

The teaching of clinical practice and the competency system

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Abstract

The teaching of clinical practice should focus and be directed to the training of health servants, making use of technology, scientific advances, simulators and practicums which were implemented to offer medical students a supervised practice in a specialized field with the theoretical foundation previously acquired or simultaneously.

These strategies undoubtedly prepare them for the world of work and generate the necessary competencies in a specific field of medical knowledge.

Learning includes skills and abilities, aptitudes and attitudes to apply the clinical method that leads to research and information gathering, its summary and interpretation, construction of a diagnosis, and as a result, propose treatment and establish a prognosis.

This professional and ideal service model is achieved by mastering common procedures and medical and surgical techniques complemented by a harmonious doctor-patient relationship, a moral a legal responsibility of professional practice and the humanism that should characterize the medical profession.

Keywords: clinical method, learning, teaching, competencies

Introduction

Learning medical and especially surgical practice depends to a large extent on teaching interns to develop skills and abilities that will be necessary throughout their careers. In the field of health, it is essential to be at the forefront of knowledge both in this field and in technological knowledge and advances in medical practice.

The diseases of the past are not those of the present nor will these be those of the future because the practical lifestyles and customs of the patients change. Globalization has generated constant changes and the adoption of behaviors typical of other cultures, which has triggered new emerging diseases and the increasing presence of chronic degenerative diseases.

It should be noted that although the therapeutic tools today have developed a great advance, people continued to get sick. It is therefore necessary that the teaching of surgical medical practice break paradigms and focus on a different way of teaching the management of various diseases.

The methodology as well as the tools, methods and techniques used in the teaching of medical activity should then focus on reorienting students to acquire skills, safety skill and above all to master the necessary competencies of their professional work to become effective and efficient unique elements human and empathetic.

This article reviews the subject and highlights the importance of teaching students in practical medical training to learn to learn by developing skills and abilities that prepare them for professional practice.

Clinical Method

The clinical method is a systematic process that gives us the opportunity to recognize the health-diseases process of patients and ensure and accurate diagnosis that promotes timely and adequate treatment. The ideal way to know and relate the three areas involved in pathological processes,

read clinical, biological and social is undoubtedly the clinical history.

Whit the implementation of the clinical method in patient care, true and objective judgment elements are generated, the result of which is systematic and well-founded knowledge^[1].

The scientific principle that is applied to clinical practice imposes and orderly procedure to know and study whit precision the binomial health – disease. Its objective is, as already indicated, to reach a diagnosis, establish a prognosis and develop a treatment plan.

This procedural order begins with the medical interview and continues with the exploration and physical examination that leads to the search and identification of the health problem by detecting the signs and symptoms of each patient as well as the relationship or link that these signs and symptoms have whit their lifestyles, habits, nutritional status, environment and socio-cultural level in order to be able to recognize and establish the risk and predisposition factors that affect each individual in particular.

In this way, with the medical knowledge duly founded and obtained from the auscultation and investigation of the patient, a presumptive diagnosis or hypothesis is reached by ordering systematized and summarizing the information.

Additionally and depending on each particular case, complementary studies should be used to confirm or not the diagnosis, that is to say, use radiographic images and tomography, biopsies and laboratory tests. All of them are very useful to learn more about the patient's disease, the severity and the affection of the organs involved in such a way that we confirm and reach a definitive diagnosis and establish an assertive treatment plan.

It should be noted that these complementary studies will be functionally useful if and only if they are indicated, analyzed and properly interpreted.

Doctor: Patient relationship

It is a fundamental aspect in the care of patients that is based on principles of bioethics. The doctor- patient relationship is the generally unwritten contract established by autonomous persons free, to initiate, continue or break this relationships. It is the interaction of the patient with the doctor and the health team based on communication and willingness to achieve common objectives such as the prevention of diseases, preservation and recovery of health, rehabilitation and reintegration in the family nucleus and the social and even work- related environment ^[2, 3].

Day by day the paradigm has changed and it is necessary to involved the patient in their care process and decision-making (Principle of autonomy); The principle of autonomy refers to the right of the patient to decide for himself about the acts that will be practiced on his own body and that will directly or indirectly affect his health, integrity and life (www.innsz.mx/opencms/contenido/investigacion/comiteEtica/eticaatencionmedica.html) In summary, the clinical method is essential for the development of well-reasoned clinical practice that leads to highly accurate diagnoses. This methodology applied or implemented daily with each patient improves health services and promotes excellent medical professional development.

