improving the role of the universities in medial education

1. We need to develop new curriculums for our medical schools. We should be bold enough to remove some of the topics that just make life difficult for our students but have very little to contribute in their practice. Why spend time on antimuscurinics as treatment for peptic ulcers when no one uses them any more? On the other hand we need to bring new issues to the fore, such as ethics, medico-legal, research[9] and management issues so as to help our graduates become better equipped team players
2. We need to train our teachers to be better teachers. This may be achieved in the long run through the establishment of departments of medical education in the medical schools. However, for a start, either the NPMC or the NUC should be organizing six-monthly courses for training in medical education, leading to the award of diploma or certificate in medical education. This should be a requirement for being recognized as a medical teacher or to hold administrative posts from, say 2012, so as to give opportunities for the young academics to be trained before then
3. Part of the requirement for accreditation, in the next four or five years should be the availability of teaching aids such as clinical teaching centers in the universities for students to use for self study.
4. There is need for better coordination and partnership

between the NUC and the MDCN. To aid this, common accreditation exercises can be conducted to avoid repetition and foster synergy. Medical teachers who have loyalty to both bodies should chair such visits. They will make sure the interests of both bodies are taken care of. There will also be the need for them to work on harmonizing their requirements for establishing faculties/colleges of medicine and for accreditation. The Committee of Deans and Provosts of Medical Schools can take the lead in this and work out a blueprint.

5. We may need to place a moratorium on the establishment of more medical schools for a few years to increase the number of medical teachers in the present schools before throwing the gates open again. This will obviously not go down well with those who want to establish such institutions and those who want to benefit from being "grasshopper" lecturers

CONCLUSION

The Universities have been in the forefront of medical education in Nigeria. Right from the start at the University College Ibadan, down to the new schools of medicine being established, the universities have had the major roles of designing the curriculum, deciding on admission of students, providing facilities and personnel for the teaching and assessment of students and ensuring that acceptable quality of our graduates is maintained. They have faced many challenges, ranging from inadequate number and quality of teachers, pressure to admit more than they can reasonably train, inadequate teaching facilities and inadequate funds. Judging from all the problems they face the universities have done very well. The quality of our graduates can compete favorably with those from any other country. We still need to work on improving our facilities and our teaching and assessment capacity. Basic training in educational methods and provision of adequate facilities is recommended to help us add even more value to our work.

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