

Awareness Of Medical Students On The Relevance Of History Taking In Clinical Diagnosis.

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ABSTRACT:

Background: The devastating COVID Pandemic has physically distanced the doctor from the patient, giving life to the new era of telemedicine in communicating, diagnosing and treating the patient. As physical examination has got almost no role to play in telemedicine, dependence on the patient's symptoms in the clinical diagnosis has gained more relevancy. Eventually, the patient's history became the most important diagnostic tool for evaluation of the patient's condition.

In this back drop, The relevance of history in clinical diagnosis has taken the center stage. In the present day scenario where physical examination and investigations are more focused upon in medical teaching, history taking is being less focused upon and has made the medical student shelve the art of history taking. This prompted me to undertake a study on the awareness of medical students in the art of history taking and its relevance in clinical diagnosis.

Materials and Methods: In this Cross sectional study 100 medical students of 2nd year and Final year who have completed their Clinical postings in the Department of General Medicine were given an online questionnaire to obtain their awareness on the relevance of history taking and its importance in arriving at the most probable diagnosis. Statistical analysis was done using SSPS software version 20.0 and MS Excel 2007. Data will also be tabulated and graphically presented. Chi-square test will be done to assess the association among categorical variables. For all analysis probability value 0.05 and less then was considered as statistically significant.

Results: 98% of the students were under the impression that history taking was a very important component of clinical diagnosis but only 53% were certain that history taking accounted for around 75% of the clinical diagnosis.

Conclusion: The students were very much aware that history taking was important and helped in enhancing communication skills and also improved doctor- patient relationship but were under the opinion that Physical Examination played a greater role in making a clinical diagnosis.

Key Word: History taking; Physical examination; Laboratory diagnosis; Relevance.

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I. INTRODUCTION

Healing the sick is the essence of the medical profession. A series of procedures are involved in the process of promoting healing in the patient. The initial and foremost step in the series of procedures involved in arriving at a diagnosis of the disease is taking a proper history [1]. Elements like history taking, physical examination, laboratory investigations contribute their respective part in arriving at a conclusion regarding the disease.

History taking skills are taught to medical students in the 2nd year of medical education on the bedside. The importance and relevance of history taking in arriving at a clinical diagnosis is not well perceived by medical students per se in the medical education years leading to a neglect in learning the art and science of history taking.

The recent pandemic which devastated the world has distanced the Medical Professional away from the patient, giving no scope for physical examination and over reliance on history and lab investigations for making a diagnosis. The advent of tele-consultation and the inability to examine the patient physically, has become the order of the day. This prompted me to know the relevance of history taking in arriving at a clinical diagnosis [2]. Information gathered from the previous studies also showed that, around 80% to 85% of cases can be diagnosed with proper history taking alone.

In an attempt to find out the awareness of this fact in the medical students, this study is being conducted. The questionnaire thus created to evaluate the student perception, will in itself create awareness in the medical students and the results thus produced can also be used to sensitize the undergraduate student on the relevance of

a proper history in diagnosing the patient. The other advantages of this study are slated to improve communication skills, patient satisfaction, avoiding unnecessary laboratory investigations and an overall improved doctor-patient relationship.

II. MATERIAL AND METHODS

This study was carried out on Medical students of 2nd year and Final Year Part-I, who have successfully completed their Clinical postings in the Department of General Medicine from various colleges in the North Costal Andhra Pradesh, and have been well versed with the art of History taking which is one of the components which contributes to the making of a clinical diagnosis.

Study Design: Cross sectional study

Study Location: This study was conducted through an online questionnaire to medical students of three Tertiary care teaching hospitals of GMC, Srikakulam, GSL Medical College, Rajahmundry and Andhra Medical College, Visakhapatnam, located in North Costal Andhra Pradesh.

Study Duration: November 2021 to December 2021.

Sample size: 100 medical students of 2nd year and Final year Part-I who have completed their clinical postings in the Department of General Medicine.

Subjects & selection method: Students who were willing to participate in the study were taken at random.

