

Teaching History Taking to Undergraduates- Can we change the Way?

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Introduction

Different teaching methods and interventions have been tried, tested and evaluated to inculcate history taking skills in medical students in recent years; however, these mostly focus on the conduct/process of history taking and there are very few interventions which target content. The article aims to focus on history taking content and propose a model which will appeal to the new generation and make history taking interesting, problem directed and help in diagnostic reasoning, without compromising on the amount and quality of information gathered.

Over the years, teaching learning methods and assessments have seen a paradigm shift across all the phases of a student's journey; right from primary through secondary and higher secondary education. The entrance tests to professional courses too have joined these winds of change and we have moved from a subjective way to an objective way of writing and evaluating. Thus, the new generation has intentionally or unintentionally been trained to grasp, remember, recollect things and answer exams in a manner which is very different from what was taught and expected years earlier. Medical education too has seen a change and the traditional didactic method of teaching - a teacher centered method- has given way to hybrid or mixed methods. The Competency-Based Curriculum introduced in 2019 has given a much needed twist to traditional methods of teaching and learning. However, some areas have remained the same as far as content is concerned and one such area is History Taking or the Clinical Interview of the patient.

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Undergraduates are typically taught and trained in interviewing the patient in their second year. It is the most common and most important skill that they would then use throughout their life. Concepts in history taking can be viewed as Conduct (procedural aspect pertaining to the physician's ability to communicate and interact effectively with patient), Content (related to information gathering that provides for the translation of symptoms into relevant medical data) and Diagnostic reasoning (which involves the analysis of symptoms, evaluation of data and later, formulation of a hypotheses) (Nardone *et al.*, 1980). Each component is important and cannot replace one another.

Review of Literature

The teaching of history-taking in American medicine can be traced back to the era of William Stokes, the father of Anglo-Irish bedside teaching, who was profoundly influenced by Hippocrates. (Nardone *et al.*, 1980). "History-taking is a way of eliciting relevant personal, psychosocial and symptom information from a patient with the aim of obtaining information useful in formulating a diagnosis and providing medical care to the patient. The medical interview is seen as an encounter between physician and patient, both contributing to the results". (Keifenheim *et al.*, 2015) The importance of the art of history taking is summarised by William Stokes in his Lectures, wherein he mentions.....

Let us lastly revert to the opinion of the Hippocratists ...they believe that great advantage is to be derived from the careful study of symptoms, even in cases whose pathological nature is not revealed by the knife.
(Dublin, 1840)



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The above phrase perfectly sums up the role of history taking and also conveys how a good history can avoid unnecessary, costly and sometimes invasive tests and diagnostics. It was, it is and it will always remain the cornerstone of patient management.

To the medical student, history taking, besides being a tool of information gathering which fuels diagnostic reasoning, is also a test of his/her communication skills. To the medical teacher, it is a challenge of sorts to inculcate two different skills (clinical and communication) in young undergraduates who with limited clinical knowledge and sparse patient contact are difficult learners. To add to the problem, there is the time factor. It is not easy to teach the students all concepts of history taking, in the short time that they spend in wards. A fine balance is needed to combine the content and the process to get the best clinical information. (Kurtz *et al.*, 2003) Both, content, which focuses on clinical skills, and conduct, which focuses on communication skills are equally important. Over the last few decades however, the focus of teaching and educational interventions has revolved around improving communication skills and on the use of electronic learning methods, to teach students how to conduct history taking. Studies concluding that better communication skills translate into better patient satisfaction (Robbins *et al.*, 1993), articles reviewing and grading teaching methods focusing on communication skills (Aspergren, 1999) have dominated literature and studies on content are hard to find. Proof to these claims are the systematic reviews which concluded that there are few studies that focus on educational interventions targeting history taking content (Alyami *et al.*, 2016.). This systematic review by Alyami *et al.*, which included literature search from 1980 to 2015 included only those studies focusing on improving undergraduate student history taking content. 6 articles were included. The oldest of these studies was a RCT from 1987 and the latest were from 2013; one, a quasi-experimental study and another an RCT. The authors state that all the interventions were in addition to the traditional teaching methods. 5 out of six showed a positive impact on medical student performance via objective assessment.

