• **Difficults face medical Students in learning Medical Terminology**

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الخلاصة

هذه الدراسة تهدف الى تسليط الضوء على بعض الصعوبات التي تواجه طلاب الطب في المعهد العالي للتقنيات الطبية المرج في تعلم المصطلحات الطبية وتستند الدراسة إلى بيانات تم الحصول عليها من اختبار مفردات اللغة الإنجليزية الطبية ويتضمن الاختبار ثلاثة أسئلة وتُظهر النتائج الرئيسية أن اللغة الإنجليزية الطبية تُمثل مصدر الصعوبات التي يواجهها طلاب الطب مما يعيق فهمهم للمصطلحات الطبية و لخصت الدراسة إلى أن مجالات الصعوبات تشمل الترجمة وكتابة هذه التعريفات وهناك الكثير من الصعوبات المختلفة في مهارات الكتابة الطبية وخاصة في تكوين الكلمات والتهجئة والاختصارات الطبية

كما ينبغي عليهم استخدام قواميس جيدة، وخاصةً القواميس الطبية

Abstract

This study aims to shed on some of the difficults that face medical students at **High Institute of medical science and Technologies Almarj** in learning medical terminology. It relies on information gathered from a medical English vocabulary test, which consists of three questions. The primary findings indicate that medical students struggle with the medical English language, which constitutes the source of the challenges

medical English language that represents the source of difficulties that medical students encountered and thus impede understanding medical terminology. The study concluded that the areas of difficulties include the translating and writing of these definitions

They should Focus on some relatively current medical courses in English for academic purposes. They should also use a good dictionaries especially medical dictionaries

- **Keywords: Medical Terminology, English for Specific Purposes (ESP), Learning Difficulties, Medical Students, High Institute Almarj, Translation.**

1. **Introduction**

This research aimed to explore the application of medical terminology by medical students at the **High institute in Almarj**. Medical terminology refers to the specialized vocabulary used to articulate medical concepts in a scientific way, and it fundamentally serves as the language of medicine, used in various medical domains. This method of forming words is founded on the principles of roots, prefixes, and suffixes, which explains why many medical students are currently experiencing confusion and difficulties with medical terminology, such as making various errors in translation, learning, and writing in English. Especially medical English vocabulary and how it's usages.

Medical terminology is a language used to precisely describe the human body including all its components, processes, conditions affecting it, and procedures performed upon it.

Medical terminology is used in the field of medicine the terms produced and used in the field are called **medical terms   or medical terminology**. Most medical terms originate from Latin and Greek; however, due to the predominance of English as the language of science in recent years, English usages within medical terminology are also noteworthy (**Cohen** & **Jones, 2020; Spiro & Heidrich, 1983; Wermuth & Verplaetse, 2019).**

In today's world, where scientific and technological developments occur rapidly, many terms enter our language. The global use of medical terms to create a common language in medicine is seen as a guarantee for world health (**Köprülü, 2017).**

Medical Terminology education plays a "key" role in the early stages of education in many health professions, primarily in medicine. **Learning Medical Terminology** will help healthcare workers prevent mistakes in their work and create the necessary perception (**Chabner, 2017; Miller, 1944).**

This study examines the importance of Medical Terminology, a language used to describe the components and processes of the human body, medical procedures, diseases, disorders, and pharmacology, for health professions.

1.2The statement of the problem

In the preparation of this research a pilot study was conducted by the researcher to ask a set of Three questions to the group of students to get background information on their levels of studies.