Inclusion criteria:

1. Medical students who have completed their clinical postings in the department of General Medicine were only included in the study.

Exclusion criteria:

1. Medical students not completed their clinical postings in the Department of General Medicine

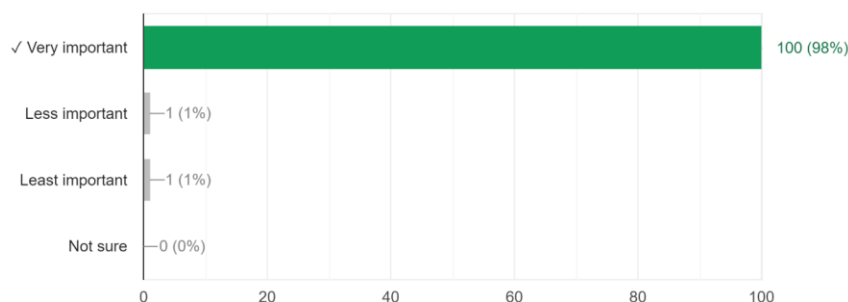
Procedure methodology

After obtaining informed consent from the students through whatsapp, the students were made aware of the importance of the study. A well-designed questionnaire was prepared in google forms and the link was shared with the students who were willing to undertake the study [3] The students went through the link and opened the designed questionnaire. After duly answering the questionnaire, the forms were submitted and the responses collected [4]. The responses were tabulated on an MS Excel sheet with a scoring system as per the three point Likert's scale. Statistical analysis was done using SSPS software version 20.0 and MS Excel 2007. Data will also be tabulated and graphically presented. Chi-square test will be done to assess the association among categorical variables. For all analysis, $p < 0.5$ will be statistically significant. Data collection tools like scales and other material will be used wherever necessity.

III. RESULT

1. Do you think that History taking is important in arriving at a clinical diagnosis ?

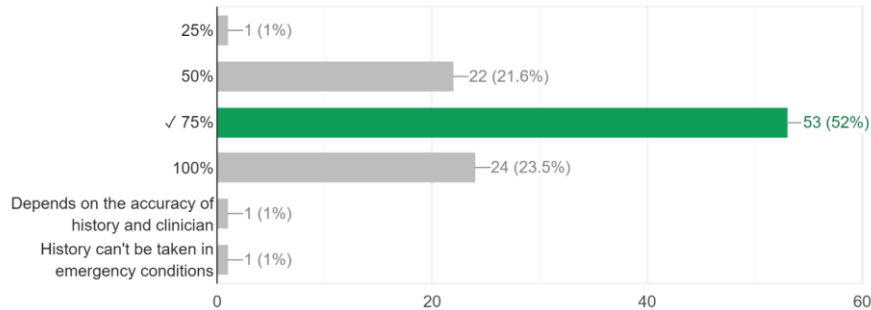
100 / 102 correct responses



98% of the students who participated in this study were aware of the fact that history taking was a very important aspect in clinical diagnosis [5]. Out of this only 53% were certain that history taking accounted for around 75% of the clinical diagnosis. 21.6% were of the opinion that history contributed to 50% to arriving at a clinical diagnosis. 23.5% of the students said that history contributed to 100% to a clinical diagnosis. 2% of students attributed the accuracy of the history and the competency of the clinician in arriving at a diagnosis and also that history has no role during emergency conditions.

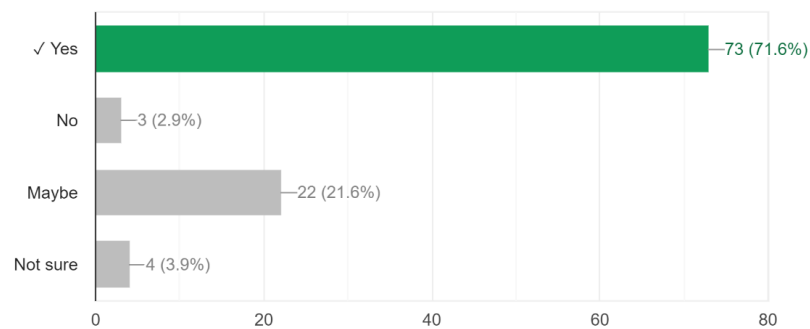
2. What [do you think] is the percentage of relevance of History taking in making a clinical diagnosis

