

**Capacity Building: What kind of health care professional is needed.
Focus on primary care**

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*“Ser un despertador de conciencias,
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Hipócrates

We have read, and much more has been written, about the necessity of changes on health, at the onset of the new millennium; however little has been done so far, and probably even less will be done, to meet current and future demands in the health field.

Health is clearly a socioecological construct. It starts from a biological basis with individual physical and emotional characteristics which are shaped by the social and environmental elements of our lives (1) The need to see in health a Social Capital, from the community point of view, leads us to think about the potential present in the idea of building health in the population, from a network that includes different aspects of human resources depending on the sanitary conditions of a certain population.

Community health capacity grows where there are supportive organizational structures, such as schools, workplaces and community planning mechanisms, that are conducive to health. (2) This *empowerment*, should be understood as participation in collective actions on behalf of the community. (3)

Health *capacity building* should be a *continuing dynamic process*, never static, therefore it calls for permanent investment and renovation. Capacity building is a means to achieve goals.

The concept of capacity building remained the same for decades in development co-operation: it was equated with individual training and organization restructuring. (4)

The current definition of capacity building implies a complex process aiming at changing people's mindset and behavior by introducing more efficient technologies and resources.

In 1947, Ludwig von Bertalanffy, (5) described “The General Theory of Systems”. There he stated that the concept and complexity of a system depended on the number and complexity of the relations among its components rather than on the number of its components.

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Capacity building is an important element of productive results in health, as it enhances the efficiency and efficacy of the health system thus contributing to a policy or strategy more likely to be sustained and incorporated into existing national, state and district levels of health structures and linked to existing positions and accountability process.

Involvement of the governmental health sector is expected to increase awareness and contribute to the development of sustainable health programs at the country level. Such systematic approach will also pave the way for a multisectorial acceptance of health changes that are needed.

The capacity process has some key strategies and activities :

- Assessment of local health needs, at the country level.
- Planning and building capacity at regional and national level.
- Building consensus and political commitment.
- Implementation of priorities
- Evaluation and recollection of experiences
- Compare results at regional, national and international level

To change people's behavior has always been difficult. Most people know that tobacco is harmful yet how many have given up smoking or tried to do so and how many have not even thought about quitting it?

Our medical schools and our medical doctors have always been several steps behind the population's real needs and circumstances. During the last two or three decades, medical education has not been able to adjust quickly enough to change in health care delivery systems and to meet people's needs and expectations. In many countries, education has not kept pace with changing demographic and health conditions, which should, ideally, influence curriculum development and educational delivery models, says Director General Brundtland. (6)

Today it is necessary to have some precise predictions concerning the future health of our communities for the next 50 years.

Epidemiological transition and ageing population are well-known facts and this change will take place, let's say, overnight from a historical perspective (7). In 2002, almost 400 millions of people were 60 years or older, by 2025 this group will amount to 840 million people, just considering developing countries. This figure will be 70% of the total elderly population. (8)

Ageing in developed countries has been taking place since the Industrial Revolution and it took France, for example, over 100 years to increase its elderly population from 7% to 14%, whereas nowadays in developing countries such as China, this change will just take 27 years. (9,10)

At the moment ageing population is healthier and better educated than ever before (11) In fact, population with non communicable diseases is bigger than population with communicable diseases (12,13) In order to inform national and international health organizations in charge of policies for the prevention and control of disease and injury, in the early 1990's, researchers from Harvard School of Public Health and WHO began an investigation into the worldwide burden of illness. This research group concluded that health trends in the next 25 years will be determined mainly by the ageing and chronic diseases of the world's population. (14)

Ageing also requires an imperative redefinition. In our society sustainability capacity is fundamental in view of changes. Our prime resource to assure sustainability is community involvement and health promotion, and this must be understood as a process through which people become more aware of and have a better control of the causes of illness, and choose to improve their health and attain a better quality of life. The challenge for those promoting health within the communities lies in a deeper understanding of both health biomedical indicators and their social determinants.