1.3   **The Aim of the study**

This study is an attempt to identify the difficulties of medical students at High Institute in Almarj city when translating ,learning writing medical terms

1.4 The significance of the study

This study helps to shed light on

Individual differences   in learning, translating writing medical terms

1.6 **This study limitation**

The study has limitation of including participant from fifth semester in High Institute of Science and technological in Almarj

. 2 Literature Review

Medical terminology is a crucial aspect of medical education, enabling healthcare to communicate effectively and provide quality care. However, learning medical terminology can be a significant challenge for medical students.

medical students face difficulties in learning medical terminology due to its complexity, volume, and unfamiliarity (**Nation, 2001; Schmitt, 2000).** The use of Greek and Latin roots, prefixes, and suffixes can be particularly challenging (**Cobb, 2007).**

Non-native English speakers may face additional challenges in learning medical terminology in English, including difficulties with pronunciation, spelling, and comprehension (**Hunt & Beglar, 2005).** English-medium instruction (EMI) programs can exacerbate these challenges.

Cognitive load theory suggests that the complexity of medical terminology can lead to cognitive overload, making it difficult for students to retain and apply their knowledge (**Sweller, 1988**). Additionally, students' prior knowledge and learning strategies can influence their ability to learn medical terminology (**Laufer & Hulstijn, 2001**).

2.1 Medical terminology

Medical terminology refers to the words and language used specifically in the medical and health fields. The proper definition describes medical terminology as language used to describe anatomical structures, procedures, conditions, processes and treatments in the medical field.

While memorizing terms across that many disciplines might seem impossible, medical language can be simplified when you understand that nearly all medical terms can be broken down into three parts: the prefix, root and suffixes

2.2Components of medical terminology

Medical terminology is composed of several key components that work together to convey meaning. Understanding these components can help you decipher unfamiliar medical terms.

1.Word Roots

 It is The core of a medical term, usually derived from Greek or Latin.

As fir example Card (heart), Neuro (nerve), Derm (skin)

2. Prefixes

  It is added to the beginning of a word root to modify its meaning.

As fir example Hyper (above), Hypo (below), A (without)

3. Suffixes

It is added to the end of a word root to modify its meaning or indicate a procedure.

As for example ation (inflammation), ectomy (removal), logy(study of)

4.Combining Forms

It is a word root and a vowel (usually "o" or "i") combined to make it easier to pronounce.

For example Cardio (heart) Neuro (nerve)

Medical Terms

-Definition A combination of word roots, prefixes, and suffixes that convey a specific meaning.

 As for example Cardiovascular (heart and blood vessels) Neurology (study of the nervous system)

Examples

Cardiovascular Cardio (heart) vascular (blood vessels)

Neurology Neuro (nerve) logy (study of)

Dermatitis Derm (skin) -iti (inflammation

2.3 The importance of Medical Terminology in the Medical Field

Medical terminology is the linguistic foundation on which the entire healthcare system is built. Because physicians are trained at varying universities and complete their training across different hospitals and disciplines and geographies, having a singular medical terminology system ensures that effective care is delivered while reducing the potential for miscommunication.

More specifically, medical terminology is important for a few reasons, both for medical professionals and the field itself. Medical terminology courses or certificates are usually a prerequisite for most graduate degree or certificate program .

2.4The uses of medical terminology

Medical terminology is used extensively and in various contexts throughout the healthcare industry. Not only is it critical in the surgical ward or the emergency room, but it's also useful for medical receptionists, health insurance agents, health information technicians, and more.

3.Methodology

3.1The participant

The participant in this study were 25 students taking a medical terminology course as compulsory in their fifth semester at High Institute of science and Technologies on Almarj

2. . **Instrument**

The research was conducted using a questionnaire. It used in the study was slightly modified version of the one used by **seddigh and Shokrpur (2012)** the research found the Questionnaire adequate for the purposes   of the current study the questionnaires a set of questions (three) used to get some background information

3.1 Data Collection

The researcher explained the questionnaire to the students and distributed it among the students it was carried out with medical students, level fifth semester at

. This questionnaire composed of three questions which depend on students' medical information

Question one concerns about the definitions of pain quality, the results show that in significance that medical students faced difficulties

to understanding and recognizing the meaning of pain quality that means medical students need to study more in specialist medical English vocabulary about pains quality.

