

The Edinburgh Declaration: Ten Years Afterwards

Henry Walton, M.D., Ph.D., F.R.C.P.E., F.R.C.Psych, D.P.M.
38 Blacket Place
Edinburgh, Scotland EH9 1RL UK

TEL: (+)44-131-667-7811 FAX: (+)44-131-662-0337 E-MAIL: H.Walton@ed.ac.uk

INTRODUCTION

The *Edinburgh Declaration* (Table 1) is a mandate for reform of medical education, which was derived from enquiry at national level, internationally agreed upon by medical educators in global consensus, endorsed regionally, formally accepted by governments, and approved by the world health parliament. It reflects the convictions of medical teachers, medical students, doctors and other health professionals, and the general public around the globe. Its long-term goal is improvement of health care for all the populations, and its implementation has been wide.

The *Declaration* is an instrument for reorientation of medical education. Its initial justification derived from a signal U.S. venture¹ demonstrating that any reform was bound to fail unless based on a specific statement which had been arrived at, and formally adopted by, those committed to the change process. The World Federation for Medical Education (WFME) undertook to provide such an instrument for reform, the essential statement necessary for reorienting medical education to produce doctors relevant to health care needs of individuals and communities. This article reviews the tenants of that document and the impact it has made on reform in medical education around the world over the past decade.

WFME GLOBAL COLLABORATIVE PROGRAM

The WFME began a Global Collaborative Program in 1984, initiated by an intensive global enquiry, the first such investigation ever conducted. The *Six Major Themes* document² was translated into many languages and sent to the deans of all medical schools world-wide. They responded to 32 questions. Their replies were analysed at national conferences, and the ensuing *National Reports* were intensively considered at six Regional Conferences during 1987-1988 (Dublin, Brazzaville, New Delhi, Amman, Kuala Lumpur and Rio de Janeiro). The World Conference on Medical Education³ followed. Held in Edinburgh, Scotland in 1988, delegates from the six Regional Associations represented all countries world-wide.

The *Edinburgh Declaration* sets forth the recommendations of the 1988 World Conference, encapsulating the consensus views of medical teachers, health care advisers, national governments and international bodies across the world, and constitutes a model for the reorganization of medical education.⁴ The *Declaration* subsequently received endorsement by governments of all member countries, the World Health Assembly (WHA) adopting Resolution 42.38 on 19 May 1989.⁵ The health parliament of the world thereby endorsed the mandate for reform arrived at by

national, regional and global action, and fostered the necessary political will by calling on the governments of all member states to implement the reform in medical education which the *Declaration* has outlined. Five years later, WHA Resolution 48.8, 1995 repeated the charge to member states to reform their medical education systems.

The *Edinburgh Declaration*, now translated into all major languages, has been very widely adopted as a basis for reform of medical education. Currently, there is a greater surge of reform world-wide than at any time since the start of the century.

OUTCOMES OF THE DECLARATION

Entire regions of the world have in recent years aimed to change their medical education systems in keeping with the 12 principles of the *Declaration*. For example, the Pan-American Federation of Associations of Medical Schools credits the *Declaration* accordingly, as do the National Associations for Medical Education of many South American countries. The *Declaration* was reformulated⁶ to meet South American regional priorities and administrative structures at the 1995 international conference at Bogota of the Colombian Association (ASCOFAME). This meeting was cosponsored by WFME, the World Health Organization (WHO), the Pan-American Federation of Associations of Medical Schools (PAFAMS) and the Latin American Association of Medical Schools (ALAFEM).

Individual countries perhaps illustrate most explicitly the direct impact of the *Declaration*. An example is Portugal, where

The Edinburgh Declaration, now translated into all major languages, has been very widely adopted as a basis for reform of medical education.

Professor Walton is the Past President of the World Federation for Medical Education and Professor Emeritus of Psychiatry and of International Medical Education at the University of Edinburgh. He is also Editor Emeritus of the journal *Medical Education*.