There is no doubt that health professionals have a major role, however we should ask ourselves: Are we, health professionals, trained enough to grapple with present and future (the next 20 years) demands on health?

Are we, doctors, qualified to work with a more elderly population?

The responsibilities of medical practitioners are now going far beyond the consulting room or the operating theatre. Physicians are better informed than ever before and have high demands as they are aware of financial costs. Striking the right balance between controlling health cost and ensuring that adequate resources are available for health is a delicate political and economic exercise.

This paper attempts to assess current medical education as regards ageing, and to focus on primary assistance as of crucial importance for health everywhere. A broad basis of knowledge and a change of paradigm of this speciality, according to documentation consulted, might be the best approach to health needs in people, which should be considered as a starting point and not as an end point.

Almost a century after the Flexner Report, when the author had great hopes for the physician's training, laying the stress on their *social and preventive function, rather than on an individual and curative one*, we may question whether the Flexnerian paradigm is still relevant to meet the challenges today. (15)

At that moment, and still today, the biomedical and hospital-centered model, based on the Flexner report, has contributed to shaping many medical educational programmes in a reductionist fashion. As a result, there is now little attention paid to the psychological, social, ecological and economic dimension of health. (16)

Therefore medical education should be defined in new terms so that it leads to a greater responsibility with society. The obligation of accountability is a responsibility that must guide all activities in the institutions devoted to learning, research and assistance. (17)

In general, undergraduate medical education can be more responsive to national health goals related to universal coverage and primary, preventive and cost-effective care. Although health systems need physicians trained to meet a broad range of community health needs, medical students are usually trained in narrowly specialized hospital-based settings and taught to manage patients' problems which are not representative of the community at large (18)

From a wider standpoint, some serious questions are now being raised about the biomedical approach to medicine. Although the reductionist and dualist approach to biomedicine has produced many outstanding achievements in diagnosis and in treatment, it has failed to account for most of the phenomena and conditions seen in community based practice, thus it is essential to create a new operational framework for both teachers and students. (19)

There is a need for a new model which takes better account of the interrelation of the events which together result in human illness, and which embraces ecological as well as social, psychological and physical aspects.

The future role and responsibility of the medical school should reflect the expected essential features of the future health system as well as the future doctors' capabilities, which should be stimulated by the curricula and by appealing to their energy and inborn resources. Quality in the medical training of future doctors means that these doctors should be adequately trained to fit in our society. (20)

Medical education faces a dilemma when confronted with the overwhelming amount of information and knowledge nowadays. Should this lead to an increasing specialization or should we keep to a more general model?

We are currently educating and training through a pyramid that includes specialization and sub specialization, but is this the correct way to meet the patients' needs? (21)

Cultural changes at the core of the medical education system are badly needed.

Do societies require different undergraduate curricula?

To make a satisfactory change it is necessary to carry out a thorough reform of the curricula. It means a modification of the criterion as regards how this reform should be defined, conceptualized and how should all undergraduate and postgraduate curricula be defined. Our interest focuses on undergraduate students. Generally we think about changing curricula or contents when there are doubts about the competence of the educative institutions. The model in mind is usually one that resulted from the accumulation of successive “ geological “ layers in medicine schools.

The kind of Curricula ,which may lead to changes that we define by the words “written on paper”, that is *action curricula*, is that one that proves to be effective in practice. Universities should be in charge of making decisions about changes into their deep structures. The Superior Council, the Departments, Secretaries and the Dean, all are in a position to make decisions which will definitely determine the way they teach.

We should consider that two curriculums coexist, the written curricula and the practical curricula consequently to change the contents of the curricula raises some questions: Which are our most important needs ? What do we do with the market needs? In some way, undergraduate curricular change is a deep sociocultural modification, because the whole sociocultural life is affected (22).