53 / 102 correct responses



3. Does taking a relevant patient history decrease the necessity of unnecessary laboratory investigations?

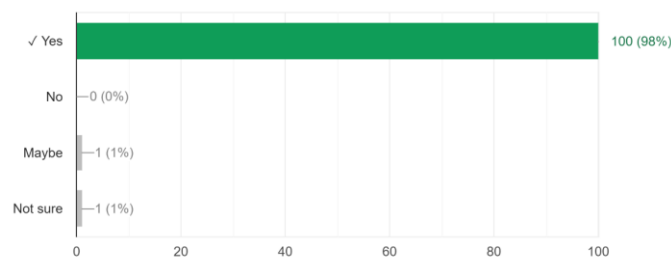
73 / 102 correct responses



Regarding the role of laboratory investigations in clinical diagnosis after a proper history, 71.6% of students confirmed the fact that proper history would reduce unnecessary laboratory investigations. 25.5% of students were not sure of whether a proper history would reduce the need for unnecessary laboratory investigations [6]. Only 2.9% opined that relevant history would not help in reducing unnecessary laboratory investigations.

4. Does History taking improve doctor patient relationship?

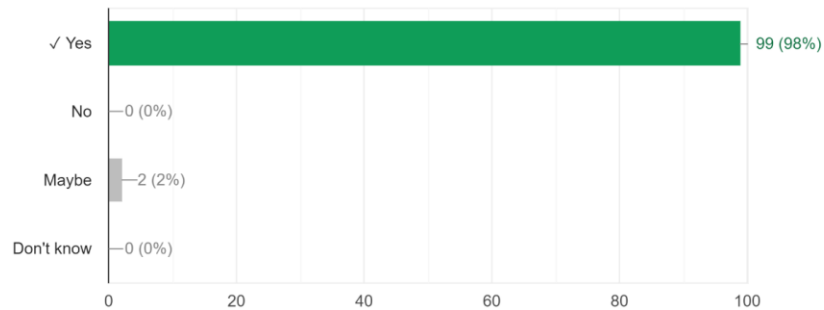
100 / 102 correct responses



The awareness that Doctor-Patient relationship would be enhanced during history taking was confirmed by 98% of the students who participated in the study. Only 2% were not sure. The same percentage expressed that history was an important tool in promoting a clinical diagnosis [7].

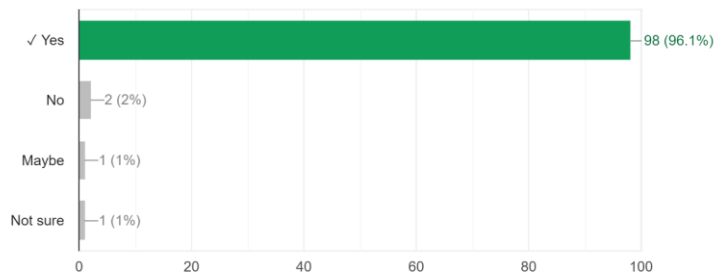
5. Do you think history taking is an important tool in clinical diagnosis.

