



The News Bulletin of
Medical Education
Technology Unit

Published By
Medical Education
Technology Unit
N.K.P.SIMS & RC and LMH

Annual MET News Bulletin
2021
Vol- 21



REFLECTIONS

DEVELOPING CLINICAL SKILLS IN MEDICAL STUDENTS



N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital
Digdoh Hills , Hingna Road Nagpur - 440019

Phone (07104) 665000, 236291, Fax- (07104) 306111 mail: nkpsims1@rediffmail.com/ website : www.nkpsims.in

<i>Editorial</i>	2
<i>Dean's Reflection</i>	4
<i>From the Director's Desk</i>	5
<i>Guest Editorial</i>	6
<i>Bolus from the Boss</i>	8
<i>Invited Article</i>	10
<i>Clinical Skills Lab - Our Pride</i>	12
<i>PG Page</i>	15
<i>Interns Page</i>	16
<i>UG Page</i>	18
<i>Article Critique</i>	19
<i>MET Secretary's Report</i>	21
<i>MET Unit Buzz</i>	22
<i>Educational Research</i>	24



N.K.P. Salve Institute of Medical Sciences & Research Centre and Lata Mangeshkar Hospital

Digdoh Hills , Hingna Road Nagpur - 440019

Phone (07104) 665000, 236291, Fax- (07104) 306111 mail: nkpsims1@rediffmail.com/ website : www.nkpsims.in

Medical Education Technology Unit



Patrons

Dr. Kajal Mitra,
Dean

Director & Chairman

Dr. Madhur Gupta
(Prof. & HOD Biochemistry)

Dr. Anne Wilkinson(Associate Prof. Pathology)

Joint Secretary

Dr. Neena Nagdeo (Prof. & HOD Microbiology)

Co- Chairpersons

Dr. Vivek Harkare
Prof. & HOD ENT

Dr. Rekha Khandelwal
Prof. & HOD Ophthalmology

Members

Dr. S. Deshmukh
Professor
Dept. of Anaesthesia

Dr. D. Barick
Professor
Dept. of Orthopadics

Dr. T. Manohar
Professor
Dept. of General Medicine

Dr. K. Date
Asso. Professor
Dept. of Microbiology

Dr. M. Kulkarni
Asso. Professor
Dept. of Community Medicine

Dr. S. Gawande
Asso. Professor
Dept. of Psychiatry

Dr. S. Fulare
Asso. Professor
Dept. of General Surgery

Dr. S. Pakhmode (Narad)
Asso. Professor
Dept. of Biochemistry

Dr. P. Dixit
Asso. Professor
Dept. of Obstrectics
& Gyneacology

Dr. A. Dashaputra
Asst. Professor
Pharmacology

Dr. S. H. Khan
Asst. Professor
Dept. of Forensic Medicine

Dr. S. Patil
Asst. Professor
Dept. of Physiology

Editorial



Dr. Vivek V. Harkare

Professor and Head

Department of Otorhinolaryngology

NKPSIMS & RC and LMH, Nagpur

Editor Reflections

Developing clinical skills in Medical Students

*“Knowing is not enough, we must apply. Willing is not enough, we must do”
(Goeth)*

The above phrase perfectly describe and underlines the importance of development of clinical skills in both undergraduate and postgraduate Medical Students, so as to make them an ideal Indian Medical Graduate (IMG), as per the National Medical Commission's new perspective for Medical Education in India.

What is clinical skill?

A clinical skill can be defined as, in care of a patient, a practicing physician performs a purposely selected and integrated set of skilful acts that are pertinent to each patient's encounter.

These may include

- 1) *Taking clinical history*
- 2) *Engaging a patient in a professional relationship*
- 3) *Performing a mental and physical examination*
- 4) *Performing clinical test or procedures*
- 5) *Undertaking diagnostic and therapeutic interventions*

From an analytical perspective the above mentioned components of medical care reflects what is known as competencies and the same principal forms the basis of Competency Based Medical Education (CBME), as per the new vision of Government of India.

The following skills needs to be imparted in both UG and PG medical students of CBME-

A) Clinical Skills

- I) Listening and observational skills*
- II) Diagnostic skills*
- III) Problem solving skills*

B) Human relation skills

- I) Communication skills*
- Ii) Assessments of patients' need*
- Iii) Physician and patient relationship*
- Iv) Patient care and drug prescription*

Thus, an essential purpose of medical education is to ensure that each student develops and continues to define the basic clinical skills that are required to provide competent care throughout a lifetime of professional work.

To achieve the final outcome of competency based education which focuses on developing clinical skills of medical students, every medical school should design and implement an explicit clinical skills curriculum in the following manner-

- I) Medical school should adopt a set of common principles for guiding the clinical skill education process.*
- Ii) The medical school should identify a specific set of skills to be learnt prior to graduation.*
- Iii) Medical school should provide opportunities for learning clinical skills for medical students.*
- Iv) Clinical skill education curriculum should contain essential pragmatic elements so that the medical teacher and the learners have a common understanding of professional skill education and their share in the responsibility of implementing the same.*

Let us work together for achieving these objectives in our future medical education.





Dr. Kajal Mitra
DEAN
NKPSIMS & RC and LMH, Nagpur

Developing clinical skills in Medical Students - UG and PG

The basic purpose of studying medicine is to become a "good" doctor. Here the word - good - is very important.

The student who gets admission in a medical college is, in all likelihood, going to become a doctor. Thousands of such doctors are produced in India every year. However few of them can be called a good doctor. A good doctor is one who has developed clinical skills to such an extent where science becomes arts. How many times do you think a doctor thinks about the diagnosis the moment patient walks in?

Looking at his gait.

Noticing his affect Or the way he talks about his illness.

It's sheer artistic.

Nothing to do with - inspection, palpation or auscultation.

That comes with ... developing enough clinical skills during the five and half years the student spends in a medical college acquiring a degree along with experience she acquires along the way.