Table 1. The *Edinburgh Declaration* of 1988

ACTIONS WITHIN THE MEDICAL SCHOOL

1. Widen educational settings
2. National health needs as the context for curricula
3. Active learning methods (tutorial, self-directed and independent) for continuity of learning throughout life
4. Require professional competence (not mere knowledge recall)
5. Train medical teachers as educators
6. Prevention of illness and health promotion
7. Integration of science and clinical practice
8. Selection of applicants for non-intellectual as well as intellectual attributes

REQUIRES WIDER INVOLVEMENT

9. Coordination of medical education and healthcare systems
 10. Balance in production of categories of medical staff and other health professions
 11. Multiprofessional training and teamwork
 12. Provision for continuing medical education
-

UNESCO and WFME, with the Portuguese government and national medical education authorities, carried out a joint project for reorienting the curricula of the medical schools. The *Declaration* was used as “a reform protocol of medical education in Portugal at the request of the Ministers of Education and Health of that country.”⁷ The recent monograph⁸ which specifies in detail the extensively revised medical curriculum to be implemented in all the Faculties of Medicine in Portugal cites the *Edinburgh Declaration* as its first reference.

Regarding the South East Asia Region specifically, a country that may be cited in illustration is Thailand, best conveyed in the words of Professor Charas Suwanwela addressing the WHO/WFME Regional Conference on 7 February 1996 at Pattaya:⁹ “The World Federation for Medical Education with its 1988 World Conference and 1993 World Summit on Medical Education has provided ideas and stimulus for change in medical education. The *Edinburgh Declaration* and the *Recommendations* of the World Summit were milestones providing directions and guidelines for action. The impact was felt at the National Medical Education Conference in Thailand and has led to changes in all medical schools. For instance, experience in a rural health setting is now a requirement in all medical curricula, and the ability to manage health care facilities is now required of medical graduates.”

This demonstration of the primary importance of the *Declaration* as the very basis of reform and reorientation of curricula medical world-wide can be replicated by manifold instances where explicit acknowledgement is expressed. Equally frequent are the extensive national or institutional reforms that manifestly implement the principles of the *Declaration* without overt acknowledgement, but with close accord. The validity of the *Edinburgh Declaration* remains uncontested as a global mandate for reform of medical education.

The late James Grant,¹⁰ Executive Director of UNICEF, spoke of “the historic *Edinburgh Declaration*”, commenting it had been a vision in 1988 but by the 1993 *Summit* the proposed reforms had become “practical, realistic and do-able.”

REAL LIFE SETTINGS VS THE IVORY TOWER

The very first principle (Table 1) of the *Edinburgh Declaration* was the insistence that the university center alone could no longer serve unaided as the educational base for future doctors: “Enlarge the settings in which educational programs are conducted to include all health resources of the community, not hospitals alone.”

For such enlargement of the learning base to occur, all health service resources of the country must be mobilized. *Principle 2* requires medical education to reflect national health priorities and the resources available in countries. Ministries of Education and Ministries of Health must cooperate, and together create the committee structures integrating the medical education system with the health care system. Perhaps such academic and health care delivery partnership is foremost among the necessary reforms, and spells the end of academic elitism and exclusivity in medical education. District hospital, community clinics, and family practices are settings for learning in addition to the teaching hospital, as are schools and the workplace. Skills are to be acquired in the places where medical morbidity is actually encountered.

ACTIVE LEARNING

Principle 3 requires elimination of passive methods of learning. The Flexner Report¹¹ at the start of this Century already insisted that the only sort of medical student of any use is an *active* medical student. Exactly because contemporary medicine requires a scientifically sophisticated doctor, the science base of the medical curriculum must function to activate students, and not simply perpetuate the passive role induced by obsolete didactic methods. Flexner could never have envisaged the disastrous misreading of his Report, leading to separate basic science departments being administered as competing fiefdoms, each with their own didactic agendas, resulting in passivity-inducing curricula becoming commonplace.