99 / 101 correct responses



6. Does history taking have any effect on the development of communication skills

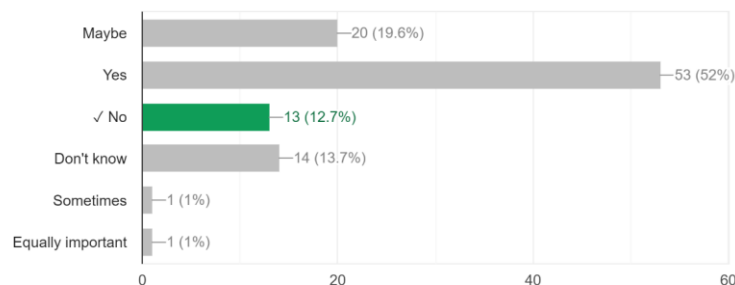
98 / 102 correct responses



In addition to an improved doctor patient relationship, improvement in communication skills was also ascertained by 96.1% of the students and 2% were not sure. 2% of the students did not agree that Communication skills improved during history taking [8]

7. Do you think that physical examination is more relevant to history taking in the evaluation of the patient.

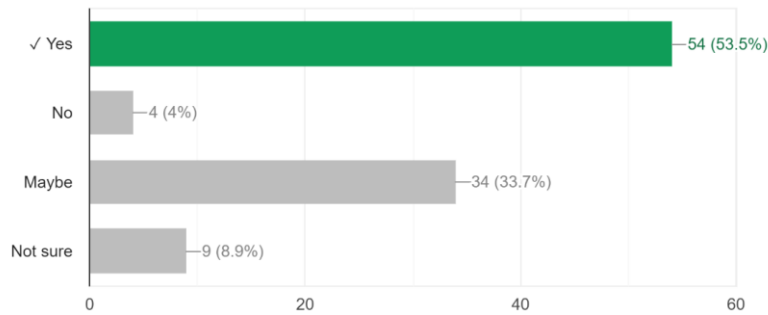
13 / 102 correct responses



When it came to relevance of history vs physical examination in arriving at a clinical diagnosis, 52% of students thought that physical examination contributed more than history while 12.7% were of the opinion that history was more relevant in the evaluation of the patient. 13.7% were not sure of which was more relevant and 1% said that each of them is important [9].

8. Does history taking help in the early diagnosis of premalignant conditions

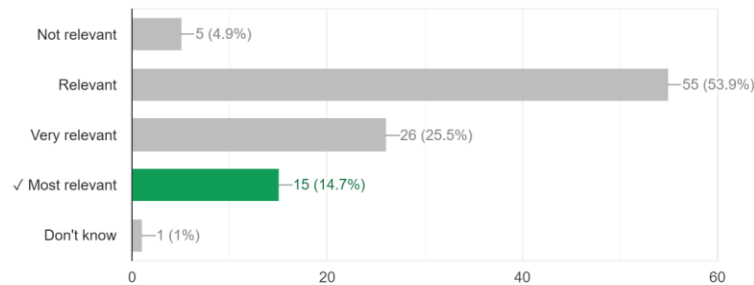
54 / 101 correct responses



When asked about the contribution of Proper history in the early diagnosis of premalignant conditions, 53.5% were affirmative that it helps while 4% negated. 42.6% were not sure whether it helped in early detection of pre-malignant conditions.