Teaching: learning

The teaching-learning process in a schooled manner is something very complex and its development is influenced by multiple factors such as objectives, goals, contents, curricula, school system, policy and philosophy of the school institution, methodology and evaluation tools. This process is a dialectical unit between instruction and education as well as teaching and learning ^[4, 5].

Therefore the traditional role of the teacher as instructor must change. The work is arduous since beyond instructing and informing the students, we must guide them, motivate them and integrate them in the constriction of knowledge and highlight their skills.

Teaching is not to just providing information but helping to learn (*Maruny, 1989*). In this context, the role of the teacher is fundamental. You must know your students, the learning styles appropriate to each one, what work habits they have, what their motivations are, what their school history and what their attitudes and values are ^[6, 7].

Within the classroom, the teacher must promote an environment of teamwork and interactive dynamics with harmony, mutual help and self-evaluation, among other purposes.

Over time, education has turned, orienting learning towards the construction of its own knowledge with autonomy, independence and self-evaluation, adapting study plans and programs according to these strategies.

Students who know how to learn and obtain satisfactory results do so because they control their learning processes, they know what they are doing, they grasp the demand of the task and respond accordingly, they know how to plan activities and times with optimization criteria to later examine their successes and errors. In this way they can assess their achievements and rectify their mistakes. It should be noted that in their performance they employ various study strategies.

In summary, learning to learn implies the ability to reflect on the way in which one learns and to act accordingly to self-regulate the learning process itself through the use of

flexible and appropriate strategies that are transferred and adapted to real situation (*Diaz Barriga Frida, Hernandez Rojas Gerardo. Estrategias docentes para un aprendizaje significativo. Una interpretación constructivista, 1988, pág. 114*)

In clinical teaching, this type of teaching - learning is important since on the one hand we are training students who will dedicate their professional lives to health care and dealing with human beings who think, love and suffer.

Students must always keep this human condition in mind as a shared essence worthy of empathy and solidarity. This call to conscience should be the guiding axis of the teacher in the process of leading students to learn and configure the competencies for their professional development.

When we talk about what is necessary to know we must include the learning of facts and concepts that are the basis of theoretical learning, which should focus on the investigation and formulation of ideas and concepts of each particular subject (Knowing what).

At this point we can say that know-how is theoretical learning grounded in medical practice. A position that is only achieved with the prior teaching and learning of the technical skills and abilities required by the profession.

All learning and knowledge must be closely associated with attitudes and values that in clinical practice are based on bioethics.

Competency System

Competency - based education is translated as the source where theory and practice converge and students are encouraged to learn to learn, to make effective decisions, to be autonomous and to be respectful of themselves and others. University training that starts from models based on a conception of content is changing due to the accelerated change in knowledge and the provisional nature of knowledge ^[8].

These educational models for their implementation and development require training and updating of the teaching staff, reengineering of the study plans and changes in the evaluation tools.

Informing and instructing students in the understanding and acquisition of theories and concepts is only part of the teaching since, once the other hand, it is required to train them as individuals capable of assuming attitudes full of values, norms that constitute and follow a code of ethics.

Competency education goes beyond training guided by the content of the different disciplines by considering the transformation of the conceptual context representations that Students project (on the planes) in the following planes:

That implies

- **Cognitive:** Knowing and knowing how to do
- **Affective:** Knowing how to be
- **Social:** Knowing how to be “present”

The teaching process is oriented through a structuring logic towards professional performance (*Gorodokin, 2005; Perrenoud, 2004*) Assessment systems in competency education make use of multiple tools that seek to qualify and integrate the different learning, knowledge, skill and abilities that constitute an approach to competency assessment in which attitudes and values are integrated.

On theoretical and practical academic campuses, students are inserted into real working life from the beginning of teaching. In the medical area, they work in hospital clinics

and surgical areas after the classroom.

The teaching profession also requires mastery of the specific academic content of each profession, knowledge of strategy and planning, mastery of the classroom and external environments, and experience in their field of work development.