The International Association for the Study of Pain widely used pain definitions as (**Bogduk, N. nd Merskey, H**.(1994). stated that "Pain is an unpleasant sensory and emotional

experience associated with actual or potential tissue damage, or described in terms of such damage." In medical diagnosis

The vocabulary test designed according

- The students were taken a questions contained three sections

To evaluate the level of understanding a medical vocabulary after collection the exam the teacher checker the test and the scores by stastical methods

The results show here

The numbers	Mean	Std. deviation	SE of mean	The test	sig	Mean difference
Thee question 1	3.31	2.18155	0.2181	1.811	0.037	0.51
Thee question 2	4.51	6.9050	0.6905	53.10	0.000	3.76
Thee question 3	2.78	1.38	0.138	5.181	0.000	0.41

The table shows the result of the which t-test are used to determinant there is difference mean from test value (the test value is half mark obtained by the student). For question 1 the mean marks is 3.31 from total mark 10 with standard deviation 2.82 and standard error of mean 0.283. but there is in significance this implies in this question student not matter. For question 2 the mean marks is 4.51 from total mark 8 with standard deviation 0.698 and standard error of mean ttt0.0698. the value t-test is 53.864 with p-value 0.000 this implies in this question the students high grade. For question 3 the mean marks is 2.78 from total mark 5 with standard deviation 1.38and standard error of mean 0.038 the value t-test is 5.181 with-value 0.000 this implies in this question the students high grade.

3.2 The Test discussion

The test was carried out with medical students, fifth semster, at High **Instute in Almarj T**his test composed of three questions which depend on students' medical vocabulary knowledge according to their previous medical syllabus

Question one

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Question Two

This question includes different meaning of some medical terms that describes the body organs' diseases. In question two medical students well done and they have obtained good marks with mean difference (3.76), there fore they are studied at first, second semester physiology, patient care, community medicine, Anatomy, immunology, infectious. Basic clinical skills and Pathology.

Medical vocabulary including not just words but also their meaning, orthography, pronunciation, context and conjugation, is in the very essence of the process of learning a new medical language.

Medical vocabulary is the key to communication (Wilkins, D. 1972), also medical vocabulary allows to develop other English skills (Nation, P. 1994), and Nation, P. (1990) stated that the more words you know, the more you will learn.

medical students are tested on their general medical knowledge of some definitions of diseases. This question based on different meaning of words that includedsimilities between words in homonyms which divided into homophone and homograph especially in suffixes and prefixes. The main different between the most of words is words root The responses of medical students are accepted because they studies many different courses related to above issue

All languages have a large number of collocating words. A good medical dictionaries will help medical students to formulation medical English collocation

Question 3 Writing

The mean difference of question three was result shows that medical students face many different problems in medical English writing which divides into words

formation, spelling, medical abbreviations, medical terms, collocations, and punctuation marks. English language has special conventions for writing (namely, using alphabet standardized system of spelling and a set of punctuation marks). The vocabulary and the grammatical structure are used for speaking and writing are essentially the same even though writing is often more polished than speech. **Natilene, B. (2007. P**:164) defines "Academic writing style" as' 'another words this type of writing tends to be quite formal in tone. Also it doesn't have emotional colorings and any kinds of someone's own position in situations. In short this means that your essay or something else should avoid colloquial words and expressions".

4 .Conclusion

English for medical purposes, in this one of the most demanding areas to help medical students for understanding medical terminology. There are many difficulties face medical students in this areas and they are need effective teaching strategies for enhancing and supporting their knowledge of medical English vocabulary. To overcome these difficulties should make directly instructions for medical English syllabus designers and subject teachers because they are responsible to monitor medical students directly, to enable them to use medical terminology in real life professional situations. To help medical students to develop learning strategies of medical terminology is by taking advantage of the specific online lecture and improve grammar elements, use medical dictionaries to promote medical vocabulary uses, read medical book.

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