INFORMATION OVERLOAD

Two other liabilities result, one of which – information overload – is targeted by *Principle 4*. The curriculum is disfigured by emphasis, both in teaching methods and in examinations, on retention and recall of facts as a curricular aim. Much content now cluttering curricula in any case can be moved into post-graduate programs or, indeed, continuing medical education (CME).

MEDICAL TEACHERS AS EDUCATORS

One obdurate barrier to necessary reform, which *Principle 5* addresses, is the inertia of medical teachers - a profound obstacle within the medical school itself. Educational commitment is accorded scant regard. Many teachers, it hardly needs mention, have not ever had personal instruction about how to teach. The ACME-TRI Report¹² published by the Association of American Medical Colleges showed that a main reason for failure of reform is the apathy of teaching staff. The general conclusion was that it seemed next to impossible to get a critical mass of medical teach-

ers interested, concerned and involved in the education of medical students. At issue was the regularity with which medical education can still be dismissed as merely the harmless hobby of isolated academics. The medical education literature remains little cited in medical faculties, and medical education research is invariably a closed book to all but a very few medical teachers.

Such educational obscurantism on the part of the staff of medical faculties is now altogether untenable. The entire medical professional scenario has changed, and with this transformation medical education has come of age. Economically, medical education is big business. In England the postgraduate deans receive government funds to pay half the salaries of all junior doctors (the hospitals pay the other half); in Scotland the postgraduate deans pay the total salaries. Medical education is legally of great consequence. In the European Community medical education is governed by international law. For instance, the European Court ruled against the legality of the United Kingdom specialist regulations, and this adverse legal ruling led to massive restructuring of the entire postgraduate training system of Britain. Postgraduate training previously had been in stasis under the aegis of the Royal Colleges. Managerially, medical education has become a force with which to be reckoned. Medicare now pays half the costs of graduate medical education in the United States.

THE NEW MEDICINE

The preamble of the *Declaration* urged:⁴ "The aim of medical education is to produce doctors who will promote the health of all people, not merely deliver curative services to those who can afford it or for whom it is readily available." The first principle insisted on extended settings for learning. Skills are to be acquired in the places where medical morbidity is actually encountered. *Principle 6* states that the new medicine calls for equal emphasis on promotion of health and prevention of illness, as well as curative medicine. The requirement follows that every department and branch of medicine must rethink the educational content provided as its contribution to the medical curriculum.

EDUCATION IN THE SCIENCES

Principle 5 attends to the charge that basic science education is too little, too isolated, and too simplistic. Throughout the world the medical sciences are taught separately from the clinical subjects. *Principle 7* specifies science teaching must be integrated with clinical practice. As anomalously, the sciences are taught in isolation from each other.¹³ To package different sciences in separate departments obfuscates learning, by suggesting that the sciences present clinically in separate subject or disciplinary parcels. Division of the curriculum into halves, with the so-called *basic* sciences taught first, has been disastrous. Empirical surveys repeatedly show students are bored with these *preclinical* disciplines, which they regularly perceive as hurdles to be overcome before they can proceed to clinical studies.

Science must imperatively be rehabilitated into the curriculum, vested interests and expediency countered by insistence on the biosciences as integral to proper medical studies. Of the three curriculum paradigms (traditional, systems-based, and problem-based), only the first is tenable when the curriculum is bifurcated. The third paradigm is supported by *Principle 7*.