I don't mean to undermine the power of typical clinical examination.

Again, by now we know clinical skills can be of broadly of three types. Cognition Psychomotor skills Soft skills

All these types are very very important and one type can't score over another. A good doctor has to have all three skills. Cognition is acquired by reading, discussing and various teaching - learning methods.

Psychomotor skills are acquired by observing, assisting and finally doing various procedures.

Soft skills are mainly innate in my opinion. That doesn't mean you can't acquire them if you really try. A good doctor always bears a pleasant personality howsoever bad she may be feeling at the moment. For a patient you are, if not god, someone who is between her and the god. Hence a good doctor always talks and behaves responsibly. Understanding patient's pain and trying to ameliorate that is the prime objective of all doctors. A good doctor ia also a good listener. Howsoever trivial she may feel the complaints are. She must listen patiently and try to explain to the best of her ability.

Let me quote Sir William Osler : -"To study the phenomenon of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all."



Dr. Madhur Gupta
Director and Chairman,
Medical Education Unit
NKP Salve Institute of Medical Sciences & RC
and LMH, Nagpur

Clinical Skills and Medical Students

A lot of emphasis is being given to proper ways of clinical teaching all over the globe. This is rightly so since one of the major components required for a medical graduate is competency of clinical skills.

The term clinical skills includes physical examination skills, practical procedures, communication skills, and treatment/therapeutic skills, with or without integration across all domains. Moreover a student who graduates from a medical school is recognized as a professional by the expertise of his or her clinical skills.

Needless to say for clinical skills to be learnt one has to have not only the procedural knowledge but also correlate the same with clinical reasoning (diagnostic reasoning and clinical decision making). Clinical skills that will enable him to practice safely and effectively in the real world.

Without these clinical skill become a “mechanical performance” which has limited diagnostic value, and cannot be adapted for different patients and different situations.

To ensure acquisition of clinical skills, medical teachers must adopt teaching methods that prioritize observation, practice, feedback; and more practice.

According to Martina E.J. Michels, teaching clinical skills first requires a clear decision as to which domains are to be addressed, as clearly different domains require different types of training based on educational theory. Secondly, attention must be given not only to training a task/performance/procedure, but to integrating this with both underlying knowledge and clinical reasoning skills. How these components are best taught, and at what stage of learning they need to be taught.

Several authors have suggested many methods of how this can be taught in the class room. This issue of "reflection" is dedicated to understand the importance of learning and teaching clinical skills to complete the process of making an Indian Medical Graduate

**Dr. Vijay Kautlya**

Asso. Dean, Prof. & Head, FMT

Manipal Tata Medical College , MAHE Jamshedpur

Developing Clinical Skills in Medical Students.

This is some time the hardest thing to do. By looking back, I don't mean to criticize the past, I only want to take informed decisions for the future. Reflecting on my own learning experience as an undergraduate, I realize that most of the skills that I picked up during MBBS were most influenced by junior faculty and senior postgraduates during the clinical postings. Sessions engaged by the final year postgraduates were most fruitful. I also realize that most of the time in clinical postings was spent in case discussions after we finished taking the case history and unlike theory classes there were no planned sessions. Learning was opportunistic and random. Every department had a few faculty who we looked up to as ideals and interacting with them was only a privilege and not an everyday affair. The most significant realization is the fact that after spending over 4000 hours in the hospital during MBBS I was not really confident of my skills.

There is no doubt that some of the best physicians around the world have begun in the Indian educational system, but do they really attribute their skills to the system, or did they overcome their deficiencies after getting out of the system? Clinical skills teaching in medical colleges is certainly a challenge facing multiple hurdles like absence of a clear professional recommendation, large student numbers, patient consumerism, growing need for specialization and most importantly opportunistic learning(1). Unless we attempt to address these issues, we will not be able to deliver an effective clinical skill learning process.

The problem with lack of professional recommendation has largely been addressed by the Competency based curriculum model being implemented by the National Medical Commission. The opportunistic and knowledge intensive learning model previously adopted for clinical teaching clearly cannot be justified. We need to adopt an active, in context, reflective and a practical oriented learning model, if we are to deliver on the new competency based medical education model. Clinical skills contribute to entrustable professional activities requiring the clinicians to perform in all domains namely knowledge, Affect and skill (psychomotor)(2, 3).

An Educational Plan that is conscious about the Expectation, encourages learning by doing and mentors change in behavior through conscious, observant, constructive and timely feedback is the key. This does not require radically new teaching learning methods. It only requires that we fall back to sound learning theories as we implement the tested old methods more effectively.

The Dundee Three Circle Outcome model requires that for effective teaching of clinical skills, we need to adopt appropriate TL methods keeping in mind the objectives of task being trained (the right method / thing), encourage an experiential learning model supported by feedback (Doing it right) and

harbor an environment that nurtures Role models (the right person doing it) who can in turn build a value system for the learners to follow. This is easier said than done. We might be able to successfully develop TL methods for Psychomotor skills but building a value system that nurtures professionalism, empathy, ethics, and soft skills cannot be achieved easily(4, 5).

Clinical teaching is a skill that needs to be learnt and refined by the medical faculty. This probably explain why some of the most popular teachers are junior faculty. Teaching in turn requires a reflective competence among the faculty where they can scale down their expertise, break down the skill into observable steps. Experts generally are unconsciously competent and don't strictly follow a rule governed behavior making it difficult for the learners to imitate the skill.

The skill learning process has to a staged experience. The learners first get to shadow the expert and observe, then they are involved in the skill execution with the expert (Joint execution/Consultation). This is followed by independent execution under observation or review before they can independently perform. An ideal skill teaching session also needs to go through a staged five-step process. To begin with the faculty briefs about the skills to orient the learner. Then a demonstration of the actual skill without description to give a realistic picture. The Demonstrator next re demonstrates the skill where he elaborates the steps as he does it. This is followed by a step-by-step narration of the skill by the student while the demonstrator performs allowing the student to commit the process into his memory. Finally, the student can perform the skill as the demonstrator observes to give constructive feedback(4, 5).

