Developing medical English writing skills through the use of verb collocations

Hichem, A. Ghembaza [a1], University of Dr. Moulay Tahar – Saida, Algeria. ghembazah@yahoo.com
Hadjéra Chebta [b], University of Djilali Liabès – Sidi Bel Abbès, Algeria. h.chebta79@gmail.com

Abstract

Within the medical science context and after the new legislations and government instructions recently issued, the mastery of English language use has become one of the most important learning objectives within the tertiary education context. Yet, when it comes to pedagogic applications within English as a Medium of Instruction (EMI) context; a few questions are raised regarding the very content of the syllabus and relevant methodologies when approaching the teaching of Medical English. The present paper aims to shed light on the teaching of Medical English through the use of verb collocations. The paper displays the different steps and results of action research that targeted 2nd-year medical science students who were involved in medical English training and who sat for different tests within both summative and formative assessment orientations. The results show that the sample exhibits a relatively average level of collocational competence while their vocabulary knowledge tends to be inadequate translation activities. The researchers suggest the use of electronic corpora as a reliable technique that can help enhance students' collocational competence.

Keywords: Medical English; translation; verb collocations; writing skills.

---

* ADDRESS FOR CORRESPONDENCE: Hichem, A. Ghembaza, Affiliation, Address, City and Postcode, Country
E-mail address: ghembazah@yahoo.com

1. INTRODUCTION

The English language is one among other foreign languages that are taught in Algeria through different educational levels covering middle schools, secondary schools, and universities. In elementary schools, kids have just now begun to look forward to their first English sessions, which begin in the third year. However, because of its growing significance in both the professional and educational spheres, English has emerged as the foreign language that Algerians are most eager to acquire. In front of such growing interest and remarkable increase in motivation among individuals raises a polemic about the efficiency of the methods and approaches used in teaching English for specific purposes (ESP) at the university level. The debates over the aforementioned issue are becoming of great significance nowadays with the implementation of the English Medium of Instruction (EMI) project. The latter is becoming one of the new trends in tertiary education and is approved by most academicians and professionals who maintain that medical lecturers should acquire English language competencies to be able to instruct their students in medicine using medical English (Ghafar & Sawalmeh, 2023; Chan et al., 2022). However, it is important to note that English has evolved into the Lingua Franca for explaining fundamental ideas in a variety of disciplines, including medicine (Faraj, 2015; Deng et al., 2022).

As far as teaching medical English to students of medicine is concerned, some questions are raised about what to be taught to future doctors. Instructors tend to balance their syllabus content between general English and medical English, which is a bit complicated process as most students have restricted English language competence. Instructing students in English collocations within the medical context is a sample of the training program that is targeted by some practitioners for the development of students' medical writing skills. However, it is important to mention the very issue of medical vocabulary learning and its link with language proficiency in general and appropriate writing competencies in particular. It is also important to state that self-development among students is an aiding factor in writing skills (Al-Mwzaiji & Alzubi 2022; Wang et al., 2024). In this respect, it is worth pointing out the triangular relationship between vocabulary retention, verb collocations, and writing skills within the very same context of medical English.

1.1. Theoretical Framework

The present section delineates the theoretical background of medical English collocations. It provides some definitions and illustrations before highlighting the main literature related to previous studies about the topic in question.

1.1.1. What is a Collocation?

According to Richards and Schmidt (2002), collocation is defined as: "*how words are used together regularly. Collocation refers to the restrictions on how words can be used together, for example, which prepositions are used with particular verbs, or which verbs and nouns are used together*."

