

Training Medical Students in the Community - Memoirs and Reflections of the University of Transkei Medical School

Ehi U Igumbor, MPH, Amalio del Río, MD, MSc, David L Buso, FCPHM and Jose M Martínez, MD, MPhil

Department of Community Medicine,
Faculty of Health Sciences,
Walter Sisulu University for Technology and Science,
Mthatha, Eastern Cape Province, South Africa.

Abstract: Not long after its inception, the undergraduate medical program at the University of Transkei (UNITRA) departed from the traditional hospicentric medical education approach to one tailored around a Community-Based Medical Education (CBME) curriculum adopting the Problem-based Learning (PBL) pedagogy. This article reflects on the experiences of the faculty in establishing and implementing CBME, exploring what it has meant to train medical students in the community. It further appraises CBME by reviewing its impact on students, the faculty, and the community at large.

Keywords: Medical Education, Medical Students, Community-Based Medical Education, University of Transkei.

In the last few decades, there have been remarkable changes in the content and delivery of medical curricula the world over.¹⁻⁴ This metamorphosis of the face of medical curricula owes, in part, to the major paradigm shifts in the delivery of health care from “episodic care of individuals in hospitals to promotion of health in the community, and from paternalism and anecdotal care to negotiated management based on evidence of effectiveness and safety”.¹ The implication of this is that medical faculties have had to reorient training programs to be more student-centered, emphasizing active problem-based learning in an integrated programme, rather than the prototype, passive acquisition of knowledge and the transmission of content without appropriate context, which was characteristic of traditional medical training.^{1,2,4,5} The notions of community-based medical education (CBME) and problem-based learning (PBL) have therefore received great boost as being indispensable elixirs of neo-medical curriculum development.^{5,6}

The Faculty of Medicine at the University of Transkei (UNITRA) was established in the mid 1980s, tasked with the responsibility of producing medical practitioners who had the requisite knowledge, clinical skills and professional grounding to offer quality health care to rural and underprivileged communities in the then homeland of Transkei.^{7,8} In order to actualize this mandate, it was

envisaged that an innovative CBME was needed, which would be built around a pedagogy of PBL.⁹ Detailed description of this innovative curriculum at UNITRA has been published elsewhere.^{9,10} The experiences and lessons learned through the years, be it serendipitously or otherwise, have also been described.^{8,11-16} Pertinent among these is the growing body of evidence that PBL tends to improve the academic performance of medical students;^{9,11,12} that rural medical faculties such as that at UNITRA, tend to produce a high proportion of graduates who choose to practise in rural settings rather than in metropolitan areas;^{13,14} and that early clinical contact and exposure to the community is positive in inculcating requisite clinical skills and self-confidence in the students upon graduation.^{15,16} There is, however, limited substantive documentation of the experiences of the institution with regard to CBME as recounted by the faculty in general, and the lead Department of Community Medicine in particular.

In this paper, we describe these experiences, trying to highlight the unique input of CBME in UNITRA since its inception two decades ago. This is done with a twofold objective; first describe the CBME that has been implemented over the years and secondly to present its general impact on students, faculty and the community.

Community Based Medical Education (CBME) in UNITRA

Over the years, our medical curriculum in UNITRA has striven to train doctors who are adequately equipped not only with technical skills of patient care, but also, with the necessary social skills for the much broader tasks in health care delivery. The CBME curriculum therefore entails two progressive components- community based education and service (COBES) and Community Clinical Clerkship (COMCC), the latter building upon the former as the student advances in clinical competence and skill.

Community-based Education and Service (COBES) program in UNITRA - The first component, COBES, has aims congruent to those of the overall UNITRA medical curriculum, most important among which is that of fostering attitudes appropriate to community-based medical care. It runs in the first three academic years of the curriculum. Students are encouraged from these very early years of their training not to look merely at a patient's symptoms and signs, but at the whole person, who comes from a family, from a community, and from society at large. Students are also trained to always consider not only the impact of illness on the above sociological entities, but also the influence of the physical, economic and sociological environments on health and disease.