A change like this means to assess resources and build capacities, and in doing so to set the university institutional life into an organizational macrosystem articulated with the community, the country and the world.

As Michel Foucault states (23), objects change throughout time and are redefined, at the same time, methods change too and today, there are some methods with needs to be defined. Medicine schools with an assistance model or schools with research profile, schools which favour specialization or which have a broader basis related to the most common health problems, lineal and compartmentalized curricula or schools with a model of growing complexity and spiral and integrated curricula.

Fifty years ago, we could never have imagined the need for the inclusion of themes like HIV/AIDS, brain image methods, the use of Internet for telemedicine and for learning, genomic and biotechnology or caring for the ageing in their homes. (6).....yet today all this is real.

Surely the University framework and education are a old and long process. The gap between medical education and practice is big, however the deepest fundament must be to train people as best as possible. (24) but adjusting to life in the “new millennium” .

Probably we need to ask ourselves, what kind of health professional do we want??

Medical professionals have often viewed the elderly through cultural lens that focus on deterioration, dependence, rigidity and even resistance to treatment (25)

To train doctors after a hospital-centered model is almost like to train a veterinary doctor at the zoo, with lions, elephants and giraffes, which can be very good provided he is going to work in the jungle, vets are more likely to work in the city with cats, dogs and bird as patients. (26)

Kerr White’s well-known experience shows these problems with a cohort of 1000 people during a month, with the result that less than 1% of them were admitted to the university hospital. (27)

We cannot do without specialists in gastroenterology, genetics or autoimmune diseases, but we also need other kinds of specialists with wider knowledge to deal with another type of patients.

Many medicine schools pay little or no attention to longitudinal care, skills on physician-patient communication, loneliness, normal decline of physical capacities without illness, suffering, end of life care or compliance with treatment.

Primary care provides person-focused (not disease-oriented) care over time and care for many of the unusual and chronic conditions (28) while at the same time it is integrated with the other specializations. Thus it is defined as a set of functions that, in combination, are unique to primary care. But primary care is not a set of unique clinical tasks or activities. Primary care is an approach that lays the basis for and determines the work of all the other levels of health systems as well.

Primary care addresses the most common problems in the community providing preventive, curative, and rehabilitative services to maximize health and well being.

It integrates care when there is more than one health problem and deals with the context in which illness exists and influences the responses of people to their health problems. (29)

Vuori (30) suggested four ways of viewing primary care: as a set of activities, as a level of care, as strategy for organizing health care and as a philosophy that permeates health care. (Table 1)

TABLE 1
From primary medical to primary health care

FOCUS	
<i>From</i> <i>Illness</i> <i>Cure</i>	<i>To</i> <i>Health</i> <i>Prevention and care</i>
CONTENTS	
<i>From</i> <i>Treatment</i> <i>Episodic care</i> <i>Specific problems</i>	<i>To</i> <i>Health promotion</i> <i>Continuous care</i> <i>Comprehensive care</i>
ORGANIZATION	
<i>From</i> <i>Specialist</i> <i>Physician</i> <i>Singled handed</i> <i>practice</i>	<i>To</i> <i>General practitioners</i> <i>Other personnel group</i> <i>Team</i>
RESPONSIBILITY	
<i>From</i> <i>Health sector alone</i> <i>Professional</i> <i>dominance</i> <i>Passive perception</i>	<i>To</i> <i>Intersectoral</i> <i>collaboration</i> <i>Community participation</i> <i>Self responsibility</i>

Population changes, mainly population ageing and increasing longevity, are fundamental cornerstones for this reexamination of the skills and training required from our health care students and professionals, including health care services and systems. (31)

A professional centered on the problems of communities and individuals, a professional with vertical and horizontal integration; vertical means ensuring clinical education and medical sciences, horizontal integration is about breaking down specialty and departmental barriers (32)

Due to their importance, non-communicable diseases must be dealt with within a close and longitudinal patient-physician relation. In a society in which "self control" is an important value,

chronic illness represents a loss of such "control". (33), so one of the main challenges in the care of these patients consists in obtaining compliance and improvement in their life styles.