Deliberate practice and Intellectual excitement are the two golden words to remember when planning a clinical teaching session. This must be followed by timely, meaningful constructive feedback for improvement. There are a multitude of clinical skills like, procedural skills, reasoning, decision making, teamwork, communication etc. that need to be learnt. Hospital setting alone is not enough and practicable. This brings in simulation, standardized patients, and skills labs where in controlled environment the student scan attempts the practice, make mistakes, and correct them before attempting on the actual patients. The students can learn in a controlled low risk environment before venturing into the unknown. Skills labs can also the address the hurdles of patient consumerism, Increased numbers, & opportunistic learning(1, 2, 4, 5).

Competency Base Medical education model in clinical skills teaching can only be achieved by developing exclusive skill labs, encouraging feedback and reflection, incorporating assessment for learning, and nurturing a value system through conscious role modeling(4). "Effective teachers are known to Inspire rather than Inform. Who they are and what they teach are often more important than what they teach.!"

References:

1. Stark P, Fortune FJEfh. Teaching clinical skills in developing countries: Are clinical skills centres the answer? 2003;16(3):298-306.
2. Burgess A, van Diggele C, Roberts C, Mellis CJBME. Tips for teaching procedural skills. 2020;20(2):1-6.
3. Jamieson JS, L.; Fairholm, D. Teaching skills for community based preceptors. University of British Columbia Library. 2010.
4. George JH, Doto FXJFM-KC-. A simple five-step method for teaching clinical skills. 2001;33(8):577-8.
5. Ramani S, Leinster SJMt. AMEE Guide no. 34: Teaching in the clinical environment. 2008;30(4):347-64.





**Dr. Girish Nanoti,
Professor & HOD**

**Department of Paediatrics.
NKPSIMS, Nagpur.**

Improving Clinical Skills in Undergraduates and Postgraduate Students

Globally, COVID 19 pandemic have greatly increased the awareness regarding health and greater stress being laid on high quality, accountability, and transparency. Competency-based curriculum with well-stated learning objectives provides a blueprint for medical institutions determining the modes of training and assessment for students to acquire competencies, including essential clinical skills. The term “clinical skills” encompasses history taking, physical examination, using diagnostic reasoning, effective communication, and teamwork.

To achieve any clinical skills, acquiring knowledge of the subject beforehand is very essential. For this knowledge building large group teaching (lectures), small group teachings(tutorials) and syndicate seminars are conducted.

For undergraduate students, acquiring skill in history taking mandates developing communication skill. We conduct Bedside consultations, small group debates and clinical postings so that they can interact with patient and their relatives which improves their history taking skill. In this era of increasing laboratory and radiological assistance we should not forget the importance of history taking. We had a 2 year old male child presenting to us with weakness in both lower limbs, it was only through detailed history it revealed that he resides in a area nearby with a battery factory, which poses him to increased risk of having lead poisoning which is one of the cause of peripheral neuropathy. Good skills in communication and knowledge about the subject helps to expel positive history and helps to reach diagnosis. Also, It increases their confidence, improves performance and also helps them to best prepare for upcoming years.

Role-play is widely used as an educational method for learning about communication in medical education.

The inspection skills and examination are acquired by carefully observing senior doctors while performing detail clinical examination and practicing it repeatedly. In pediatric practice handling neonate and neonatal examination is a fine art. We can collect lot of significant information about the condition of the neonate by inspection only. Developing skills of handling a neonate is taught to undergraduate students while their clinical postings. If we perform Moro's Reflex at the beginning of examination, baby will cry as a component of reflex and it will hinder our further examination. So , here we can break the rule of sequence and perform Moro's at the end of examination. NKP SIMS have a well equipped Clinical Skills Lab. Simulation-based medical education (SBME) is another useful pedagogical approach that provides medical students with opportunities to practice their clinical, problem-solving, and decision-making skills to cope competently with real-life critical situations.

In a planned and prescribed manner without Compromising ethical and legal rights of patients. We have incorporated fixed hours training in skills labs for students in their early phase of medical training. They Acquire skills in a safe and Zero- Risk environment. While practicing in CSL using different models, mannequins, video clippings, and other equipment, students get the opportunity to learn from their mistakes and also it is not harmful to do error because they are not directly exposed to patients.

For post graduate students, higher level of clinical skills are to be achieved. We conduct hands on training in the form of one day workshops for various skills like IV cannula insertion in child or in a neonate, PICC insertions, central line insertion, Intubation in a child or neonate. All this requires repeated practice. SOPs are ment for all the important procedures in pediatric practice, so that students can refer it as and when needed. While their training students observethen they perform under supervision and then independently. For more advanced skills of Neonatal and pediatric resuscitation we organize NRP every year as new residents join the department and planning to conduct PALS also.

For other skills like clinical examination and system wise examination methods, we have dedicated hours in PG activity schedule. Also, bed-side teaching of examination method is done on routine basis, while routine rounds faculty demonstrate residents proper methods of clinical examination and ask them to perform it. Clinico-pathological Correlation CPC is conducted in our department every monthly for all PG students. CPC improves critical thinking and applying knowledge for patient care, to diagnose and manage clinical problem.

In critical areas like PICU, NICU counseling of the parents and relatives is very important. Explaining the severity of disease and our plan of management to relatives is done timely. Acquiring communication skills plays very important role in this process. To acquire this skill residents accompany seniors while counseling sessions of critical patients, then they are asked to do in presence of seniors and then independently.

All the above skills are accessed on regular basis, knowledge is assessed by conducting quiz and clinical skills are tested by OSCE every 3 monthly. OSCE is one of the comprehensive tools for assessment of knowledge and clinical skills along with critical thinking.

