# The Final M,B.B.S. (Certifying) Examination

Pages with reference to book, From 251 To 254

N.A. Jafarey ( Dept. of Pathology, Basic Medical Sciences Institute Jinnah Postgraduate Medical Centre, and National Teacher Training Centre, College of Physicians and Surgeons, Pakistan, Karachi )

A Good Doctor. What are the qualities that should earn this title. To some extent it depends upon who is answering this question. If the question is addressed to patients and their relatives the greatest quality they will probably choose is availability. Pleasant manners, sympathetic attitude, and other such qualities will also be high on their list. Professional excellence is not something which will rate high on the lay person's list for the obvious reason that they do not know how to judge it. The only yardstick they use for this is the relief of symptoms and majority of the ifinesses we know have a self limited course anyhow.

Medical Colleges and Postgraduate Institutes which produce the doctors however put all their stress on professional competence. Almost the entire curriculum and certainly the entire examination which certifies a person as a doctor or a specialist is based wholly on professional competence. Part of the reason is that it is much easier imparting knowledge and skills and evaluating them, than the attitudes which is what the patients and their relatives base their judgement on.

This is a dilemma facing medical education and medical educators the world ,over and no easy solution to the problem is forthcoming.

Having accepted the fact that the present day medical education does poorly on training of attitudes, let us look on what is being done about the training of the other components of professional competence i.e. knowledge and skill. In Pakistan at present, the entire emphasis of medical education is on knowledge. Faced with the very large number of students in each class and limited number oF teachers, teaching of skills has become difficult. it is much easier to give a lecture or supply notes to a large student group then to show them how to carry out a procedure and then supervise the acquisition of that skill. What is even more unfortunate is that the examinations also test only the knowledge part of the subject. No wonder, students put so much emphasis on mugging (preparation leaves) and cheating.

In the opinion of many medical educators in Pakistan (expressed at various seminars and meetings) if the examination, particularly the Final MBBS examination, can be designed to test professional skills in addition to knowledge the students will spend more time in the wards learning and practicing the desired professional skifis. if the Students are informed before hand about the skills they are required to acquire, guided in acquiring them and then examined for those skifis in the fmal examination they will spend their time in practicing and mastering these skills. The young graduate passing such an examination will be much better prepared to handle clinical responsibilities of a physician than those coming out of the present examinations. Acting on this premise, this article will examine the various components of clinical competence and then recommend some ways and means whereby the Final MBBS examination can be made to test this competence better than the examination presently being given.

Very broadly the steps required in treating a patient are (l)Diagnosis of the underlying disease and (2) Prescribing treatment. The quality of clinical competence is largely determined by the ability to correctly diagnose the problem. Prescribing a treatment is then a matter of recall and can also be easily found by reference to a standard textbook. Carrying out a therapeutic procedure like an operation as done by surgeon is off course an advanced skill. The fresh graduate isnot expected to carry out such operations.

The steps in diagnosing the nature of patient's problem are the same as identification of any other problem. These steps are, collection of all pertinent data, interpretation of that data, analysis, summarization and synthesis of that data, followed by identification of the problem or diagnosis (Fig

1).