They concluded that majority of these use electronic learning methods and there are very limited studies focusing on educational interventions targeting history taking content. Although there are interventions (using different teaching methods and technology) being designed, implemented, tested and applauded (Alyami *et al.*, 2019); there are many recent articles and studies which talk about poor history taking skills in young doctors (Feddock, 2007; Fisher, 2016; Faustinella & Jacobs, 2018; Ahmed, 2002; Seitz *et al.*, 2019).

Review of the literature suggests that there is a need to relook at the way history taking content is taught. Whether a change help in improving the understanding of undergraduates or not, needs to be seen. But a humble and simple attempt can still be made. With this thought in mind, a model is proposed, which will be easy to understand, save time, not compromise the quality and amount of information gathered and may also appeal to the young generation which is accustomed to a new style of learning and recollecting.

First, it will be helpful to recollect the traditional way in which medical students are taught history taking and evaluation. They are taught to start with enumerating the presenting complaints; then go further into the history of the presenting illness and elaborate the onset, duration and progress of each of the complaint. They are then required to mention negative history and ultimately come to a provisional diagnosis at the end. A detailed physical examination further adds very vital information and helps in diagnosing. Students are then asked to make plan for workup and treatment.

The model suggested has a slight twist to this traditional way of history taking as follows- "The 'W' model"

WHAT, WHERE, WHY, WORKUP and WAY FORWARD comprise the 5 Ws of this model.

1. WHAT- What is the problem?

This section will enumerate the chief complaints (symptoms) the patient presents with in chronological order of their occurrence/ duration. This will include the presenting

complaints with onset, duration, and progress of each complaint hence filling in for the initial part of the History of Presenting Illness of the traditional manner of history taking.

Example- chest pain for 1 hour/swelling of feet for 1 week / decreased appetite for 1 month.

2. *WHERE- Where is the problem?*

This section will elaborate on associated symptoms and focused history (both positive and negative), to localize the problem area or to rule in or rule out the involvement of a specific system hence filling in for the later part of the History of Presenting Illness of traditional way of history taking.

Example- history suggestive of paroxysmal nocturnal dyspnea in a patient with a complaint of breathlessness will localize to the cardiovascular system OR History suggestive of third nerve involvement in a patient with hemiparesis may localize the lesion to mid-brain OR history of burning and frequent micturition in a patient with acute febrile illness will localize the urinary tract as a source of infection.

3. *WHY – Why is there a problem?*

This section will have answers to questions which will give a clue regarding the etiology of the problem. This will include the history of fever/trauma/ drug intake/ exposure to toxins etc.

Example- history of valve replacement in a patient with stroke may hint towards cardioembolic stroke OR history of significant alcohol consumption in a patient presenting with icterus and abdominal pain will point towards alcoholic liver disease.

4. *WORKUP (plan)*

This section will mention the plan for investigations - blood and body fluid analysis, radiological investigations and special tests (invasive/non-invasive). Developing a methodical and systematic workup plan is the aim of this section. This will also include the follow up plan for a particular patient that the student wishes to propose.

5. *WAY FORWARD (treatment)*

This section is the most important and probably the most expansive. Here the student will be expected to enumerate the treatment modalities that he wishes to offer to the patient. Keeping the holistic approach to patient care in mind, it is suggested to include not only pharmacological treatment here; but also non-pharmacological treatment if any. Certain situations require patient and caregiver education, empowerment, and rehabilitation, and this section should reflect a plan covering all the above aspects.

When applied to different clinical problems, and symptoms faced in day-to-day practice, this model seems to fit in. It will need to be seen how this model appeals to the students and if it helps in making history taking interesting and easy. Studies that compare this method with the traditional methods are needed.

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