(This article is prepared with valuable inputs from Dr. Snehal Korde Asst. Professor, Dr. Nisha Aglave Asst. Professor)

SMILE A WHILE



"Your doctor will be here in a minute, I'm a placebo."



**Dr. Devashish Barrick,
Prof. Dept. of Orthopedics,
NKPSIMS, Nagpur**

***The One minute preceptor -
A conduit for skill transfer in under and post graduate clinical teaching.***

“Knowledge without Practice is useless, but practice without knowledge is dangerous”.

The urge to shift healthcare education curriculum from its contemporary time-based approach to a competency-based model has been growing in recent years.¹⁻⁵ The literature on competency-based education has seen an increase since the beginning of the millennium. Although there is no one standard definition for competency-based education, there are common words that arise across literature. Associated with the definition of competency based education are common words such as abilities, outcomes, patient needs, quality and accountability⁷. Dacre, 2004 adds that competence can be defined as something a 'doctor should be able to do,' referring to knowledge and skills. The knowledge that is gained as a result of competence should then be demonstrated through clinical practice⁵.

The goal of competency based medical education is that medical trainees will attain the needed knowledge, skills and attitudes required to practice as competent physicians in lines with the implementation of CBME (Competency based medical education) by the National Medical Council.

However with the ever increasing demand on time - especially in the clinical setting, the steadily increasing number of undergraduate and postgraduate students and the added pressure of skills teaching, it has become increasingly difficult to do justice as a medical teachers in the short time frame that students are posted in the departments.

One of the effective, efficient and time saving teaching - learning method is the OMP (One Minute Preceptor). It is an excellent tool that combines teaching skills and the opportunity for feedback and is very functional in the clinical setting. It provides the preceptor with a system to provide efficient and effective teaching to the learner around a single patient in a single encounter. The method is intended to promote efficient preceptor-learner interactions. Though it is called as the “ One Minute Preceptor” the student spends about 10 minutes with the preceptor and it is the final minute of this interaction that the teaching is summarised by the preceptor.

The “One Minute Preceptor” teaching model was developed by a group of physicians at the Department of Family Medicine at the University of Washington, Seattle.

The teaching model consists of five steps:

1) Get a commitment from the student.

- 2) Probe for supporting evidence this step analyses the reasoning ability of the student.
- 3) Teach general rules that are applicable across a wide spectrum of cases.
- 4) Reinforce what was done right, and
- 5) Correct mistakes in a non-threatening way.

This method not only ensures effective and necessary skill transfer, it does so under supervision and in a one to one encounter between the preceptor and the student. During this short encounter the preceptor can also assess the cognitive, affective and psychomotor domains of the student.

The advantages of the OMP

1. Can be conducted in the OPD/ wards/ ambulatory setting.
2. Non-threatening for the students.
3. Effective one to one interaction between student and preceptor.
4. Scope for effective feedback from the preceptor.
5. Individual participation by the student.
6. Less time consuming.
7. A large group can be broken into smaller groups and a group of preceptors can engage the groups.
8. It is also more comfortable for the patients.
9. Avoids unnecessary distractions.
10. Extremely easy to execute.

Disadvantages of the OMP

1. Students don't get the opportunity to learn from others mistakes.
2. Preceptor bias may affect the teaching learning process.

However as one can see that the advantages clearly outweigh the disadvantages, it is a good and proven technique of effective teaching in the demanding environment to create the Indian Medical Graduate.

References :

1. Frank JR, Mungroo R, Ahmad Y, Wang M, De Rossi S, Horsley T. Toward a definition of competency-based education in medicine: a systematic review of published definitions. *Med Teach.* 2010; 32(8):631-7.
2. Bancroft GN, Basu CB, Leong M, Mateo C, Hollier LH Jr, Stal S. Outcome based residency education: teaching and evaluating the core competencies in plastic surgery. *Plast Reconstr Surg.* 2008 Jun; 121(6):441e-448e.
3. Dacre J, Haq I. Assessing competencies in rheumatology. *Ann Rheum Dis.* 2005 Jan;64(1):3-6.
4. Davis MH, Harden RM. Competency-based assessment: making it a reality. *Med Teach.* 2003; 25(6):565-8.
5. Dacre J, Richardson J, Noble L, Stephens K, Parker N. Communication skills training in postgraduate medicine: the development of a new course. *Postgrad Med J.* 2004; 80(950):711-5.
6. Davis MH, Harden RM. Competency-based assessment: making it a reality. *Med Teach.* 2003; 25(6):565-8.





Dr. Anjali Bhure
Prof & HOD
Department of Anaesthesiology



Dr. Sabiha Maimoon
Prof & HOD
Department of Pathology



Dr. Shilpa Deoke
Professor
Department of Medicine

The main objective of the Competency Based Curriculum is to provide Indian Medical Graduates with knowledge, skills and attitudes required for their practice promoting their problem based and self dedicated learning.

The rapid changes in the teaching and learning methods and in delivery of the healthcare along with rapid growth of technology challenged the traditional way of clinical skills development and led to the emergence of clinical skills laboratories in medical education. The newly reformed curricula by NMC enhanced the integrated medical teaching and emphasized the teaching and learning of clinical skills. Hence all the institutions providing health care have gone to considerable lengths to create skills lab facilities as a teaching tool.

Clinical skills lab offers potential benefit for undergraduates, postgraduates and the faculties, where they can practice clinical skills in safe and protected environment before using them in real clinical scenarios. These skills lab ensures that all the students acquire the necessary techniques and are properly assessed before practising on real patients. The word 'clinical skills' encompasses history-taking, physical examination, clinical investigations, using diagnostic, reasoning, procedural perfection, effective communication, team work and professionalism. Educational strategies that can be adopted in clinical skills lab include student centric, integrated, problem based, self-directed learning, community oriented or outcome based education.