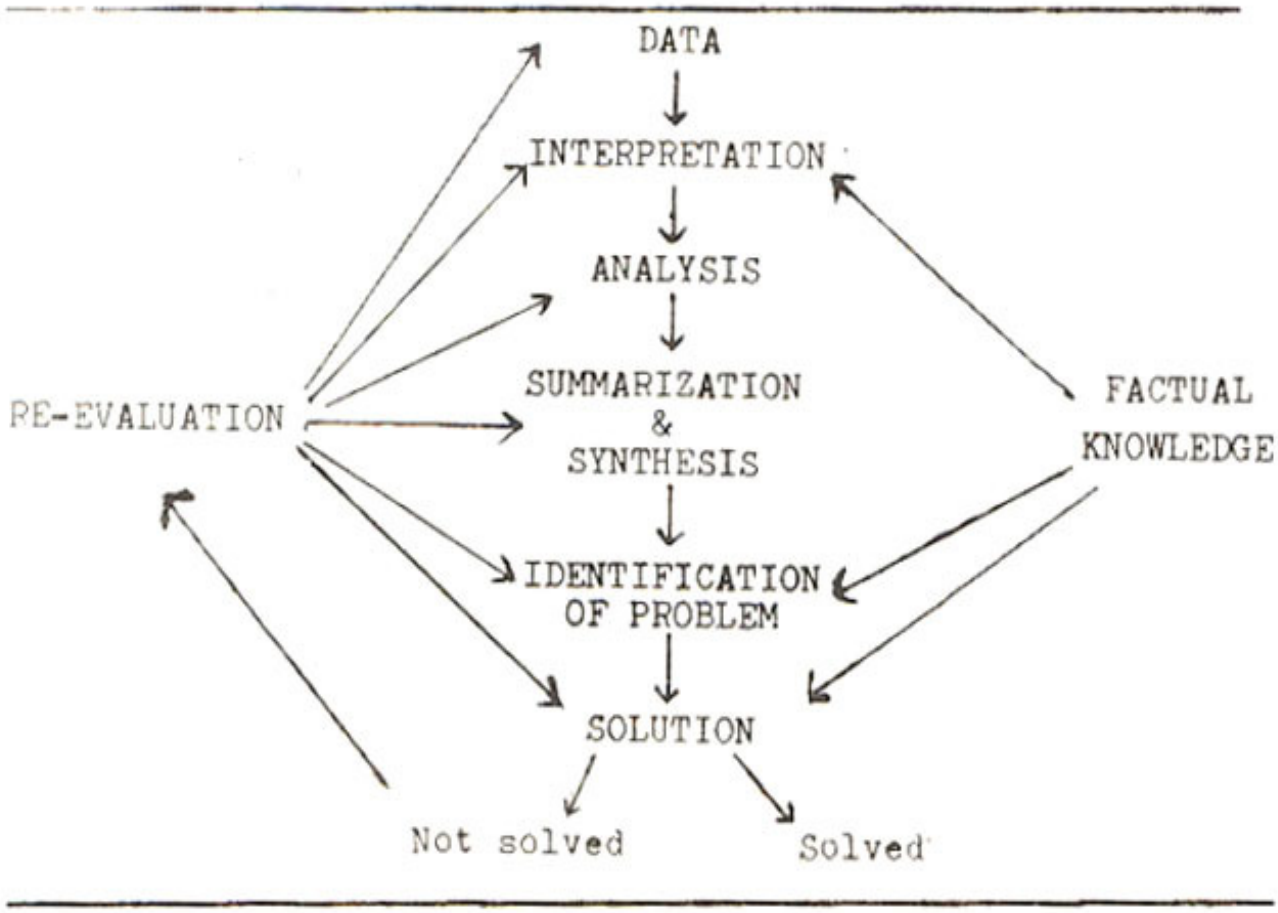


Fig. 1. Steps in Problem solving.

The whole process outlined above is a complex mental or cognitive function. Factual knowledge i.e. recall of facts and concepts derived from different sources e.g. books, journals, and lectures contributes only towards proper interpretation of data and then in the recognition and treatment of the final diagnosis. The critical steps in problem solving i.e. analysis and synthesis are mental functions which are not dependent on factual knowledge alone. The ability to recall facts does not automatically presume that these facts can also be utilised for correctly interpreting and or solving a problem. An ifiustrative analogy would be that no one can learn how to drive a car (or anything else for that matter) by just reading a book. Unfortunately, the entire present day final M.B.B.S. examination is based on the presumption that if one can recall facts he/she can also utilize them for problem solving. It is true that without knowledge one cannot correctly diagnose or treat a patient, but then knowledge is only a means towards an end, not the end in itself. The final M.B.B.S examination is a certifying examination in that after passing that he/she is licensed to practice. This examination should test the ability to use know1edge and not just recall of facts.

In addition to the problem solving abilities, the competence of a physician is also based on the skill with which he can collect all the relevant information about the patient's problem. These skills include the ability to take a history and conduct an accurate physical examination (Fig.2).