9. What is your opinion about the importance of history taking in telemedicine.

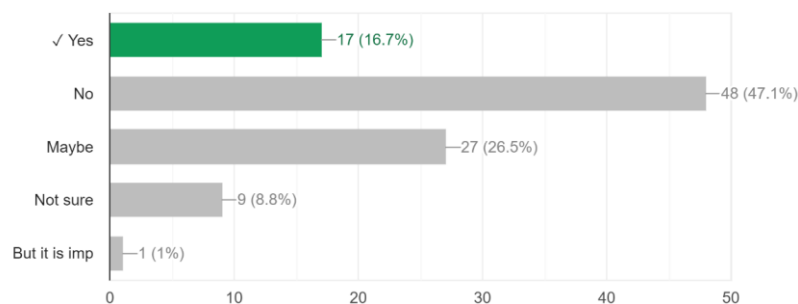
15 / 102 correct responses



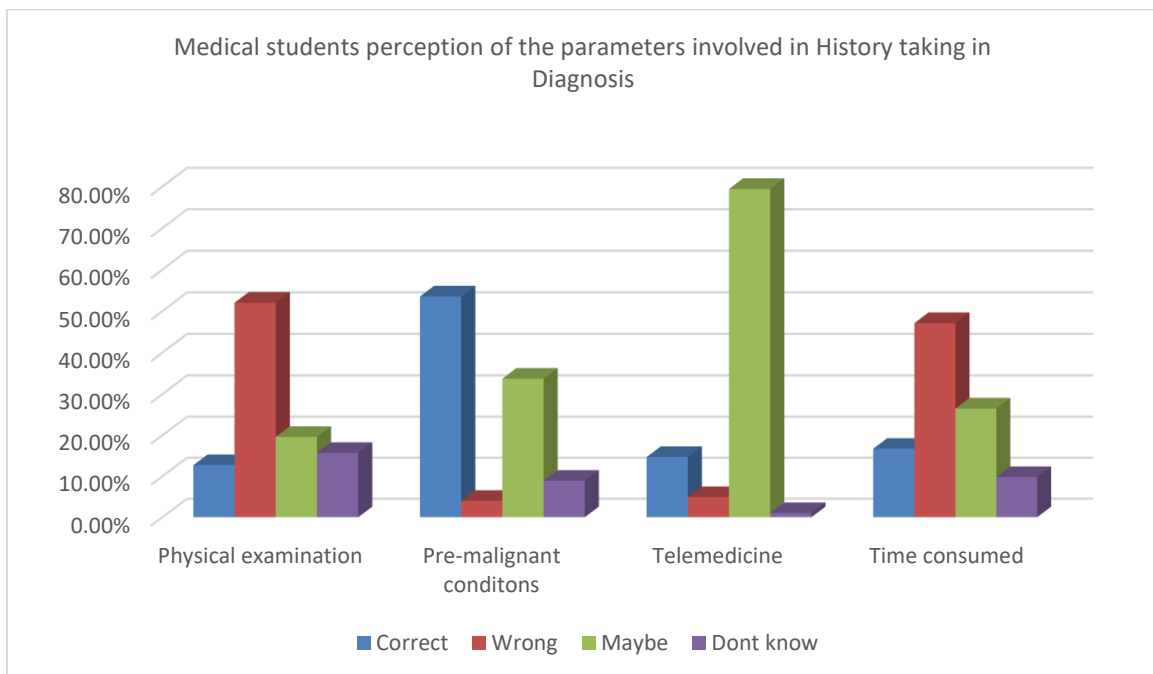
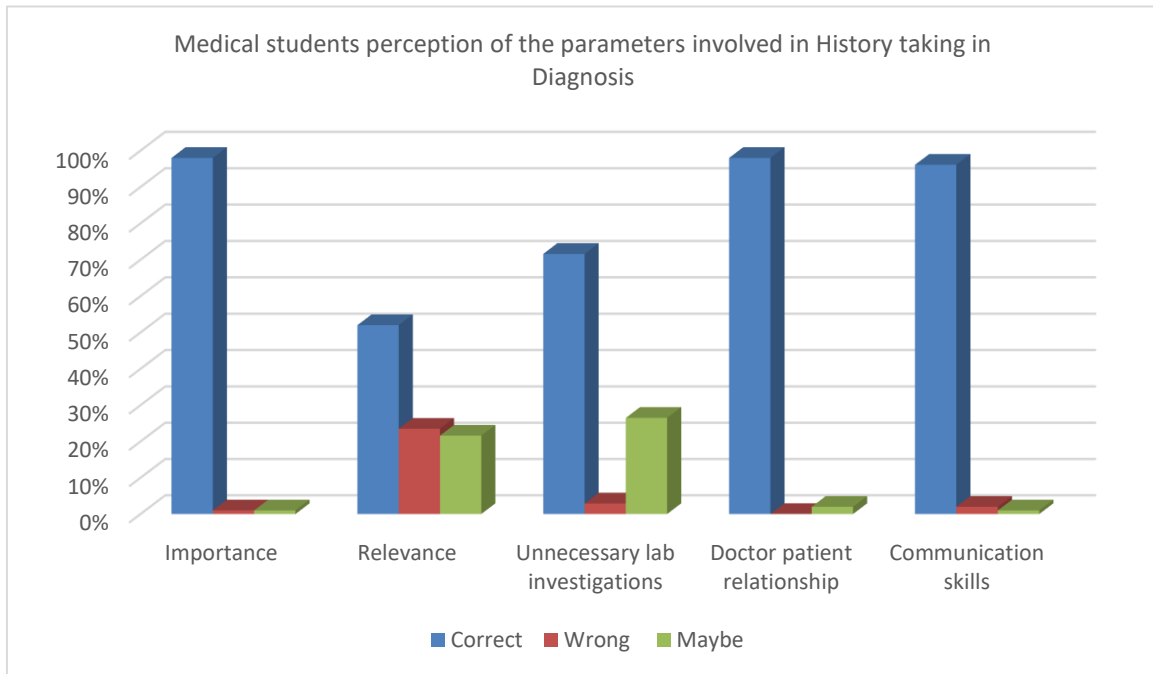
Regarding the relevance of history in telemedicine 14.7% said that it was most relevant, 25.5% very much relevant, 53.9% relevant and 4.9% opined that it was not relevant.

