

**CONSIDER THIS...**

A patient with chest pain admitted in ICU. Resident asks intern to take BP. But later resident becomes so much busy, that he forgets to ask for BP recording. Later in night, patient deteriorates, his BP is taken by another resident. He suspects something unusual.

The second resident quickly gets CT Thorax done based on BP recording.

And lo, behold, the patient indeed has dissecting aortic aneurysm. So, what's the message? The message is very clear: Well conducted history and physical examination are a must. And that even a single point in the history or physical examination may hold all important clue.

CURRENT SCENARIO

In the present era of modern medicine, the deterioration of skills in physical examination has become much more evident. And many a times it is too painful to know that some of the eventualities could have been averted by meticulous clinical examination rather than blindly relying on investigation reports.

And what is happening now-a-days:

- Routine use of sophisticated diagnostic tools is killing the art of clinical reasoning.
- Blind faith in technology: Treating the reports rather than the patient.
- Pre-determined diagnostic algorithms: One is ought to know that these algorithms are meant to assist the



clinician and they are not absolute. Thus, a judicious use is required rather than blind adherence.

Almost all the eminent clinicians repeatedly stress upon importance of meticulous history and clinical examination. In fact, a good history can itself suggest many differential diagnoses and the possibilities are narrowed down by proper clinical examination. Investigations serve as to confirm and supporting our working diagnosis rather than a tool of discovery in itself. In other words, investigations should always be guided by history and clinical examination.

So, what happens when one is not accustomed with clinical examination? One may think, "I am not able to make out anything. Let's order this battery of investigations and see if we can get something."

This is wrong attitude and should be avoided at all costs—for it creates more confusion than solutions. To illustrate this fact: Not all the persons who are positive for rheumatoid factor, have the disease. In fact, 5% of normal individuals can have RA factor (Harrison's Principles of Internal Medicine, 16th Edn).

Early physicians also believed that clinical examination has mystical power and be given priority always.

Consider the following: "By far the most frequently used drug in the general practice is the doctor himself. No pharmacology of this important drug exists....." (Michael Balint).

It is clearly evident that not many physicians now have the same attitude. Many of the physicians today are lost in the world of investigations. Thus, the fear becomes imperative that clinical examination skills would gradually atrophy and become redundant if not stressed upon.



Incidentally, the same is also true with stethoscope. The golden era of stethoscope was from invention to death of Sir William Osler in 1919. Gradually the art of listening by stethoscope is eroding. Many a times, stethoscope is put as a habit!

According to a study of residents, conducted in 1992 at Duke University—each resident was asked to identify murmur programmed in mannequin and then of real patients, at random. And the results were dismaying. On an average, a resident could identify only 20% of the heart sounds correctly.

What next? The fear is very rightly placed – That even stethoscope may become extinct in coming few decades if not years. As we make advances, the distance from patient is growing. A doctor may not even need to sit in front of patient. The question is where will it lead us to?

So, Is the Vital Art of Examining the Patients Extinguishing?

One may ask the question: Is this demise in clinical skills a crisis or an evolution due to technology? As newer tools of diagnosis evolve, clinical skills are gradually decreasing. Does this mean that one should not use technology at all? Or, does it mean that no further research should be carried in Medical field to evolve new technologies and instruments?

The answer would be: Judicious use of technology is required. What do we mean by judicious? It means that an investigation should be performed only if it is going to alter the management of patient. Doing a test just because it is available does not make any point. And thus, when one is surrounded by a myriad of investigations, today's clinician has even greater responsibility than ever to choose a proper investigation guided by history and examination.

THE OTHER ASPECT OF THE ISSUE

It is also a well known fact that clinical examination alone cannot predict whether a given patient with stroke has infarct or hemorrhage. Imaging studies are essential to confirm this. Thus, many ask this question, "Is physical examination attractive from outside and worthless at its core?"

Example 1: The frequently asked question: Is physical exam or CXR better to diagnose Pneumonia? In 1997, review of studies suggested that CXR alone can



not establish diagnosis of pneumonia. CXR complements physical examination; does NOT replace it!

Example 2: A patient admitted to superspeciality hospital with chest discomfort without any previous history or risk factors. She was straightway put through angiography.

Patient was told that she would require angioplasty. Patient was taken by surprise by these events and she asked for a day's time. During routine round in the evening same day, a doctor pointed that she did not have any chest pain nor any exertional dyspnea, anytime. So, the angiography film was again reviewed by another doctor and found that an artifact was interpreted as obstruction.

Example 3: Wenckebach discovered the arrhythmia even before ECG was invented based on arterial and jugular venous pulsations timings! Now, the answers are:

"We will straightway get an ECG." ; "Who has time to stare at patient's neck?"; "ECG is most accurate. Why waste our time then in physical examination?"

Why the Demise ?

There are many reasons that can be attributed to the demise of clinical examination. As the workload increases, doctor has to see more patients in a limited period of time. Thus, less time is available for each patient.

Secondly, doctor (and even patients) are uncomfortable with uncertainties of diagnosis. They always want a foolproof diagnosis and treatment, all the time.

Consider this example: Herniated Disk has 90% Clinical Probability (on physical examination); but has 100% certainty with MRI. Thus, patient and doctor go for MRI even if the diagnosis is certain on examination.