This can only be accomplished by a doctor with a wide range of knowledge who can manage simultaneously chronic diseases (hypertension, obesity, dislipidemias, osteoarthritis) and in this way improve the patient's health .(34) But we are aware that the physician is only one piece in the puzzle.

It is mandatory to understand the changing of roles in this model. The interdisciplinary team care can and should include nurses, social workers, psychiatrists, dietitians, volunteers and, finally, doctors.

Which is the right way to keep updated and to be able to improve our patients' health? The big wave of demographic change is here, with a lot of young old and more than ever the very old old.

As the number of citizens increases, greater demands are being placed on medical educators to train physicians who can meet the "geriatric imperative". The Institute of Medicine (USA) has recommended that comprehensive humanistic medical education in geriatrics be integrated throughout the curricula of medical schools. (35)

The TeGeME II Study (36), that was conducted by IFMSA (International Federation of Medical Student's Association) and WHO, yielded some interesting data. This study covered 72 countries and showed that only 41% of the curricula mention the word geriatrics and only a few of these countries geriatrics is taught as a proper subject, that is according to some principles of pedagogy such as "teaching", "hours of teaching" or "content of teaching". The percentage of elderly presence in undergraduate education is quite low.

On the other hand, we have quite a different picture in a private school of medicine in Argentina with a humanistic and holistic approach to the patient. Family Medicine, won hours of teaching, taken from hours of infectious diseases and imaging issues by the Academic Council decision, supported by the students. (37)

In 1995, WHO established the Ageing and Health Program, in which WHO embraced the "Life Course" as one of its perspectives on ageing. This Program includes the issues of health promotion, cultural, gender, intergenerational and ethical issues. (38)

This Statement Position strongly emphasizes that ageing is not a disease, but a natural stage of the lifecycle.

One the major considerations is that the medical care of the elderly requires a body of knowledge and skills distinct from those offered by other physicians. Not only the presentation of disease is often different, but also its management varies with the social and economic environment. (39) In the elderly population we can see, different types of "non conventional" patients, besides the patient with chronic illness, exists the "reiterative patient", the "policonsults patient" and the patient with "the other" AIDS, the elderly AIDS, (Affective Insufficiency Domiciliary Syndrome) (40)

For more than 10 years, leaders in medicine and medical education have strongly recommended clinical geriatric training for medical students, but only a few programs have been implemented (41)

As doctors we need to be trained and to acquire new knowledge, skills and technologies in gerontology and geriatrics. The opportunity for geriatric medicine is immense. (42)

Why primary care?

The Conference convened by the World Health Organization at Alma Ata in 1978 (43), used 100 words to describe primary care. Primary Care is first contact, continuous, comprehensive, and coordinated care provided to populations undifferentiated by gender, disease, or organ system. Primary care is only one level of a health system. (44)

Caring for older people requires special medical expertise, and past studies have shown that members of the general population and medical communities, express negative attitudes and accept misconceptions and stereotypes about old people, thus reflecting a poor understanding of the needs of the elderly. Different agendas coexist between medical doctors and patients (45), but the challenge is to integrate both. (Table 2)

Table 2: Medical and Patient Agendas

	Characteristics
Medical Agenda	<i>Clinical record, Physical Exam, Laboratory test, Differential diagnosis, etc.</i>
Patient Agenda	<i>Behavior comprehension and understanding of vital experiences. Expectative. Feelings. Fears.</i>

This is the reason stated by Linn and Zeppa who specifically suggested exposing students to healthy old people first, as opposed to very ill old people in nursing homes, which helped students to view old age not only as synonymous with illness and helplessness. (46,47)

The pervasive negative attitudes of ageism (48) in most countries (including the physicians') (24) resulted in poor medical assistance to old people, particularly in nursing homes.