THREE KINDS OF CURRICULUM

Most medical curricula are *traditional*: they have a preclinical phase, they are discipline focused, the major objective is memorization of facts, with teachers in a dominant authority role and students passive. The innovative development since the 1960's was the *organ systems approach*, with basic sciences and clinical subjects integrated, and with the curriculum administered by educational committees and not controlled by individual disciplines. The third, most recent form of curriculum is *problem-based learning*, in which separate disciplines are not learned in sequence; instead, the students (working in groups) are presented with a particular "problem" (e.g. sudden, severe left chest pain), and they pursue all possible knowledge and skills to explain that phenomenon. All medical schools wish to advance from the traditional paradigm; however, the difficulty is that, by

and large, medical teachers are not trained as educators. They do not have the skills for adopting sophisticated teaching styles, which promote self-learning on the part of their students. This of course is necessary in recognition that the knowledge base is constantly changing.

TWO TYPES OF MEDICAL SCHOOLS

Medical schools are either *public*, when they are government funded and in most cases part of the national university system almost always under the Ministry of Education. Otherwise, they are *private*, meaning independently funded, and the students pay comprehensive tuition fees. This differentiation constitutes two rather distinct spheres of medical education, administered by separate organizations (e.g. in Japan). Some of the very many private medical schools around the world either within countries or "off-shore" are academically substandard, inadequately funded, and sometimes established mainly for profit motives. On the other hand of course, private schools can be flexible and innovative. For example, the only problem-based curriculum in Germany is at Witten Herdecke, a private school.

GOVERNANCE

Reform of any particular subject in a medical curriculum is an overall faculty undertaking and not merely a departmental matter. The medical school as a whole often resists it. The politics of medical education are only now coming to be understood. The hard lesson has not yet been learned that a curriculum should never be changed until the system of administration and the committee structure responsible for the curriculum has first been modified appropriately. A separate, independent curriculum

To package different sciences in separate departments obfuscates learning, by suggesting that the sciences present clinically in separate subject or disciplinary parcels.

committee is essential to counter the influence of departments over the organization of teaching, and thus to prevent control of the curriculum by staff who are certainly not concerned primarily with education. Information overload, which is perniciously destructive, is inevitable and progressive unless demands of departments are neutralized by taking the curriculum out of departmental control.

Bloom¹⁴ has documented that “Educational values become subordinate to the requisites of the organizational structure of the medical school.” Curricula are controlled by basic scientists or by teachers whose primary interest lies in research, clinical investigation and scientific publication. Medical school teachers appointed to be in charge of academic departments and teaching hospitals are, of course, scientists and specialists. They all stake claims for curriculum time, and inevitably the empire-building that results has a distorting influence on the curriculum. Special pleading by such department heads for “coverage” of their discipline is a doctrine now thorough discredited.

Furthermore, those responsible for administering medical schools do not give priority to education. Certainly in the United Kingdom, the deans state candidly that they have too much else to do, and thus will delegate educational matters to curriculum committees. However, such committees often have no budgets of their own, have limited autonomy, and indeed may be dominated by departmental heads. A governance *system* must be established which reports directly, and only, to the dean, and is not answerable to the various departments of the medical school.

INSTITUTIONAL LEADERSHIP NEEDED

The solution to these problems lies in educational leadership, certainly not commonly provided by all deans. The necessary educational administrative and committee structure is essential, as is medical student involvement in the process. The curriculum must on no account allow or require medical students to be passive. Teaching and learning must focus on clinical competence and performance, not memorization of excessive detail. Neither can medical school staff continue as educational amateurs. The curriculum is no longer to be constructed through powerplay among contesting departments. The literature on curriculum reform leaves no doubt about the customary sabotage manoeuvres that constantly neutralize efforts at reform, and is equally explicit about methods to achieve effective change. The educational brief for institutional leadership is clear.

THE INSIDE-OUT DICHOTOMY

The *final four principles* of the *Declaration* insist that forces extraneous to the medical school are formidable barriers to reform in medical education. Medical education is only partially under the control of medical faculties. As medical schools face up to the challenge of reform they are confronted by the brute reality that capacity to change is only partially within the power of the institution itself.