For example, in English the verb *perform* is used with *operation,* but not with *discussion:*

The doctor operated.
The committee held/had a discussion.
Perform collocates with the *operation,* and *hold* and *have* collocate with *discussion.*
High collocates with *probability,* but not with *chance:*
A high probability but *a good chance*

"Some collocations are fixed, or very strong, for example **make effort**, where no word other than *make* collocates with an *effort* to give the same meaning. Some collocations are more open, where several different words may be used to give a similar meaning, for example, **keep to / stick to the rules"** (McCarty & O'Dell, 2017)

Ghembaza, H.A. & Chebta, H. (2024). Developing medical English writing skills through the use of verb collocations. *Global Journal of Foreign Language Teaching 14*(2), 74-83. https://doi.org/10.18844/gjflt.v14i2.9225

1.1.2. Why is teaching and learning collocations necessary?

Worth mentioning that early in the 1960s, the process of learning and teaching collocations in the English language was given undivided attention given the importance of communicative competence development. In his report about the utility of collocations to teachers, Palmer (1966) states that:

> *"It is of utility to the teacher of English. It will tend to confirm his impression that it is not so much the words of English nor the grammar of English that make English difficult, but that that vague and undefined obstacle to progress in the learning of English consists for the most part in the existence of so many odd comings-together-of-words".*

A great deal of the related literature suggests that for non-native speakers of English to be fluent writers or speakers they should develop knowledge of English vocabulary and tightly linked to the latter is the mastery of collocations (Najafi & Talbinezhad, 2018). It is suggested that the gauge of L2 students' proficiency is knowledge of vocabulary because it is through knowing words and collocations that they can understand what is said and build up their speech or pieces of writing (ibid).

As far as appropriate language use is concerned, learning collocations is quite important as they help students to:

a) *"*Say or write something most naturally: Smoking is **strictly forbidden** is more natural than smoking is strongly forbidden.

b) Get alternative ways of saying something, which may be more colorful/expressive or more precise: Instead of repeating It was **very** cold and **very** dark, we can say It was **bitterly cold** and **pitch dark**.

c) Improve their style in writing: instead of saying poverty **causes crime**, you can say poverty **breeds crime**; instead of saying a **big meal** you can say a **substantial meal**." McCarty & O'Dell (2017)

d) Collocation is a relevant technique for enhancing students' vocabulary learning and thus improving their writing skills.

e) "Most naturally occurring languages, both spoken and written, consist of recurrent patterns, many of which are phraseological" (Altenberg 1998; Najafi & Talebinezhad 2018).

1.1.3. Why teaching collocations to medicine students?

Within the medical register, examples of collocations are many different and plenty. We can have for instance: " *medical aid, premature fetuses, blood tests, upset stomachs, admission to hospital, prescribed treatment, adjusted dosage;"* and many others (Vakhotskyi, 2014). Before delineating the importance of teaching collocations to medical students, it is worth pointing to the growing and vital role the English language is playing in the scientific domain. A lot if not all people involved in any kind of research activities should have recourse to English as it is the language through which information is presented through all types of media. As far as the medical context is concerned, the motivation behind the need for English proficiency is instrumentally sound. Not only do students of medicine need to understand the thorough piece of scientific knowledge that is presented to them in English written documents, but they should also be able to write and present orally their research works. Therefore, as stated by Ghafar & Sawalmeh (2023): *A barrier caused by language might harm the quality of medical treatment*. According to Miščin (2013), most language challenges are caused by a low collocational competence. Students find it quite difficult to formulate sentences or express themselves orally when their knowledge of English collocations is limited.

As far as the literature related to medical verb collocations is concerned, it is worth noting that Takač & Miščin (2013) undertook research work revolving around the assessment and analysis of collocational competence levels among non-native users of medical English. Their main objective was to devise an appropriate teaching methodology of medical English through the identification of the frequent ill uses of verb collocations among students. The results of their investigation point out that

collocations pause a relative problem when it comes to the use of medical English either within the receptive skills (listening and reading) or the productive ones (speaking and writing). Among the most significant deficiencies, in this respect, was the heavy dependence on L1 norms (negative transfer) and approximation.

Takač & Miščin (2013) also found a positive correlation between appropriate collocational competence and adequate exposure to medical English as fifth-year 5th students and doctors exhibit better knowledge of collocations in comparison to students of lower grades (first, second, and third-year students). The researchers, then, stressed the importance of sufficient exposure to medical English as a means to enhance the development of students' collocational competence.