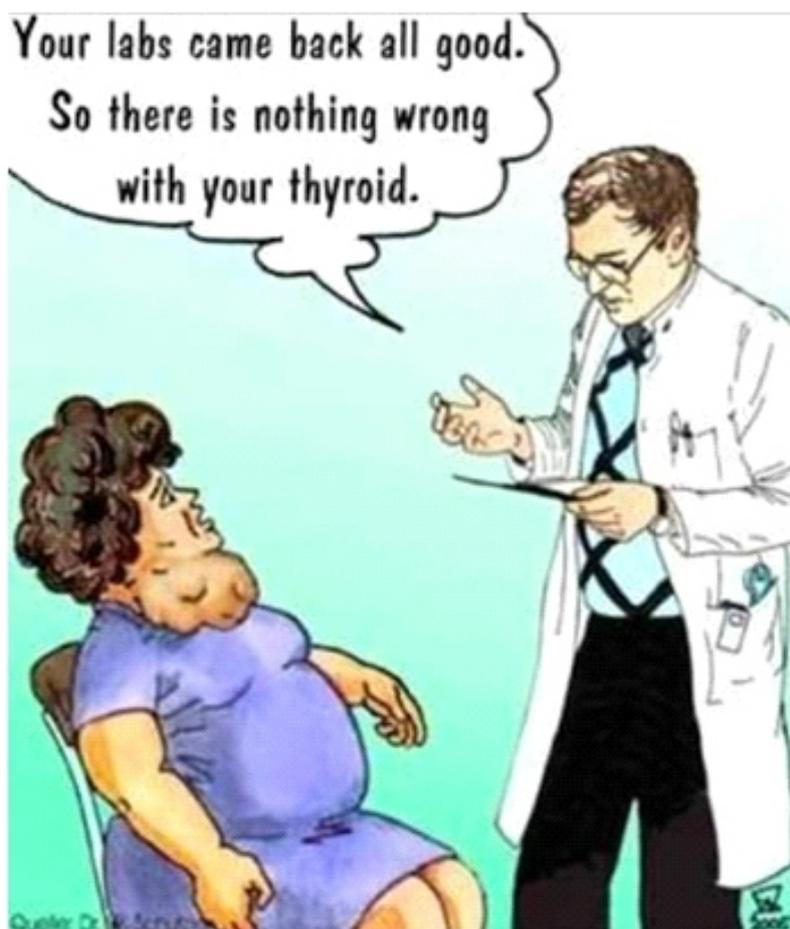
Our clinical skills lab was inaugurated on 01/03/2015 at the hands of Dr. George Abraham, President, IIES with the aim of imparting highly skilled, practical, hands-on training to not just the undergraduate and post-graduate students but also the medical and para-medical staff. Its purview was later extended to include common/ lay persons. Initially spread over an area of 4000 sq. Ft. and with about 70 manikins/ equipments, the CSL carried out training for health care professionals as well as lay persons in Basic Life Support (BLS). In an ambitious project, the entire NKPSIMS campus was made BLS trained.

In the year 2016, the CSL, under the aegis of Life Saving Training Syndicate (LSTS) gained affiliation with the American Heart Association (AHA) to conduct AHA certified Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS). At the behest of the then EMS Committee, the idea of making these courses compulsory for Junior Residents of all clinical departments was whole heartedly backed by Hon. Dean, Dr Kajal Mitra. This greatly enhanced their clinical acumen as well as improved the quality of patient care. Since then regular courses are being conducted for the newly inducted Junior Residents of clinical departments. This also attracted faculty from outside hospitals/Institutes for training. The year 2017 saw the addition of other prestigious courses like BLSO/ALSO.

Due to the NMC directives making skills training obligatory for the Indian Medical Graduate and recognizing the huge potential and utility of the CSL in undergraduate and postgraduate training, there was expansion of the CSL in the year 2020-2021. With the addition of an extra floor(an additional 4000sq. Ft) as well as many new models/ instruments/ equipments, the CSL is now well equipped to enhance the skill training.

Over the years, the passion and immense contribution of the then EMS committee and constant support and cooperation of various departments like Medicine, Anaesthesiology, Gyn/Obs, Surgery, Orthopedics in designing modules like code Blue, Airway Care, Normal Labour, Suture and First Aid has helped immensely in the growth of the CSL. The Skills Lab Committee further envisages phased procurement of advanced simulators, manikins and other equipments as our future endeavours to keep up with the ever evolving field of medical education.

We are extremely grateful to the faculty of all the departments of the Medical, Dental, Physiotherapy and Nursing Colleges for their immense and unwavering support and endowment in elevating the CSL to newer heights and popularising it. At the same time we are obliged and overwhelmed by the constant help, support and encouragement by our Management and Head of the Institute, Hon. Dean, Dr Kajal Mitra. Optimal utilization of the CSL would be the best way of showing our gratitude to them and hence we appeal to all the departments to make maximum use of the CSL. The journey seems to have just begun and we have a long way to go.....





Dr. Ankit Singh,
JR II, Department of Otorhinolaryngology (ENT),
NKPSIMS & RC and LMH, Nagpur

Developing clinical skills in medical students

The coronavirus diseases-2019 (COVID-19) pandemic has had and continues to inflict far-reaching effects on all sectors across the globe. High quality clinical training of medical students has gained more importance for the delivery of optimal and safe patient care during this pandemic. This training is traditionally perceived as being delivered by vertical teaching methods from teacher to student placing the responsibility of learning on teachers and faculty. Throughout the medical study, students are supposed to acquire knowledge, skills and professional attitudes.

In their clinical training, much time is dedicated to ensure sufficient clinical skills, defined as “Any action, performed by a healthcare worker involved in direct patient care, which impacts on clinical outcome in a measurable way, including cognitive, non-technical, and technical skills”.