These last four principles, which are outside the scope of medical schools themselves, depend for implementation on external agencies. Examples include the national government, or a national statutory body such as the General Medical Council in the United Kingdom, or a quasi-statutory body such

as Wissenschaftsrat in Germany, or the Commission of the five universities with medical faculties in Switzerland. Full cognisance must be given to this crucial reality, that external agencies have statutory powers over the medical schools that may prevent reform. In Denmark, for instance, all medical schools by governmental decree now must institute a bachelor degree within the curriculum, a policy not conducive to countering the preclinical-clinical division.

The educational institutions have often proved inept at reforming aspects of curricula well within their competence to change. This is particularly true for their obsolescent, damaging teaching methods and examination practices. Medical schools, however, do not carry sole blame. Their room for manoeuvre can be drastically restricted by limiting external forces, often not identified.

MEDICAL EDUCATION AS A CONTINUUM

The *Declaration* concludes with *principle 12* that specifically targets continuing medical education. It is accepted as an anachronism to focus on any one of the three phases of medical education (Undergraduate, Postgraduate, and Continuing Medical Education) in isolation. Comprehensive planning of the entire continuum has become obligatory. The number of entrants admitted to medical school should be in keeping with the provision for postgraduate training places and these in turn should accord with the doctors needed by the nation. Competence of such doctors must be maintained throughout professional life. This actuarial planning should also seek to achieve a proper balance between specialists and primary health care doctors (general practitioners). Medical education policy-making bodies are essential in every country, with representation from the universities, postgraduate training bodies, health services, governments, medical associations, etc. Their purpose must be to ensure professional standards, warrant public confidence, and prevent the misguided production of excessive numbers of doctors with defective skills.

AFTER THE DECLARATION

Since its adoption, a concatenation of massive social, political, economic and managerial changes impacted in major ways on medical schools world-wide. The 1993 World Summit on Medical Education¹⁵ again held at Edinburgh, was titled “The Changing Medical Profession” precisely to emphasize that educational redefinition of medical doctors had to heed the sweeping changes in health care delivery.

The World Summit focused on new external and tangential forces affecting the entire practice of medicine. Prodigious changes have resulted from economic recession, the managerial revolution, and transformation of medicine into a business. Immense political changes also supervened. In Europe the demise of Communism led to the creation of 22 new countries. World-wide genocidal wars of barbaric ferocity escalated. The 1993 Report of the World Bank, launched to the medical community at the Summit, documented the Health Transition. It described how developing countries now suffer from the same diseases as in the West, and how longevity was approaching that in developed countries. Medicine had helped to create, and was now confronted by, an ageing world. Moreover, AIDS, an entirely new epidemic

had arisen. This confronted educators with the novel challenge of young, often intelligent adults requiring care, when numerous surveys had amply established that a main deficiency of contemporary doctors was inability to communicate appropriately with patients.

REGIONAL ACTION

Implementation of the Summit *Recommendations* was carried further at six Regional Conferences¹⁶ during 1994-1995. Every region of the WFME (Europe, Africa, the Americas, the Middle East, Southeast Asia and the Western Pacific) explored intensively, within the local context, the crucial requirement that effective medical education is no longer possible without a close relationship between the health care system and the medical education system. To achieve such harmonization between medical education and health care, all six WFME Regional Conferences called for the conjoint creation in every country of authoritative and resourced health councils, to link Ministries of Education and of Health, the medical schools, and professional bodies.¹⁶ Medical education reforms always need the sanction of national governments for full implementation, very often imperatively so if any practical action is to follow aspirations and plans.

For such enlargement of the learning base to occur, all health service resources of the country must be mobilized. Ministries of Education and Ministries of Health must cooperate, and together create the committee structures integrating the medical education system with the health care system. Perhaps such partnership is the foremost among necessary reforms, and spells the end of academic elitism and exclusivity in medical education. Both WHO and UNESCO have sponsored the global enquiries resulting in consensus that supports this major reorientation, and have together called the Ministerial Consultations¹⁷ for mobilizing governmental commitment.