10. Does history taking consume a lot of the clinicians valuable time?

17 / 102 correct responses



When it came to the consumption of the Physicians valuable time during history taking only 16.7% agreed that it consumes a lot of the physicians time but 47.1% said that it was not time consuming. 35.3% were not sure of the time consumed during history taking [10].



IV. DISCUSSION

98% of the students who participated in this study were aware of the fact that history taking was a very important aspect in clinical diagnosis [11]. Out of this only 53% were certain that History taking accounted for around 75% of the clinical diagnosis. 21.6% were of the opinion that history contributed to 50% to arriving at a clinical diagnosis. 23.5% of the students said that history contributed to 100% to a clinical diagnosis [12]. 2% of students attributed the accuracy of the history and the competency of the clinician in arriving at a diagnosis and also that history has no role during emergency conditions.

Regarding the role of Laboratory investigations in clinical diagnosis after a proper history, 71.6% of students confirmed the fact that proper history would reduce unnecessary laboratory investigation [13]. 25.5% of students were not sure of whether a proper history would reduce the need for unnecessary laboratory investigations. Only 2.9% opined that relevant history would not help in reducing unnecessary laboratory investigations.

The awareness that Doctor-Patient relationship would be enhanced during history [14] taking was confirmed by 98% of the students who participated in the study. Only 2% were not sure. The same percentage expressed that History was an important tool in promoting a clinical diagnosis [15].

In addition to an improved doctor patient relationship, improvement in communication skills was also ascertained by 96.1% of the students and 2% were not sure. 2% of the students did not agree that Communication skills improved during history taking.

When it came to relevance of History Vs Physical examination in arriving at a clinical diagnosis (5) 52% of students thought that Physical examination contributed more than history while 12.7% were of the opinion that history was more relevant in the evaluation of the patient. 13.7% were not sure of which was more relevant and 1% said that each of them is important.

When asked about the contribution of Proper history in the early diagnosis of premalignant conditions, 53.5% were affirmative that it helps while 4% negated. 42.6% were not sure whether it helped in early detection of pre-malignant conditions. Regarding the relevance of history in telemedicine 14.7% said that it was most relevant, 25.5% very much relevant, 53.9% relevant and 4.9% opined that it was not relevant.

When it came to the consumption of the Physicians valuable time during history taking only 16.7% agreed that it consumes a lot of the physicians time but 47.1% said that it was not time consuming. 35.3% were not sure of the time consumed during history taking.

V. CONCLUSION

The relevance of history taking in arriving at a diagnosis in 80-85% of the patients was not known by 50% of the students. They were also adept to the fact that it reduced the burden of unnecessary laboratory investigations and also that it plays a major role in the early diagnosis of pre-malignant conditions. By participating in the study, the participants recognized the importance of history taking as an art and science which needs to be focused upon.

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