Educating about clinical skills involves a distinct set of teaching and learning behaviours. At the one-on-one education level, the most essential elements required for effective clinical skills education are:

- A skilled and willing teacher
- An appropriately prepared and motivated student
- An informed and willing patient
- Time and opportunity for repeated skills practice, including exposure to a sufficient number and diverse Group of patients
- An attitude of shared professional responsibility toward the patient by the student and teacher
- Time and opportunity for effective feedback between teacher and student

Discussing these key points further various measures can be taken to improve clinical skills in medical students. A case based approach should be taken which will help the students to develop skills of prompt diagnosis and management of the patients. Developing communication skills with the patient is of prime importance to come to a definite diagnosis . Conducting bedside consultations, small group debates and clinical postings will help students to interact with patient and their relatives which improves their history taking skill. In this era of increasing laboratory and radiological assistance we should not forget the importance of history taking . Apart from detailed history taking students should be encouraged to inculcate habit of clinical reasoning of the signs and symptoms which will help to understand and the pathophysiology behind every disease and lay strong pillars for successful clinical practice in near future. Teaching and learning should be changed from disease focused to case focused , symptom focused and patient specific. This can be play a role as revision tools for students to revisit parts of a clinical encounter they may have forgotten.

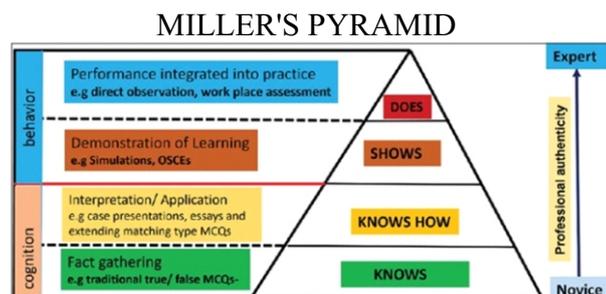
achieved by large group teaching (lectures), small group teachings(tutorials) and syndicate seminars. Virtual case banks should be prepared of the cases which are rare and less often seen. These virtual cases should be formatted to simulate all cognitive aspects of clinical encounter. Also virtual case banks will play a role as revision tools for students to revisit parts of a clinical encounter they may have forgotten.

Role-play is widely used as an educational method for learning about communication in medical education. Also the inspection skills are acquired by carefully observing senior doctors while performing detailed clinical examination and practicing it repeatedly. In ENT patients careful observation while performing OPD procedures like otomicroscopies, diagnostic nasal endoscopies, 70 degree endoscopies will help students and residents to improve their clinical examination skills and come to a conclusive diagnosis.

Along with clinical case presentation a simulation based study plays a key to improve clinical skills in medical students. Our Institution provides a “CSL” aka Clinical skills lab which provides a safer environment for a simulation based study for the students. Prompt and regular participation of the students in CSL activities should be encouraged. Being an ENT resident, labs for temporal bone dissection to build operative skills during mastoid surgeries should be encouraged among students. Students should be made to practice FESS, tracheostomies and other operative procedures on cadavers first and on patients later which will help in developing better surgical skills. Also frequent workshops for suturing technique on mannequins , animals ,cadavers should be conducted for developing better hand while operating on real patients. Procedures like endotracheal intubation, venesection, CPR, bronchoscopy can be practiced on mannequins and cadavers for repeated practice and get a better hand while being in a clinical scenario. All these clinical skills can be regularly assessed. The purpose of the evaluation is mainly to address the following five key areas:

- To communicate educational goals
- To identify areas of learner deficiency
- Determine the effectiveness of the course
- Determine readiness to practice
- Increase learner self-reflection.

Evaluation models can be included in the curriculum for effective assessment of these clinical skills learnt e.g. "Miller's pyramid ". Miller's pyramid is a way of ranking clinical competence in educational settings, and as a framework, it distinguishes between knowledge at the lower levels and activity in the higher levels. Miller's ideas strive to define education by its outputs and not by its inputs. At the end of any teaching intervention, we are interested in what learners can do, which is not the same as what we have taught them. Miller's pyramid is usually described as having four levels; knows, knows how, shows how, and does. The higher levels have greater professional authenticity.



Further evaluation can be made by conducting case presentations, regular PG activities, OSCEs and surprise tests every 3 months.

**Dr. Aditi Modak,****Intern****NKPSIMS & RC and LMH, Nagpur**

Becoming a doctor was my childhood dream, I used to wonder about the magic doctors have to cure the patients as they are said to be the craftsmen of life and are worshiped after God in our country.

I always knew that medicines cures the diseases while doctors cures the patients .I joined my first MBBS with curiosities. I always wanted to acquire those magical skills, to explore the part of curriculum which will teach me to treat and cure a patient. As naive I was then I realized in a hard way that the curriculum was much more inclined towards scientific knowledge and less towards acquiring skills.

Our institute on the other hand was a guiding path and a light house which never let my curiosities die in this journey.

When I used to attend my clinical classes I have always heard my professor saying that medicine is an art, an amalgamation of construct of scientific knowledge, communication, observations and conclusions. And I used to relate this with a quote I used to read everyday by Hippocrates that "wherever the art of medicine is loved there is love for humanity". But is this art is perceived by us?

to acquire this art we must be competent enough to express it and here comes the role of clinical skills which are bridge between capabilities and functioning . The skills are the abilities to have a better perspective, acquiring them is a journey, and with each milestone we gain !

Communication being part of these skills, be it oral, written or nonverbal plays a major role in diagnosing a morbidity.

The doctor's comforting words is a powerful tool while treating a patient and communication is its key.

With these skills we start to hear what isn't being said and interpret things, it boosts our ability of critical thinking and correlations .with high interpretation powers we will be adding feathers to our knowledge. And this could be acquired by going to clinics .what we see and do is imprinted on the canvas of memory forever.

When we discuss about the roles of doctors in saving lives and in health of the community we must not overlook the way in which we are providing education to the young doctors, the young doctors who are with their physical and intellectual abilities are most productive members of society,.