One of the first COBES activities our students are exposed to is a visit to traditional healers in their first year of study. UNITRA is in an area of South Africa where the traditional healer is, for more than 80% of patients, the primary contact with the health care system.¹⁷ Despite this, many of our students come to medical school with negative stereotypes relating to traditional healers, and our aim is to inculcate in them the fact that indigenous knowledge systems and traditional medicine are, indeed, viable and useful complementary approaches to health-care.¹⁷

The students are also introduced to such public health and social services as water supply, sanitation, housing, refuse and waste disposal, as well as rehabilitation centers for the physically disabled, deaf, blind, drug and alcohol abusers, abandoned children, street children, orphanages, hospices, amongst others. The relevance of these social amenities as determinants of health is also taught.

During the second year of study, students receive instruction around three themes, namely; normal structure and function (in anatomy and physiology), population medicine (community medicine and behavioral sciences)

and clinical practice. COBES at this stage therefore assists the student in learning about the basic sciences and introduces the skills of conducting public health research. Specific activities include guided tours of the various departments and units of a peripheral hospital to identify the function and organization of the hospital; study of the profile of morbidity of a sample of patients attending the hospitals, study of the primary health care services such as immunization, maternal and child care, community participation being rendered by the hospital, visits to the community and conducting an abridged household demographic and health survey, continual exposure to clinical activities including the conduct of a unique clinico-social presentation of a patient. In this activity, the student chooses, with the help of a tutor, a patient from any ward in the hospital and reports on the patient's history, examination and management. Emphasis is given to the understanding of how psycho-social problems of patients affect their bio-medical presentation and vice-versa.

In the third year of study, the emphasis is on the evaluation of services provided by primary health care clinics and the development of a community diagnosis for a defined, often rural, community. In order to achieve this, students are placed in small groups and assigned to visit primary health care clinics weekly for a duration of 20 weeks. Each group is assigned to a different primary health care clinic. Owing to the increasing number of students through the years, the number of clinics has equally increased: from 4 health centres in the period 1998 to 2000, to 6 between 2000 and 2003, and 7 in 2004. The students spend the whole day in the clinic- the morning sessions of their visit is spent on bedside learning of clinical skills while afternoons are dedicated to community activities.

Each group is assigned one tutor from the Faculty who works with the Matron in charge of the health center, the community liaison officers, the community health workers and other health personnel in the clinic in facilitating the COBES learning for the group of students.

The three learning arenas in our COBES at this level are (i) clinical skills sessions every morning in the months January to September; (ii) evaluation of the health centre (dubbed "Know Your Clinic") which runs in the afternoons for a duration of eight weeks and (iii) community diagnosis in a 12-week period. The activities have included meetings with household residents, school students and health professionals in the community, collecting health and socio-demographic data in household surveys, capturing and analysis of data, appraisal of clinic data, presentation of the previous year's data to the clinic personnel and community, health education and promo-

tion activities in schools et-cetera. To ensure ongoing monitoring of the COBES activities, weekly meetings of the students and tutors are held, in which they discuss the results of the week, including any logistical or operational constraints.

In October of each year, the students present their findings in the university auditorium- an activity which has seen improving skills and ingenuity in presentation techniques through the years. Among the presentation audience is the university and faculty management representatives, faculty staff members, Provincial Department of Health representatives, workers from the designated health centres, community members, and students.

The students also submit a written report following conventional styles of scientific report writing. These reports have often been lauded for insightfulness in providing relevant health statistics and for making essential recommendations necessary for the improvement of the health status of these communities. For example, during the evaluation of the health centers, students draw up the profiles of morbidity based on patient registers- such collations were seldom done by clinic staff who never find time, away from very busy patient loads, to collate the data.

The students are assessed both individually and as groups for their participation in clinic and community activities, COBES report projects and presentations as well as other individual or group reports on specific activities. These contribute, as methods of continuous assessment, to the year mark in Community Medicine.

Community-based Clinical Clerkship (COMCC) programme in UNITRA - As students acquire advanced clinical skills, COBES metamorphoses into Community-based Clinical Clerkship (COMCC). This ensures the constant focus on Community-based learning throughout the educational program.

