



Introduction

- More than 10 billion laboratory tests are performed in the United States each year
- Laboratory test results constitute an estimated 70 percent of the patient's medical record and are vital to the diagnosis and treatment of illness & disease [Fig. 1]

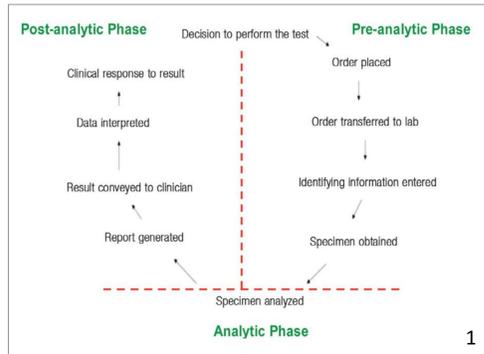


Fig. 1: Flowchart illustrating the laboratory testing process and cycle

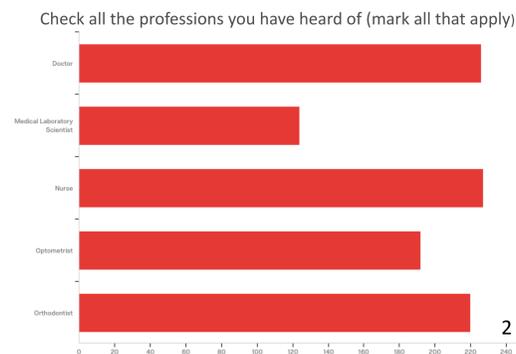
Motivation

- Since laboratory professionals often work behind the scenes, few people know much about the vital testing they perform every day
- Using a Knowledge, Attitude and Practices (KAP) survey method, this study was conducted to determine the awareness that college students at a Texas University have of Clinical Laboratory Science (CLS) professionals and their responsibilities.

Methods

- We surveyed 234 undergraduate students and asked 5 scenario-based questions and 5 demographic questions
- The questions were designed to gauge their knowledge of the Clinical Laboratory Science profession and of other common health professions, and to note the frequency that they visit various health professionals [Fig. 2]

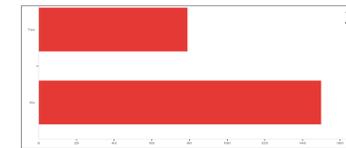
Fig. 2: The graph displays the preliminary question asked and the corresponding data collected. Purpose of this question was to gather a preconception of any prior knowledge participants may have before being influenced by the following questions and answer choices



2

Results

- Only one-third of the participants (34.5%) could describe some of the duties of a Clinical Laboratory Scientist [Fig. 3]

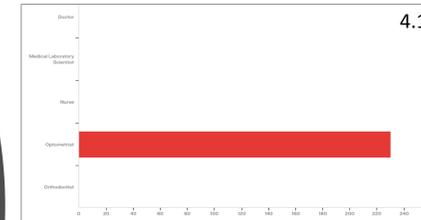


Do you know what a Medical Laboratory Scientist is (also known as Clinical Laboratory Scientist), or would you be able to describe some of their duties?

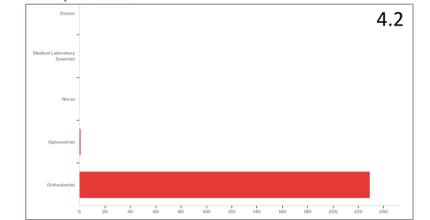
#	Answer	%	Count
1	Yes	34.50%	79
2	No	65.50%	150
	Total	100%	229

- In contrast, 95.5% of the participants could correctly determine the duties of other health professions [Fig. 4]

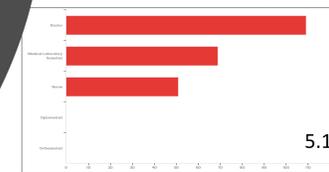
If you were having trouble seeing and needed glasses, which of the following professionals would you visit?



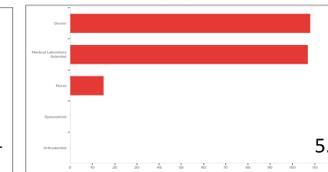
If you needed braces which of the following professionals would you visit?



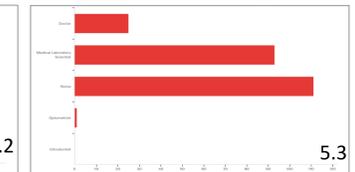
- Scenario-based questions additionally assessed the students' practical and applied knowledge of CLS [Fig. 5]



If you had common symptoms associated with diabetes, which of the following professionals would perform most of the necessary tests to determine your results?



If you contracted malaria from a recent trip overseas, which of the following professionals would perform the proper diagnostic test?



If you needed a blood transfusion (process of receiving blood through veins) which of the following professionals would conduct the test to determine your blood type?

Conclusions

- The data collected demonstrates the need to inform and educate the public about the medical laboratory
- To increase recruitment there should be a requirement to discuss Clinical Laboratory Science in college, whether in the classroom or through a health advisor, to increase students' knowledge and awareness of CLS
- This could diminish the shortage of vacancies within the profession and no longer make Clinical Laboratory Science the "hidden profession that saves lives"

Acknowledgments

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References

- Clinical Laboratory Tests: Which, Why, and What Do The Results Mean?
- Lab Med. 2015;40(2):105-113. doi:10.1309/LM40A4L0HHUTWWUDD
- Lab Med | © American Society of Clinical