It must focus on building not just knowledge but also abilities which creates attitudes and expectations, which supports lives better and helps us to become a dynamic citizen of the society.

In this Era of cut throat competitions and acquiring specialities no one has time for self or to acquire empathy with surroundings. The mad race continues and we keep forgetting about the foundation of "professional" course we are in.

I have been fortunate enough to get a right direction while learning. But in my opinion there should be more emphasis on letting students to know about the clinical Importance of everything we have been taught in theoretical classes to build our intellectual curiosities.

There should be sessions of discussions including presentations, case scenarios ,tasks of analyzing situations starting as early from first MBBS.

The activities like OSCE should be encouraged and these projects should offer more authorities to students to do more and interact more on their parts.

Nevertheless a humble appeal to my friends that it has to be us" individually differentiating ourselves like a "stem cell" from others. As quoted by Benjamin Franklin that the best doctor gives the least medicine, So to be able to become best we must be perfect in portraying the art of medicine we have.

Let's be creative, let's go beyond ppts and journals ,let's tease our brains and act more on what we have been taught.

Let's not forget

Our words should inspire hope and our actions should save lives! Article critique





Sameera Sunil Gire
MBBS 2018
NKPSIMS & RC and LMH, Nagpur

Clinical skills is considered as an important part of the curriculum of ug students .It constitutes of knowledge, student's exposure towards patients , demonstrations and most importantly bed side teaching Problem based learning is one of the effective approach in medical education that help students development various skills such as problem solving, critical thinking, teamwork and communication skills . Simulation based learning is another approach that provides medical students with opportunities to practice their clinical, problem-solving, and decision-making skills to cope competently with real-life critical situations in a planned and prescribed manner without compromising ethical and legal rights of patients.

Since medical education is rapidly evolving with technological advances, many medical schools are adopting and encouraging technology-enhanced active learning which includes mobile medical applications and virtual patient simulations. Role plays are also considered important tool in clinical skills teaching.

Above all, voluntary participation led to better clinical skill performance of participating students. Hence Clinical skills is considered helpful in gaining confidence for the students which may help them to make better diagnosis of disease. Different approaches works equally well for basic practical skills and leads to improved learning by the undergraduate students.





Dr. Meenal Kulkarni
Asso. Professor,
Dept. of Com. Med,
NKPSIMS & RC and LMH, Nagpur

Commencing Technical Clinical Skills Training in the Early Stages of Medical Education: Exploring Student Views

Abstract:

Introduction: Medical schools are increasingly introducing technical clinical skills training from year 1. However, little research has determined students' views of such training. This study compared the perceptions of student groups which received different levels of technical skills training during the early years of their undergraduate medical degree. Methods: Medical students from King's College London's Stage curriculum (n = 184) receiving 48 h of technical skills teaching and Phase curriculum (n = 94), receiving 12 h, voluntarily participated. A mixed methods design using a questionnaire and focus groups explored students' views. Stage and Phase student questionnaire responses were compared using Mann Whitney U tests. Focus group transcripts underwent thematic analysis. Results :The majority of Stage (n = 169) and Phase (n = 68) students identified year 1 as the best time to commence technical skills training. For the majority of the technical skills taught, Stage compared to Phase students reported feeling more prepared to perform them. Thematic analysis identified three main themes: Role of technical skills teaching in the early stages of medical education, impact on students' learning and factors to consider when designing a medical undergraduate technical clinical skills programme. Conclusions :The wide student support and positive impact of technical skills training on students' perceived preparedness for carrying out the techniques taught advocates its addition to the first year of the undergraduate medical curriculum. The identification by students of specific components considered to be fundamental in the effective teaching of technical skills provides guidance when designing future undergraduate clinical skills training.

Keywords: Undergraduate medicine . Technical clinical skills . Student views . Student experience.

Strengths of the study.

1) Title of the study- appropriate. Title is matching with the study.

2) Study Background-

Why the topic is important & why it has been selected is well mentioned in the study.

3) Aim - Aim is appropriately mentioned in the study.

4) Methodology-study was planned properly.

- Students were recruited by using Emails.
- Sessions were well planned and comprised of a lecture component related to the skill, a demonstration and the opportunity for students to practice and receive feedback. Six integrated sessions involving simulated patients were planned.
- All tutors were healthcare professionals who were knowledgeable and experienced in skills being taught.
- IEC approval received.
- Informed consent was obtained.
- An expert panel consisting of medical educators and clinicians was used to assess construct validity of Questionnaire.
- 5 point Likert scale was used.
- Questionnaire completed anonymously.
- Data was analysed by using SPSS version with appropriate statistical tests.

5) Results and conclusions

Results and conclusions are matching with the objectives of the study

Limitations of the study

- Voluntary participation and involvement of a single medical school reduces generalisability of the study.
- Further follow up studies are needed





Dr. Anne Wilkinson
Associate Professor Pathology
Secretary, MET Unit
NKPSIMS &RC and LMH, Nagpur

The past year was once again a challenging one for the Medical profession teachers and students due to the second and third waves of the pandemic.

After months of online teaching the preceding year, offline mode of teaching started, but soon had to be discontinued due to the second COVID pandemic wave.

The exposure to clinical postings suffered. Teachers had to continue using the online mode to conduct practicals, and clinics. Here again technology helped us and by using live demonstrations, videos, case discussions and quizzes, besides the lectures, the teachers were able to complete the course. This may not have been the ideal way but as they say “Necessity is the mother of invention”.

We now hope that our students will be well prepared for the offline teaching and learning experience, besides appearing for their professional exams, to enable them to become good clinicians.



GUEST LECTURES



24th March 2021
"Strategies to monitor and enhance student learning"
Speaker: Dr. Latha Ravichandran FAIMER 2012
Associate Dean, Education and Professor of Pediatrics, Chennai



31st March 2021
"Dimension and scope of mentoring at NKP"
Speaker: Dr. Chetna Desai, Prof & Head,
Dept of Pharmacology, B. J. Medical College, Ahmedabad.