In this respect, therefore, enhancing medical English spoken and written proficiency depends tremendously on helping students understand how different vocabularies are used within groups of words to sound quite natural and thus allow accurate meaning inference.

According to Najafi & Talbinezhad (2018), an appreciation of collocations will help medical students to:

 "1) use the words they know more accurately. They will make (not do) fewer mistakes;
 2) sound more natural when they speak and write. By saying, for example, "respond well to treatment", *rather than "react to treatment", you won't just be understood, you will sound like a fluent user of English;*
 3) vary your speech, helping avoid repetitions;"

2. METHOD AND MATERIALS

2.1. Participants

The researchers have undertaken a pilot study targeting twenty-five-year students at the Department of Medicine – University of Djilali Liabes – Sidi Bel Abbes.

2.2. Data collection tools

With the very objective of collecting data related to students' verb collocational competence and assessing the sample's ability to understand and use verb collocations in medical English, two different research tools were used:

- Classroom observation
- Written test

2.2.1 Classroom Observation

The choice of observational practice as a data collection instrument is motivated by the fact that observation may help the researcher obtain a large range of information related to student's behavior in the classroom.   The main objective of the observational practice was to collect data about students' involvement and motivation in classroom activities dealing with medical English in general and medical verb collocations, mainly *collocation forks,* in particular. Therefore, the sample of the present research (2nd year students of medical sciences – University of Sidi Bel Abbès – Algeria) took part in the study as the main target of observation during their regular classes in medical English.

The researchers used a structured observational grid that focused on the following items:

- "Students' oral discourse.
- Teacher's written discourse (on the whiteboard).
- Students' engagement and involvement in classroom events.
- A general observation about students' affective orientations about classroom instructions."

The main results of the observational practice point to an actual interest on the part of students who regularly volunteered to take part in conversational tasks and written ones. This shows clear

engagement and actual motivation on the part of students, which is a sign that most students have positive attitudes towards learning English in general and medical English in particular.

However, when it comes to students' oral discourse, some 65% of the sample exhibited humble control over their oral production. The latter was most of the time characterized by grammatical mistakes, pronunciation, and vocabulary problems.

2.2.2. Medical Verb Collocations Test

The written test aimed to assess the participants' collocational competence within a medical English context.

The test, which was taken from Miščin (2013), was used to assess students' collocational competence in medical English.

The written test in question consists of three main different tasks all of which revolve around the use of verb collocations within the very register of medical English:
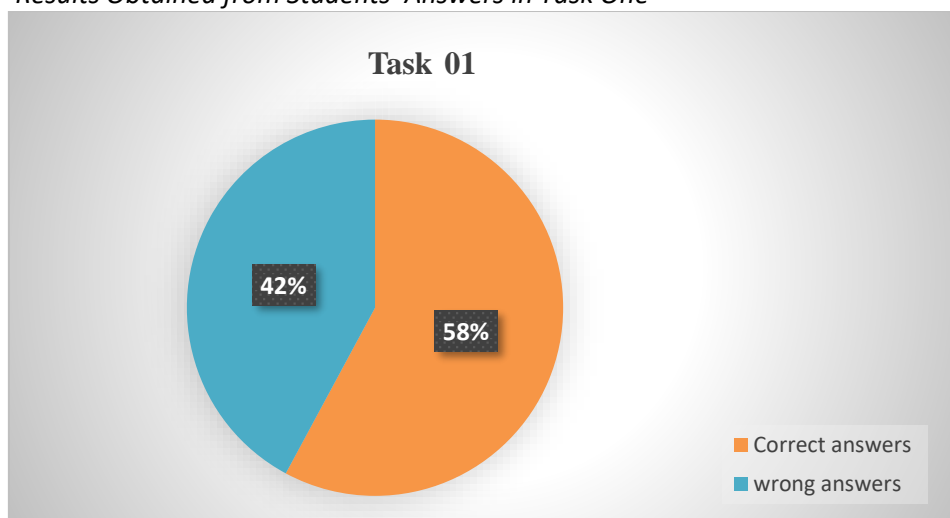
3 RESULTS