During COMCC, there is clinical clerkship in primary, secondary and tertiary care facilities with rotations in family medicine, internal medicine, obstetrics and gynecology, psychiatry, pediatrics, community medicine, forensic medicine, surgery and surgical specialties including ophthalmology, otorhinolaryngology, orthopedics and anesthesiology.

At all times, emphasis is not placed on clinical practice alone, but also normal and abnormal structures and functions and population medicine in an integrated manner.

Table 1: Duration of Community-Based Medical Education in UNITRA Medical curriculum

Year of Study	Week(s)	Percentage of Total Learning Period (%)
MB ChB I	1	3.1%
MB ChB II	4	11.1%
MB ChB III	6	16.7%
MB ChB IV	5	11.4%
MB ChB V	6	13.6%
Total	22	11.5%

Under UNITRA's current 5-year medical training program, as much as 192 weeks are dedicated to teaching and learning, of which 22 weeks (11.5%) is allocated to COBES activities away from campus as summarized in Table 1. It suffices to point out that Community-based education per se, involves much more than COBES or COMCC and therefore accounts for more time than the 11.5% indicated above.

Lessons learned: The impact of Community-Based Medical Education.

CBME is a means of achieving educational relevance to community needs by implementing a community-oriented educational program.¹⁸ Learning activities take place within the community where not only students but also teachers, members of the community and representatives of other sectors, are actively engaged in the educational experience. Our experience in CBME has taught us that in order to inculcate a comprehensive outlook to health in students, we require the corollaries of CBME, inter alia; a multidisciplinary, interdepartmental and integrated learning approach. We also believe that community-based Education can in fact be conducted wherever people live, be it in a rural, peri-urban or urban area, and wherever it can be organized.

Over the years, more than 600 students have learned how to make a community diagnosis (health diagnosis in the community), visiting over 3,600 houses in localities around Mthatha. Students have collected useful information on the major risk factors for diseases and health-adverse conditions that affect the well being of 33 local communities in the Transkei region of South Africa. These documents have been archived and have often served as reference materials when dealing with the health problems of the community. A number of health research publications have also emanated from them.¹⁹⁻²¹

Our experience has been that everyone benefits from CBME: students, faculty, health centers and the community at large. To the students, CBME has helped to (i) sensitize them to clinical situations that reflect the social, cultural and economic factors important in the causation of disease; (ii) develop in them an appreciation of the importance of health promotion and disease prevention; and (iii) expose them to methods of intervention that are applied as close as possible to communities served by the health units.

To the host communities, the impact has been (i) developing a closer relationship between the community, health workers and faculty; (ii) having access to faculty resources especially human resources and expertise; (iii) having the opportunity to contribute to the educational process; (iv) informing changes in behavior in favor of healthy lifestyles; (v) increasing awareness of health-related matters; and (vi) minimizing suffering as a result of improved health.

To the faculty, CBME has helped to (i) improve the emphasis on student-centered learning; (ii) gain a new perspective on the teaching-and-learning process (iii) identify areas of research which are of critical relevance to the communities (iv) link the community with the medical curriculum (v) increase the number of graduates and (vi) achieve its social responsibility of being of service to communities directly, not merely through research.

Conclusion

In conclusion, we have learned over the years, that CBME helps students to gain a sense of social responsibility and a deeper understanding of the problems facing the communities. It has also assisted us succeed in obtaining the cooperation of community leaders who have closely supported our teaching and learning activities. Invariably, CBME demonstrates that a symbiotic relationship is possible between the medical faculty and society, such that the university serves the needs of society and maintains its integrity while at the same time eliminating its stature as an "ivory tower" for an elite few.

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Correspondence

Ehi Igumbor
Department of Community Medicine
Faculty of Health Sciences
Walter Sisulu University for Technology and Science
Private Bag X 1
Mthatha
5117
Republic of South Africa

Tel: +27 47 502 2304

Fax: +27 47 502 2235

E-mail: igumbor@getafix.utr.ac.za