The competency method claims that the competence of individuals has a causal relationship that predicts their performance. In medicine and especially in the development of a medical residency, competencies are acquired and developed over time on a day to day basis with knowledgeable practice with good communication skills with clinical reasoning, with management and control of emotions, attitudes and values.

The National Autonomous University of Mexico in its program to support institutional projects to improve teaching defines Clinical Competence as the set of capabilities of a doctor to correctly perform the functions and integrated task that are required to solve problems with efficiency and human quality both individually and collectively within a community.

Mental and behavioral habits are developed with reflective clinical practice beginning in the undergraduate degree, then in medical residency a more comprehensive view of the patients is exercised with the application of deeper and more specific knowledge as well as more developed skills.

Competency – based education is one of the pillars that in health institutions will raise the level of the training process with the firm purpose of improving medical care in our country.

Discussion

Clinical teaching comprises a significant percentage of the medical curriculum and has a significant impact on the efficient development of the profession at the service of humanity.

The clinic is surely the most archetypal of medical activities. It had its heyday peak at the time when pathological anatomy was also developed, which provided feedback to clinical practice under the so – called anatomoclinical model.

At that time, the foundations were laid for what is now known as clinical propaedeutic, the model of which is maintained after approximately 200 years with few modifications. The teaching of the clinic has not undergone spectacular change either, which has led to the continuation in many schools of a rigid, routine and superficial stereotyped approach. A large number of qualities in clinical teaching must be preserved, but this discernment is needed between what must be discarded as obsolete, what must be maintained, and what must be modernized (*Alberto Lifshite-Guinzberg. La enseñanza de la clínica en la era moderna. Inv Ed Med 2012; 1(4): 210-217*).

Thus, the paradigms of teaching in medical practice must be at the forefront of technological advances and new strategies for care and diagnosis. A good teaching and learning of the clinical method will lead without exception to the correct application of all its strategies: that are integrated by interview, collection and organization of information, medical summary, diagnosis establishment of a prognosis, treatment plan and follow-up of cases.

The clinician will always be related not only to the health-disease process but also to the care of the patients and achieving a good doctor-patient relationship will

significantly influence the recovery of the patient's health.

Conclusions

Teaching by competences proclaims knowing how to know, how to do and how to be. Therefore, clinical competence requires adapting to new strategies, to great medical advances, to therapeutic diagnoses that were not even conceived in the past. The clinician must have the ability to make decisions even in risky situations, always weighing the risk – benefit balance with each patient. The clinician must be aware of his/her responsibility for the health and well-being of the patient by applying their knowledge and recognizing their limitations.

Teachers must channel and reorient the behavior of students, observe and monitor their progress and corroborate their learning from the practical point of view as well as the domain of therapeutic management.

The full coverage of all the previous conclusive points has the firm intention of reaching the goals of this type of teaching whose destiny must be the construction of “*Competent professionals with great human quality*”.

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Referencies

1. Frómata A, Sánchez S, Maya M, Jara J, Valarezo D. The Clinical Method. *Bionatura*, 2(1):255-260.
2. Gutiérrez SC. Relación médico-paciente. In: Cote Estrada L. Olvera Pérez D., editor. *Cirugía en el paciente geriátrico*. 1a ed. México DF: Alfil, 2007, 707-713.
3. Arrubarrena Aragón V. La relación médico-paciente. *Cirujano General*. 2011; 33(2):122-125.
4. EcuRed. El proceso de enseñanza- aprendizaje desarrollador. 2012; Available at: https://www.ecured.cu/El_proceso_de_ense%C3%B1anza-aprendizaje_desarrollador. Accessed Enero/05, 2021.
5. Johnson D, Johnson R. «Motivational processes in cooperative competitive and individualistic learning situations», en Ames, C.; y Ames, R. (eds.): *Research on motivation in education. The classroom milieu* Nueva York: Academic Press. 1985; 2:249-286.
6. Díaz FHG. editor. *Estrategias docentes para un aprendizaje significativo. Una interpretación constructivista*. 2da ed. México: McGraw-Hill, 1997.
7. Irigoyen J, Jiménez M, Acuña K. Competencias y educación superior. *Revista Mexicana de Investigación Educativa*. 2011; 16(48):243-265.
8. García J, González J, Estrada L, González S. Educación médica basada en competencias. *Rev Med Hosp Gen Mex*. 2010; 73(1):57-69.