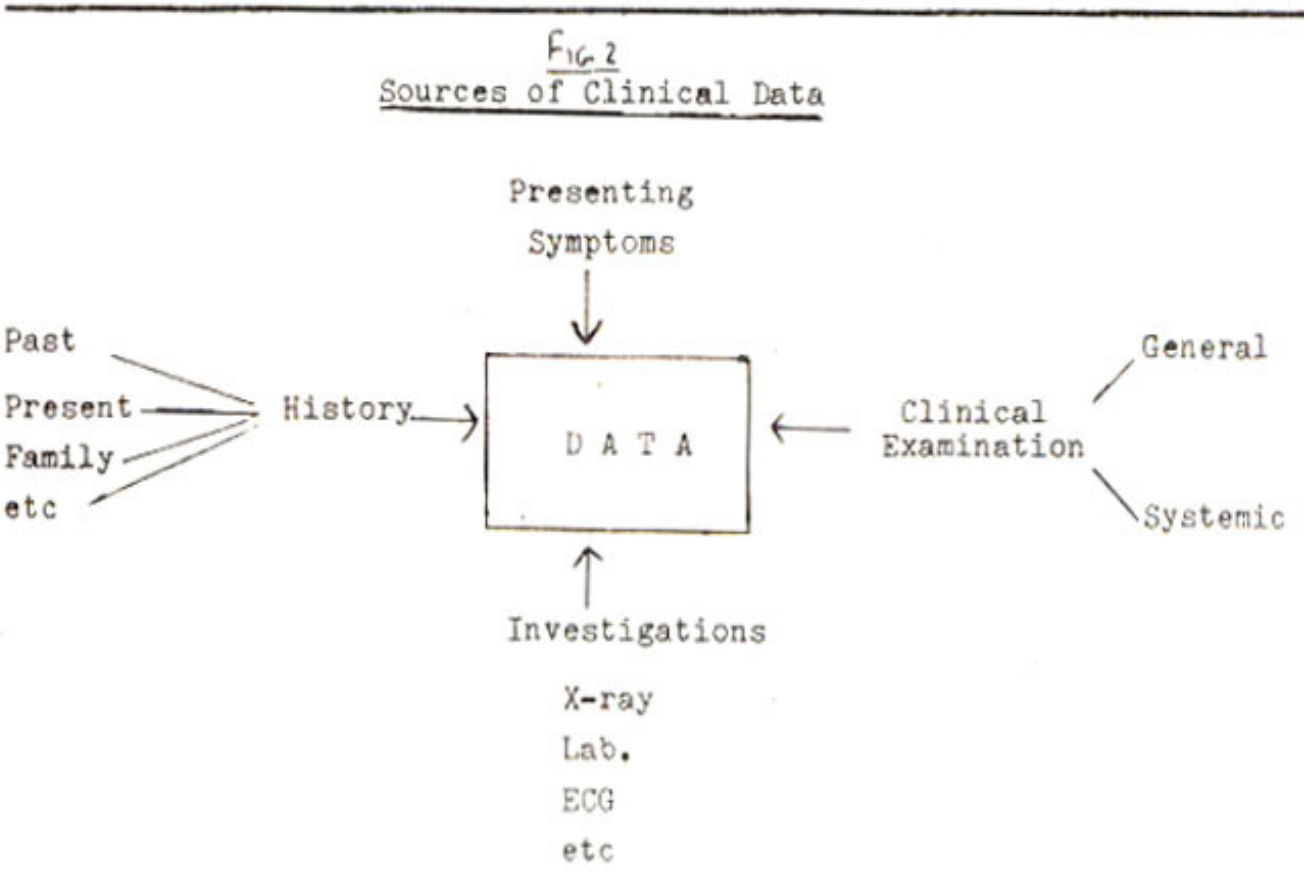


Fig. 2 Sources of Clinical Data.

No matter how knowledgeable or how good a physician is in his mental abilities to solve a problem, he is no good till he can take a proper history and conduct a physical examination. It is this part of clinical competence which sadly is most defkient in the fresh graduates of our medical Colleges and needs urgent correction. Ordering relevant investigations such as laboratory tests, X-ray etc. is also part of the skills required for complete collection of data.

In summary,the clinical competence is made up of skills and a mind trained to solve problems. Knowledge contributes towards problem solving abilities in that without knowledge a correct diagnosis is not possible, but knowledge alone will also not lead to the correct identification of the problem. It is the application of knowledge in a proper logical manner which is the key to the solution and the first crucial step towards this is the skill of data collection.

The existing certifying (Final MBBS) examination consists of a written paper with Essay type of questions. The clinical examinationconsists of a long case, some short cases, and a viva (oral) which may include identification of instruments and specimens. The basic idea of the long and short cases was to evaluate the candidates skills in data collection (history taking, physical examination) while the viva was supposed to evaluate his/her deductive logic and problem solving abilities, I have deliberately used the wora was, as the format of the clinical examination that I have described has been there since at least the creation of Pakistan and was used originally for the purposes described. The number of candidates were small and the examiners had the oppOrtunity to observe the candidates examining the patient and to conduct the viva on the bed side.