CONCLUSIONS – THE TIDE OF REFORM

Progress in educational reform has been prodigious. An inexorable tide, greater than that at any time since the start of the century when Flexner's Report¹¹ revolutionized medical education in North America is now flowing world-wide. There is no doubt that the world scene is at last set for decisive, effective action.

In formulating the extensive reorientation of all stages of the training of doctors, to accord with the health needs of countries, WFME has been allied in the reform process by the United Nations agencies concerned with health in the widest sense. Notably, these have been WHO, UNESCO, UNICEF, UNDP and the World Bank, and by the international non-government orga-

nizations partnering the Federation, the great foundations, and the national governments.¹⁸ The health parliament of the world, by World Health Assembly Resolutions 42.38, 1989 and 48.8, 1995, has endorsed the mandates for reform arrived at by regional and global action. It has fostered political will by calling on the governments of all member states to implement the reorientation in medical education as outlined in the *Edinburgh Declaration*. Over the past ten years, the principles espoused in the *Declaration* have successfully unified an international effort and provided a global strategy for reform in medical education.

REFERENCES

1. Cope O. and Zacharias J. *Medical Education Reconsidered*. J.B. Lippincott Co., Philadelphia, 1966.
2. Planning Commission, World Federation for Medical Education. Six Major Themes. *Medical Education* 20: 378-89, 1986.
3. World Federation for Medical Education. Report of the World Conference on Medical Education. Edinburgh, WFME. 1988.
4. World Federation for Medical Education. The Edinburgh Declaration. *The Lancet*, ii: 464, 1988.
5. World Health Organization, Geneva: World Health Assembly Resolution 42.38, 19 May 1989. See also World Health Assembly Resolution 48.8, 12 May 1995.
6. Colombian Association of Medical Schools. Sante Fe de Bogota Declaration. Bogota, ASCOFAME. 1995
7. Badran, A. State of Health Education in the World. Proceedings of the World Summit on Medical Education. *Medical Education* 28: Supplement 1 (p16), 1994.
8. Sociedade Portuguesa de Educacao Medica. Formacao Medica no Ambito do Novo Plano Curricular das Faculdades de Medicina Portuguesas. Lisbon: *Cadernos de Educacao Medica* p19, 1988.
9. Suwanwela, C. International Cooperation for Medical Education and Practice: A View from Thailand. *Medical Education* 30: 401-404, 1996.
10. Grant, J.P. *Medical Education: Finishing the Unfinished Business*. New York, UNICEF: distr. WFME, 1994.
11. Flexner, A. *Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching*. Updyke, Boston MA. 1910.
12. Association of American Medical Colleges. Educating Medical Students: The ACME-TRI Report. *Academic Medicine* 68:(6), Supplement, 1993.
13. Walton, H.J. International Medical Education. IN: *Graduate Prospects in a Changing Society*. A.H. Ronning and M-L Kearney (eds.) Paris: UNESCO Publishing, 1998.
14. Bloom, S.W. Structure and Ideology in Medical Education: An Analysis of Resistance to Change. *Journal of Health and Social Behavior* 29: 294-306, 1988.
15. World Federation for Medical Education. Proceedings of the World Summit on Medical Education. *Medical Education* 28: Supplement 1, 1994
16. World Federation for Medical Education. Proceedings of the Eastern Mediterranean Regional Conference on Medical Education. *Medical Education* 29: Supplement 1, 1995.
17. Report on the Ministerial Consultation on Medical Education and Health Services. Cairo, cosponsored by WHO, UNESCO & WFME. Alexandria: WHO EMRO/HRH/567-E/L, pp. 5-6, 1995.
18. Walton, H.J. Medical Education Worldwide: a Global Strategy for Reform. *Annals of Community-Oriented Education* 6: 327-332, 1993.