The results of laboratory science and medical technology on the specialties and subspecialties led to an increasingly impersonal and fragmented care.

Family medicine emerges as a response to that fragmentation which results from super specialization and "dissection" of the patient too. This is the best reason to produce more medical doctors with a global view and a multidimensional approach.

Clinical disciplines evolved as consensus was reached among members of the discipline about the main medical problems that those disciplines could address, and the knowledge needed to deal with them. For general practitioners, the main clinical problems reside in the community and encompass not only curative care but rehabilitation and preventive care as well. (49)

Humanistically oriented physicians seem to enter Family Practice, and this study shows that during their training they become even more positively oriented toward caring for the elderly. They constitute the first medical specialty group to demonstrate such a trend (50)

However what does the literature say about student's attitudes toward the elderly?

The study methods, attitudinal instruments, and curricular interventions are highly diverse, making the literature difficult to evaluate.

An experience with pre test of knowledge and attitudes showed students had little knowledge of the ageing process, held negative stereotypes of old people, and preferred to take care of younger patients. (51)

Thorson et al (50) found that younger and better-educated subjects had more positive attitudes toward the aged, while other subjects and those with fewer years of education showed more negative responses. Spence et al (24) studied the general medical prejudice toward old patients in a medical school environment and found misconceptions or negative information among students and teachers about old age, which are shared by society at large.

As regards attitudes related to age, race, and social class, no significant variations were observed (52), but data suggest that students selecting primary care specialties are somewhat more humanistic and empathetically oriented, at least concerning the aged. (53)

Nevertheless, several factors seem to affect positively medical students' attitudes toward the elderly: prior exposure to the elderly, specialty choice whereby students choosing careers in primary care display more positive attitudes than those favoring technical fields.

As far as students without contact with the elderly is concerned, there are a lot of papers which prove that educational programs (54) or home visits and direct contact (55) (qualitative) with this group of people, improve the attitude to ageing people (56,57,58,59,). The only variables that are consistently related to knowledge are education and attitudes.

Conclusions

The diagnosis for the current medical education is the need of change. The epidemiological transition, demographic changes and unfair medical care enforce a new kind of health professional. Health capacity building is a valid and necessary strategy to produce change. The usual gap between the different levels of decision-making is only one of several hurdles in the way of change. Governmental areas as social affairs, health ministry and education ministry are typical examples of what should be linked through communication and coordination.

The line separating clinical medicine and public health has become increasingly blurred.

Several points and areas to be correct have been identified, but the impossibility to penetrate different structure levels is a challenge today.

The question is: How can innovative change management be made ?

The answer may be found in the market, which depending on its needs should propose what kind of physician is needed.

Undoubtedly there must be a different approach, different ways of thinking, a multidirectional and "tailor-made" assistance to the patient, And all this can only be reached through a model which centers on the patient's needs.

The narrow concept of medical education sums up only transmissions of huge amounts of skills and knowledge which become obsolete in the students' minds. Medical education is also, and today more than ever, about teaching how to manage change.

Very little attention was paid to prevention, or the skill required for leadership in health team. When decisions are made about individuals or through community intervention, it becomes mandatory to provide the optimal mixture of epidemiological, economic and ethical issues (6)

The challenge for developing and developed countries is to discuss comprehensive policies to improve health and functional capacity among today's ageing individuals and to promote healthier lifespan and healthy ageing for the futures elderly cohorts (60)

Probably we can see an answer. The transposition of the health care model based and focused on episodic care for acute illness begun to transform, in Singapore, and redesign to meet people's long term needs (61)

WHO has launched a project "Innovative Care of Chronic Conditions" to analyze and help to disseminate examples of good, applicable care for people with chronic conditions. (62)

World is changing very quickly. As educators we need be motivators of change at different level. We have the challenge on our hands, to assure equity and appropriate care for next generations in the new health world.

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