With the increase in the number of niedical colleges and candidates the examiners are pressed for time. Now, the clinical examination consists of what the candidates have aptly named as “table viva”. It is conducted in one of the offices, away from the hustle and bustle of a ward with one or two examiners

sitting across the table from the candidate. An assortment of instruments, Xrays and specimens are kept on the table. The candidate is usually asked, “what is the diagnosis of the case he had been alloted” and then how he will treat him and so on. Since the candidates are not observed while they examine the patients, the examiner never knows whether the candidate has even examined the case or just obtained the diagnosis from some where. The entire clinical examination is thus reduced to a 10-15 minutes “table viva” in which all that is tested are pieces of information based on recall. The candidates correctly plan their strategy for passing such an examination by acquiring facts. The need for acquiring skills is gone as the examiners never test that. Hence, the long preparation leaves to prepare for the examination by mugging up facts or doing whatever else is considered suitable to achieve this end, but hardly anyone goes to the wards to practice the skills of history taking or physical examination.

As for the written paper, Essays are an excellent way of judging a person’s ability to organize and systematically present a subject matter in depth, but that is, if the examiners have time to read the whole script. Given the number of candidates and the time at their disposal it is impossible for them to more than scan the scripts.

The advantage of the Essay type of examination is therefore nullified.

What then is the answer? Over the past years a number of solutions have been proposed at various meetings, workshops and seminars and what is given here is based on some of the ideas presented there.

The written examination should be changed from the Essay type to MCQs. As the number of candidates appearing is very large it is impossible for examiners to read so many scripts and all the advantages of this technique of examination are lost on this account. Again, Essay type of questions are the main reason why the results of the Final MBBS examination are delayed by months. The switch over to MCQs will not be too difficult. The College of Physicians and Surgeons are using MCQs in their FCPS Part I Examination, which is simultaneously held in three centres Rawalpindi, Lahore, and Karachi. The expertise of the College in the organization of MCQ examinations could be utilized by others wishing to do so. The major problem with MCQs at the moment is that mechanical means of checking the answers are not available, though the College of Physicians and Surgeons Pakistan is in the process of acquiring a computer and optical scanning equipment for this purpose.

The clinical examination and viva need to be re-organized so that they serve the purpose for which they were originally concieved i.e. evaluate data gathering skills and the mental capacity to solve problems. The present emphasis on mere memorization of facts should be changed to demonstration of practical skills. For this the need is to observe the candidates while they are performing some critical steps of physical examination and to focus the viva on the manage. ment of the actual case. The questions of the viva should preferably start with Why? and How? rather than, What?

Given below is a scheme of how the Clinical Examination can be conducted. This is by no means the only way, or the best way, but only a suggestion to stimulate innovation in this direction.

The Clinical Examination should be in two parts, a long case with viva based on it, and an Objective Structured Clinical Examination (OSCE) (1984).

Given a ward of 24 patients, 24 students can simultaneously be alloted 30 minutes to examine the case. If there are eight examiners, batches of two examiners each can then conduct, a 15 minutes viva, and finish the batch of 24 students in an hour and half. In the meantime another batch of 24 students would be going through OSCE with eight stations. The stations could be 4 observation type at which the candidates are required to perform a procedure. The other four could be an X-ray, instrument or specimen. The total time taken by a batch of 24 students if 5 minutes are given for each station. %yffl be two hours and forty minutes. After three hours the batches could switch over and this way a batch of 48 students can be examined in six hours by a set of 12 examiners (8 for long cases and 4 for observation stations of OSCE).

The advantages of the scheme outlined above over the clinical examinations conducted at present are,

(1) The examination will be more valid. It will be testing data gathering and problem solving abilities

which is what the objectives of the examination requires. (2) It will be more objective as part of it will be designed that way. This will also meet one of the major objections about the present examinations that the students have, which is that the present examination are very subjective.

## Reference

1. Elahi F. ; (1984) Objective Structured Clinical Examination NUC Monograph No.1 (OSLE). College of Physicans and Surgeons Pakistan Karachi 1984.