3.1. Task One

This task is a multiple-choice collocations activity. It contains 15 statements. The test takers were asked to choose the appropriate answer:

Circle the correct answer:
(1) She is _____ well to treatment.
(a) responding (b) answering (c) recovering
(2) He _____ a new kidney from his brother.
(a) had (b) received (c) obtained
(3) Playing football only _____ his knee injury.
(a) impaired (b) deteriorated (c) aggravated
(3) Antacids _____ relief more quickly than H2 blockers.
(a) give (b) offer (c) provide
(4) Respirators can _____ some risk for people with heart or lung ailments.
  (a) Represent (b) show (b) pose.

Figure 1
Results Obtained from Students' Answers in Task One

Ghembaza, H.A. & Chebta, H. (2024). Developing medical English writing skills through the use of verb collocations. *Global Journal of Foreign Language Teaching* 14(2), 74-83. https://doi.org/10.18844/gjflt.v14i2.9225

As displayed in figure 1 above, fifty-eight percent 58% of the participants provided correct answers, while forty-two percent 42% provided wrong answers.

3.2. Task two

In this task, the participant students were asked to provide the appropriate verbs to complete the collocational forms in fifteen 15 different statements:

Fill in the gaps using the appropriate verbs

"(1) A bedsore can _____ in hours and may take months to heal.

 (2) The ECG (electrocardiogram) is an important and sometimes central tool used to _____ the diagnosis of myocardial ischemia.

 (3) NSAIDs are often used to _____ headache pain.

 (4) If you experience a severe allergic reaction e.g. with breathing difficulty _____ medical attention urgently.

 (5) Tony Snow will _____ surgery on Monday to remove a small growth.

 (6) The task of a nurse is also to _____ a patient's temperature." (Miščin, 2013)