The other reasons that have appeared recently are:

- Fear of law suits (especially due to Consumer Protection Act)
- Fear of subjective observation.

Hence, what is happening today is (i) to burn money to make diagnostic work-up superficial; (ii) losing intellectual pleasure that comes from careful diagnostic reasoning. Thus, an investigation, however sophisticated and expensive, if performed in the inappropriate clinical settings, will be useless.

WHAT CAN BE DONE?

Demise of clinical examination—reasons are many and effects are sad-denning. But million dollar question is: What can be done? Let us try to answer it:



1. **Common sense:** Harvey Cushing (1869–1939) ‘Three fifths of practice of medicine depends on common sense, a knowledge of people and of human reactions’. And as a well known fact, common sense is less common !
2. **Sherlock Holmes aphorisms:** The ideal qualities that all doctors should try to adhere to are: Observation, Deduction, Knowledge. These qualities are common with doctors and detectives (Doctor as detective: BMJ 2005). Here are some of the famous quotes of Sherlock Holmes to stress importance of observation in clinical examination:
 - a. You see but you do not observe.
 - b. My method is founded upon observation of trifles.
 - c. Never trust general impressions, but concentrate on details.
 - d. It is capital mistake to theorise before one has the data.
 - e. There is nothing like first hand evidence.
 - f. There is nothing more deceptive than an obvious fact.
 - g. The world is full of obvious things which nobody by any chance observes.
 - h. When you have eliminated all impossible, whatever remains, however improbable, must be the truth.
 - i. Do not try to twist the facts to suit theories. Rather, theories should suit the facts.
3. **Some Clinical pearls:** Some of the common clinical pearls that we come across often are listed below:
 - a. Uncommon manifestations of common diseases are more common than common manifestations of uncommon diseases.
 - b. If we make rare diagnosis, it will rarely be correct.
 - c. Important facts or findings that are not uncovered during the initial clinical assessment of the patient have an uncanny way of eluding later detection as the work up progresses.
 - d. You see only what you look for and you recognize only what you know.
 - e. The least indicated procedures lead to most complications.
 - f. There is something more important than all medicine—the human touch.
4. **Build trust in patient-physician relationship:** Trust develops through a series of small encounters wherein one party demonstrates “trustworthiness”

to the other. Keeping small promises such as “I will get back to you with the test results”, or “I will call specialist for your this problem and try to provide best possible solution for you.”

5. **Advisory role:** This role is also dependant on trust. The advisory role places immense responsibilities on physician wherein patient trusts him for all important decisions such as surgery, starting of complex regimen treatment, etc. in belief that the doctor will take best decisions for him. A word here is for patients also that patient must believe that their physician is reliable, understanding and honest if they are to have confidence in their physician’s advice.
6. **Therapeutic role of physician:** It resides in addressing to the patient’s concerns, conveying empathy, building trust, giving advice and being supportive. This nonetheless means that physician should done the mantle of psychotherapist completely. But the beauty of Physician’s role lies in the fact that his role switches back and forth between being physician and providing empathy and emotional support.
7. **Importance of ideals:** Ideals are crucial. They continually set standards that we all strive for and at times, achieve.

HOW SIMPLE OBSERVATIONS CAN LEAD US TO DIAGNOSIS?

The examples have been given to illustrate the importance of meticulous observation. It is co-incidence that the job of detective and doctor, both require this quality.



Here is a lady detective—Mma Ramotswe, an intelligent detective, who was waiting to see her doctor for about an hour outside his consulting room. She makes accurate and intelligent observations when she was sitting in waiting room, which she narrates to doctor afterwards.

She tells that first patient was butcher? How? Because he had lost a finger on his left hand and was continuously scratching his body.

The second female patient unable to sleep at night. Because, she had slept off while waiting and had to be awakened on her turn. Besides there were milk stains on her clothes... must have been awake due to baby.

Third female patient was unhappy but not depressed. Because she was continuously knitting and was busy which a depressed person cannot do.

And then, it was the turn of the detective to get surprised, as the doctor tells her not to eat too much doughnuts. How he could have drawn this inference? Because her weight was not decreasing since last few years. Secondly, sugar was spilled in front of her dress from doughnuts.

TAKE HOME MESSAGE

Detailed history and clinical examination must be given priority. History should be used to formulate differential diagnosis and clinical examination should help to narrow down the possibilities. Finally, judicious and only essential investigations should be used to confirm the diagnosis.

One ought never to forget the different roles of physician—viz. advisory role, therapeutic role to utilize the patient-physician relationship in a more productive way and to the patient's beneficence. Also, a good physician must be flexible—able to adopt consumerism, paternalism, mutuality and priority for well-being of patient.

Clinical examination is less expensive. It can be performed anywhere and also increases doctor-patient bond. On other hand, technology is not foolproof; it has its own limitations that needs to be kept in mind always while interpreting the results.

And yes, we must perform clinical examination **well** each and every time. Simply because, one never knows when it will hold vital clue for diagnosis.

SUGGESTED READING

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6. William Branch, Jr. Is the therapeutic nature of the Patient-Physician relationship being undermined? A Primary Care Physician's Perspective. *Arch of Int Medicine* 2000;160:28.