WORKSHOPS

FACULTY



22nd to 24th June 2021
NMC Recognised
6th Revised Three days Basic Course in MET
for NKPSIMS Teachers



6th to 8th July 2021
NMC Recognised
7th Revised Three days Basic Course in MET
for NKPSIMS Teachers



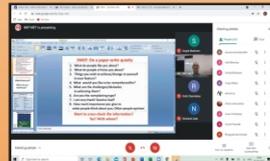
22nd to 24th Sept. 2021
NMC Recognised
8th Revised Three days Basic Course in MET
for NKPSIMS Teachers

RESIDENTS

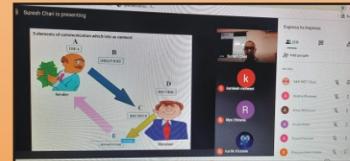
UG STUDENTS



20th Nov & 1st Dec 2021
Resident as Teacher
Basic Workshop in Educational Methodology
for Residents of VSPM College of Physiotherapy



3rd & 4th May 2021 Class Apart
"Two days online Personality Enhancement Program"
Faculty: Dr. Suresh Chari



11th & 12th May 2021
Express to Impress:
A two day workshop on public speaking & Presentation skills
Faculty: Dr. Suresh Chari

ANUBANDH

MENTORSHIP PROGRAM FOR UGs

MENTORSHIP PROGRAM FOR PGs



25th to 27th March 2021
Anubandh Mentorship Programme
for 2019 batch II MBBS Students



1st March 2021
Anubandh Mentorship Programme
Topic - "पढ़ाई और कर्कराई" for 2020 batch I MBBS Students



April 2021 -May 2021

TRAINING AND SEMINARS



MOODLE - A two day workshop for Teachers



WEB ACADEMIC SERIES
17th Dec 2021 Diabetes Mellitus for I MBBS Students

PUBLICATIONS



REFLECTIONS



SPLASH



JETHS

VI. Undergraduate Students**a) Total Online Teaching Classes**

First MBBS	(2020 Batch) -	294
Second MBBS	(2019 Batch) -	479
Third MBBS	(2018 Batch) -	54
Final MBBS	(2017 Batch) -	53

b) Syndicate Seminars: 26 held**VII. Other activities****CBL / PBL**

Sr. No.	Date	Department	Topic	Students
1	Physiology	Case discussion on Thyroid & Endocrine	05/07/2021	UG Students
2	Paediatrics	Clinico pathological correlation meeting	09/07/2021	PG students
3	Physiology	Diabetics Mellitus Care discussion	14/07/2021	UG Students
4	Paediatrics	Clinico pathological correlation meeting	24/09/2021	PG students
5	Anesthesiology	Anesthesia for Bariatric Surgery	7/10/2021	PG Students

a) OSCE / OSPE

Sr. No.	Date	Department	Topic	Students
1	20 th Jan 2021	Pathology	Hb Electrophoresis	JR I
2	20 th Jan 2021	Pathology	Hb Electrophoresis	JR II
3	20 th Jan 2021	Pathology	Hb Electrophoresis	JR III
4	18 th March 2021	Pathology	FNAC by Aspiration Gun	JR I II
5	19 th March 2021	Pathology	Grossing of Hysterectomy specimens	JR I
6	3 rd May 2021	Pathology	Cross matching by tube method & Interpretation on gel technology	JR III



Sr. no	Department	Name of Authors	Title	Journal & Vol.
1	Anatomy	Dr. Deepali Onkar	Perceptions of first MBBS students towards ethics aspects related to anatomy	European Journal of Pharmaceutical and medical research Vol. 8 Issue 4 Page no. 524 - 527
2	Biochemistry	Dr. Deepali Wanjari Dr. Madhur Gupta	Perception and knowledge of first year MBBS students toward e-learning : A Cross sectional study	International Journal Dental and Medical Sciences research Vo. 3 Issue 3 Page no. 608 - 611
3	Biochemistry	Dr. Suresh Chari Runali Bhange Dr. Madhur Gupta	Curiosity and interest towards medical sciences amongst medical undergraduates students - A cross sectional study in central India	International Journal of Medical Sciences and Innovation Research Vol. 6 Issue 4 Page no. 312 - 320
4	Pathology	Dr. Vidula Gowardhan Dr. Sabiha Maimoon	OSPE - A much needed evaluation tool today	International Journal of Medical Science and Innovative Research Vol. 6 Issue 1 Page no. 186 - 191
5	Pathology	Sameera Gire Dr. Anne Wilkinson	Perceptions of undergraduate medical students towards health : A cross sectional study	International Journal of Medical Science and Innovative Research Vol. 6 Issue 2 Page. No. 223 - 228
6	Community Medicine	Dr. Meenal Kulkarni Dr. Vedant Nayse Dr. Jaydeep Nayse	Knowledge and practices of mothers of under-five children regarding zinc supplementation in childhood diarrhea	Panacea Journal of Medical Sciences Vol. 11 Issue 2 Page no. 301 -304
7	Forensic Medicine	Dr. Arti Kasulkar Sakshi Chauhan	Knowledge and practice of smart phone and medical related applications in learning by medical undergraduates.	Journal of Punjab Academy of Forensic Medicine & Toxicology Vol. 21 Issue 1 Page no. 192 - 196
8	Forensic Medicine	Dr. Arti Kasulkar Dr. Aaraa Sawarbandhe Dr. Chitanya Bhandekar	Assessment of medical students perspective towards LGBT (Lesbian, Gay, Bisexual, and Transgender) Community	Journal of forensic Medicine Science and law Vol. 30 Issue 2 page no. 41 - 45



CLINICAL SKILLS LAB

NKPSIMS & RC and LMH , Digdoh Hills, Nagpur.