Figure 2

Results Obtained from Students' Answers in Task Two
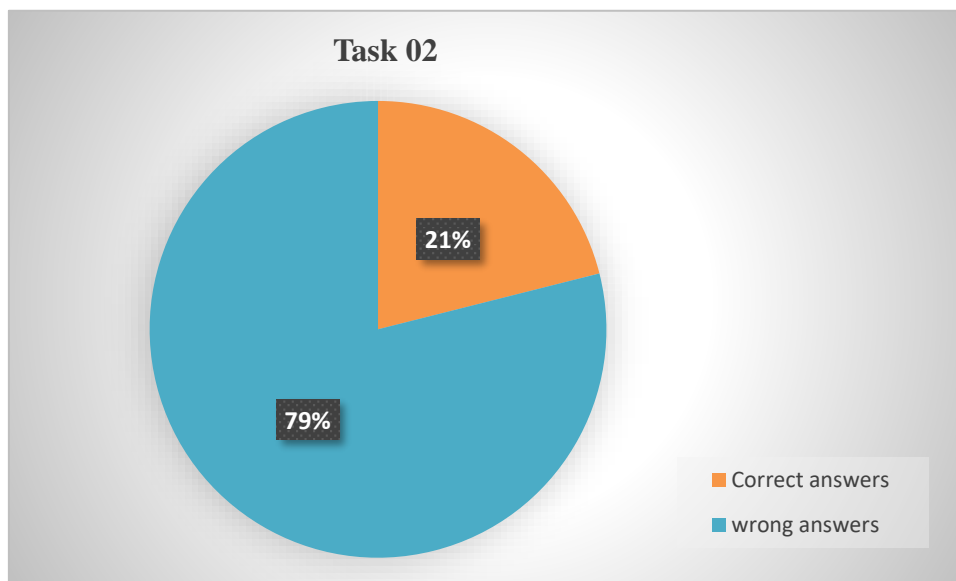
As displayed in figure 2 above, only twenty-one percent of 21% of the participant students offered correct answers. However, seventy-nine 79% provided wrong answers.
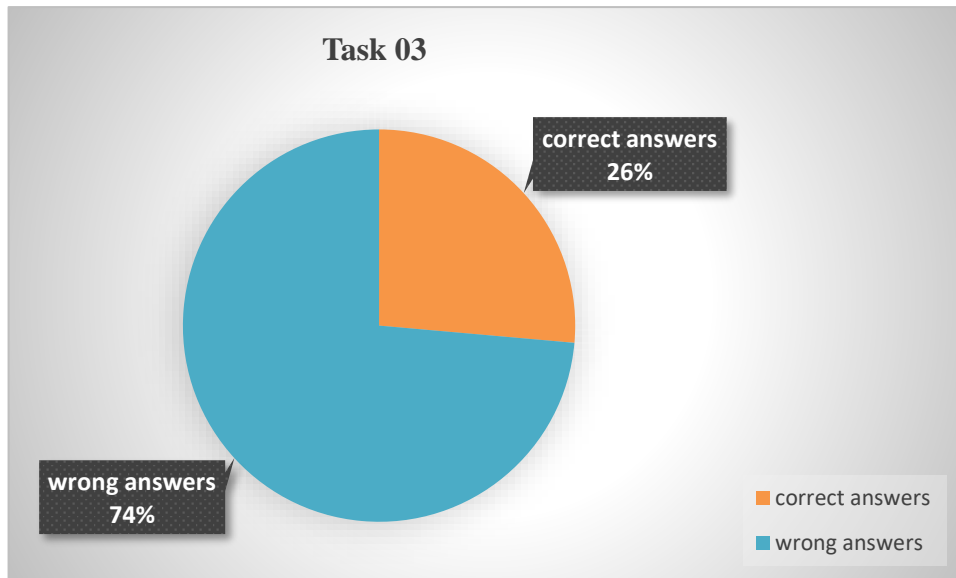
3.3. Task three

The last task differs from the two previous ones as it requires students to use more elaborate written production related to medical verb collocations. The participant students were asked to translate, from English to French, a set of statements containing medical verb collocations.

Translate the following sentences into French

(1) The victim regained consciousness after 2 months of coma.

(2) You should induce vomiting.

 (3) A person can quickly go into shock and die because of internal bleeding.

(4) Chemotherapy can sometimes extend survival to 8 months.

 (5) Deep breathing may produce pain. (ibid)

Ghembaza, H.A. & Chebta, H. (2024). Developing medical English writing skills through the use of verb collocations. *Global Journal of Foreign Language Teaching 14*(2), 74-83. https://doi.org/10.18844/gjflt.v14i2.9225

Figure 3
Results Obtained from Students' Answers in Task Three

As shown in figure 3 above, around twenty-six percent of 26% of the participating students provided appropriate translations, while seventy-four percent of 74% failed to provide correct translations of the statements.

The following table 1 displays the main results obtained from the written test:

Table 1
Results obtained from the written test

Tasks	Number of Correct answers	Percentage of Collocational Competence
Task One	217	57.86 %
Task Two	79	21.06 %
Task Three	33	26.4 %

Summary of the main results of the collocational test

• The results show that students' collocational competence is average level when propositions are offered (multiple choice).
• However, when it comes to recalling and retrieving the appropriate vocabulary to fill in the gaps, students' collocational abilities tend to be challenged. Their collocational competence in this respect proved to be low.
• The same remark about the translation task.

4. DISCUSSION

The results of the study show that the sample exhibits a relatively average level of collocational competence in English medical verbs. Yet, further analysis of the written test, particularly results

obtained from the second and the third tasks, show that lack of vocabulary knowledge of the basic medical terms is a direct cause of collocational problems in writing among students. Such deficiency was patently reflected through the fact that the sample found it quite difficult to retrieve the correct forms either within the filling the gaps task or the translation one. This suggests that the sample needs more training in medical verb collocations. It is worth referring, in this context, to Najafi Talebinezhad's (2018) findings which point out that for good vocabulary retention, instructing students in collocations is a prerequisite. Najafi & Talebinezhad's (2018) study proved that vocabulary is better learned through teaching collocations rather than through the traditional techniques covering synonyms, antonyms definitions, and L1 translation. In the present study, however, the problem is the reverse: lack of vocabulary knowledge hinders the appropriate use of collocations.

So, how just can we approach the teaching of medical English verb collocations like offer relief, pose risks, aggravate the injury, establish a diagnosis, perform an examination, carry out check-ups, etc to our students?

Empirical research, in this respect, proved the efficiency of electronic corpora integration in EFL teaching in general and the development of students' collocational competence in particular. Computer-stored real-world language data, encompassing both written and spoken forms, is known as an electronic corpus. The purpose of the saved data is to serve as reference databases for empirical research in the area of teaching and learning languages. According to Richards and Schmidt (2002), a corpus is:

"A collection of naturally occurring samples of language that have been collected and collated for easy access by researchers and materials developers who want to know how words and other linguistic items are used. A corpus may vary from a few sentences to a set of written texts or recordings. In language analysis, corpuses usually consist of a relatively large, planned collection of texts or parts of texts, stored and accessed by a computer."

Teachers can therefore select authentic material from a medical electronic corpus that they may find available in the British National Corpus (BNC), the Collins and Birmingham University International Language Database (COBUILD), The Cambridge International Corpus (CIC), etc., and provide their students with illustrations of how different verb collocations are used. According to Li (2017): "*the knowledge and use of corpora can help students raise their awareness of habitual collocational use and develop their collocational competence. This supports the positive role of direct corpus application in an EFL context"*. Yet, the problem with electronic corpora is that they are not easily accessible and most teachers at almost all language faculties have very limited access to them.

Worth noting, however, that the use of electronic corpora in EFL teaching in Algeria is given little attention. The lack of such important electronic pedagogical support globally tends to persist despite the noticeable development of information and communication technologies in general and digital learning in particular (Khojasteh et al., 2021; Harper et al., 2021). Therefore, more research works on the very issue of electronic corpora use and availability are to be undertaken to help teachers and students fully explore the utility of electronic corpora in not only the teaching of medical English verb collocations but the whole language features and functions as well.

5. CONCLUSION

The present study has examined the importance of teaching verb collocations to improve students' medical English writing skills. It has shed light on students' vocabulary knowledge and its link with verb collocations in a medical English context. The study has revealed that students find difficulties using verb collocations because of a relative lack of relevant prior knowledge of medical vocabulary. It has also shown that their relatively low collocational competence negatively influences their writing skills even when having recourse to translation into the second language: French, which is the present medium of medical instruction in Algerian tertiary education and hospitals as well.

Ghembaza, H.A. & Chebta, H. (2024). Developing medical English writing skills through the use of verb collocations. *Global Journal of Foreign Language Teaching 14*(2), 74-83. https://doi.org/10.18844/gjflt.v14i2.9225

The researchers pointed to the necessity of explicitly instructing medical English students in verb collocations rather than developing their linguistic competence through separate medical vocabulary retention. On the same line of thought, the present study highlights the utility of electronic corpora as reliable teaching resources that may enhance students' knowledge of medical verb collocations and eventually enhance their writing skills.

Conflict of Interest: The authors declare no conflict of interest.

Ethical Approval: The researchers conducted the present study following the local ethical rules and requirements. The participants gave full consent to participate in the pilot study, and no personal information about them was gathered nor was it shared publicly. The participants' identities were kept confidential.

REFERENCES

Al-Mwzaiji, K. N. A., & Alzubi, A. A. F. (2022). Online self-evaluation: the EFL writing skills in focus. *Asian-Pacific Journal of Second and Foreign Language Education*, *7*(1), 7. https://link.springer.com/article/10.1186/s40862-022-00135-8

Altenberg, B. (1998). Connectors and sentence openings in English and Swedish. *Language and Computers*, *24*, 115-144. https://brill.com/downloadpdf/book/9789004653665/B9789004653665_s009.pdf

Chan, S. M. H., Mamat, N. H., & Nadarajah, V. D. (2022). Mind your language: the importance of English language skills in an International Medical Programme (IMP). *BMC Medical Education*, *22*(1), 405. https://link.springer.com/article/10.1186/s12909-022-03481-w

Deng, J., Zhou, K., & Al-Shaibani, G. K. (2022). Medical English anxiety patterns among medical students in Sichuan, China. *Frontiers in Psychology*, *13*, 895117. https://www.frontiersin.org/articles/10.3389/fpsyg.2022.895117/full

Faraj, B. M. A. (2015). English for medical education in EFL context. *Journal of Teaching English for Specific and Academic Purposes*, *3*(1), 121-148. http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/233

Ghafar, Z. N., & Sawalmeh, M. H. (2023). The Importance of Teaching English for Medical Students in Kurdistan: A Critical Review. *Journal of English Language Teaching and Applied Linguistics*, *5*(1), 01-05. https://www.al-kindipublisher.com/index.php/jeltal/article/view/4729

Harper, D., Bowles, A. R., Amer, L., Pandža, N. B., & Linck, J. A. (2021). Improving outcomes for English learners through technology: A randomized controlled trial. *Aera Open*, *7*, 23328584211025528. https://journals.sagepub.com/doi/abs/10.1177/23328584211025528

Khojasteh, L., Hosseini, S. A., & Nasiri, E. (2021). The impact of mediated learning on the academic writing performance of medical students in flipped and traditional classrooms: Scaffolding techniques. *Research and Practice in Technology Enhanced Learning*, *16*(1), 17. https://link.springer.com/article/10.1186/s41039-021-00165-9

Li, S. (2017). Using corpora to develop learners' collocational competence. https://scholarspace.manoa.hawaii.edu/handle/10125/44625

McCarty, M. & O'Dell, F. (2017). *English Collocations in Use*. Cambridge: Cambridge University Press

Miščin, E. (2013). Verb collocations in medical English. *US-China Foreign Language*, *11*(8), 609-618. https://www.davidpublisher.com/Public/uploads/Contribute/552f675649f1b.pdf

Najafi, M., & Talebinezhad, M. R. (2018). The Impact of Teaching EFL Medical Vocabulary through Collocations on Vocabulary Retention of EFL Medical Students. *Advances in Language and Literary Studies*, *9*(5), 24-27. https://eric.ed.gov/?id=EJ1199040

Palmer, H. (1966). *Second Interim Report on English Collocations*. Kaitakusha: Tokyo.

Richards, J., & Schmidt, R. (2002). Longman dictionary of language teaching and applied linguistics. England: Pearson Education Limited.

Ghembaza, H.A. & Chebta, H. (2024). Developing medical English writing skills through the use of verb collocations. *Global Journal of Foreign Language Teaching 14*(2), 74-83. https://doi.org/10.18844/gjflt.v14i2.9225

Takač, V. P., & Miščin, E. (2013). Exploring the collocational competence of non-native users of medical English. *Jahr–European journal of bioethics*, *4*(1), 235-256. https://hrcak.srce.hr/ojs/index.php/jahr/article/view/16195

Vakhotskyi, M. (2014). Collocational competence of medical students in learning English as a foreign language. https://core.ac.uk/download/pdf/42975806.pdf

Wang, F., Geng, X., & Han, J. (2024). Chinese University EFL learners' English for General Academic Purposes: relationships between target needs and self-efficacy. *Humanities and Social Sciences Communications*, *11*(1), 1-9. https://www.nature.com/articles/s41599-024-02735-w