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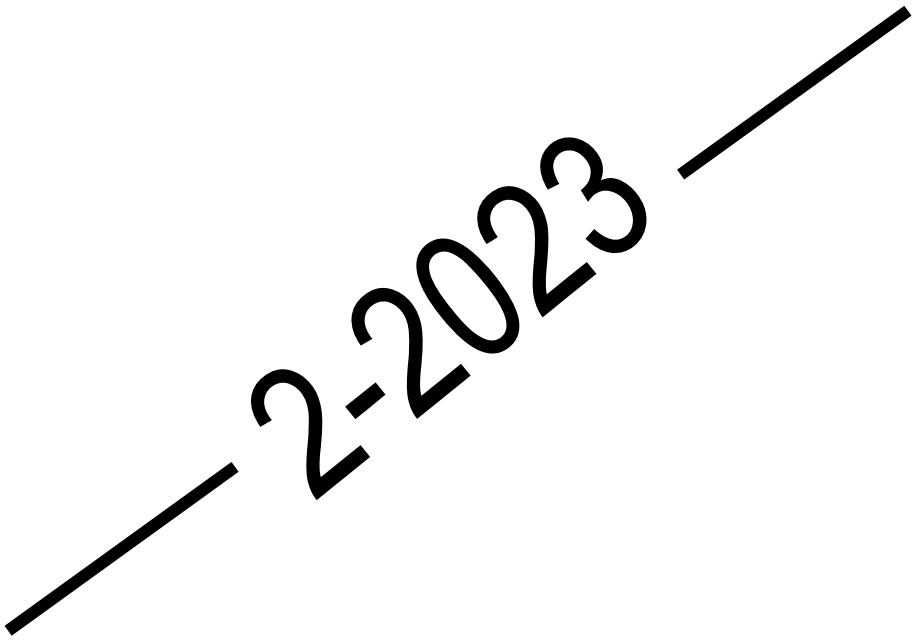

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BIRINCHI BOSQICH TALABALARIGA KLINIK LUG‘ATNI O‘RGATISH

ОБУЧЕНИЕ КЛИНИЧЕСКОЙ ЛЕКСИКИ СТУДЕНТОВ ПЕРВОГО КУРСА

TEACHING UNDERGRADUATE STUDENTS CLINICAL VOCABULARY

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Abstract

The purpose of the study, described in the article, was to implement and evaluate a method for teaching undergraduate student to use clinician vocabulary instruction during shared patient's cards reading. Undergraduate students enrolled in after semester 2 weeks practicum participated in the study. Prerecorded teaching modules may be an efficient, effective way to teach specific empirically supported practice to undergraduate student with clinic vocabulary. Future studies can examine the potential of these types of teaching modules for other outcomes or with groups of practicing clinic vocabulary.

Аннотация

Целью данного исследования, описанного в статье, было внедрить и оценить метод обучения студентов первого курса использованию лексики клинициста во время практика, в частности анализа истории болезни. В исследовании приняли участие студенты бакалавриата, проходящие после первого учебного семестра 2-недельную практику. В первом этапе исследовании наблюдалось эффективная реализация словарного запаса большинством студентов-бакалавров. На втором этапе исследовании для сравнения группа показало низкие результаты усвоения лексики клинициста. Предварительные учебные модули могут быть эффективным и действенным способом обучения студентов бакалавриата во время прохождения практики с использованием словаря клинициста. В будущих исследованиях можно изучить потенциал этих учебных модулей для других результатов или для групп, практикующих клиническую лексику.

Abstract

Ushbu tadqiqotning maqsadi bakalavriat talabalariga bemorlar kasallik tarixi birgalikda o‘qish paytida klinik lug‘atidan foydalanishni o‘rgatish usulini joriy etish va baholash edi. Tadqiqotga semestrdan keyin 2 haftalik amaliyot o‘tayotgan bakalavriat talabalari jalb etildi 1-tadqiqotda ko‘plab bakalavriat talabalari uchun klinika lug‘atining ta'siri bor edi. 2-tadqiqotda guruhlarni taqqoslash klinik lug‘atga fikr-mulohazalarning past ta'sirini ko‘rsatdi. Oldindan yozib olingan o‘quv modullari bakalavriat talabalariga klinik lug‘atdan foydalangan holda maxsus empiric qo‘llab-quvvatlanadigan amaliyotlarni o‘rgatishning samarali usuli bo‘lishi mumkin. Kelajakdagi tadqiqotlar ushbu o‘quv modullarining boshqa natijalar yoki klinik lug‘at bo‘yicha amaliyotchilar guruhlari uchun imkoniyatlarini o‘rganishi mumkin.

Key words: *Undergraduate students, clinic vocabulary, evidence-based practice*

Ключевые слова: *Студенты младших курсов, клинический словарный запас, доказательная практика*

Kalit so‘zlar: *Birinchi kurs talabalar, klinik lug‘at, dalillarga asoslangan amaliyot*

INTRODUCTION

An important challenge facing the discipline of medical sciences and linguistic ones is the application of research evidence in clinical practice. Substantial efforts have been devoted to bridging the gap between research and practice, including an emphasis on evidence-based practice. The clinical practice is a decision-making process that integrates scientific evidence, clinical expertise, and client preferences [1]. From the point of view of the medical sphere, the methods of teaching medical subjects in English and the sequence of the educational process are determined by achieving harmony with medical science and the exact system of knowledge [2]. For English learning medical students using practice in English speaking clinics, decisions about assessment and intervention are informed by evidence from research, as well as by clinical expertise and an understanding of the wants and needs of individual patient. Practicing students are aware of and acknowledge the importance of using clinic vocabulary. However, many report that important barriers, for example, a lack of professional lexicon, prevent them from using clinic vocabulary in clinical decision making [3]. In addition, learning clinic vocabulary indicated that they are more likely to make a decision based on previous experiences than on research evidence [4]. Expecting practicing clinic vocabulary to be responsible for incorporating the findings of research into practice may be insufficient to address the research-to-practice gap. Instead, we need to identify feasible and effective approaches to increase the use of research evidence in clinical

practice. Perona, K., Plante, E., & Adam, R highlight implementation science as an approach to address the gap between what we know from research and what we do in practice. In implementation science, researchers and practitioners directly examine the specific barriers and steps necessary to incorporate evidence from research into practice in real-world settings [5]. Several implementation science models exist to describe and guide implementation research [6]. In the discipline of medical sciences and linguistics, a growing interest in implementation English vocabulary has motivated recent special issues in journals [7]. Implementation science approaches have been highlighted in the development of phonological awareness interventions and in the delivery of caregiver-implemented shared-reading interventions [8,9].

In the current study, we focused on one component of clinic vocabulary during empirically supported practices to undergraduate student to increase their use in real-world settings. Here, we are using the term empirically supported practice to describe an assessment or intervention approach that has a strong body of research evidence to support its use. We hypothesized that one way to address the research-to-practice gap would be to teach clinic vocabulary to undergraduate students. McGregor, K. K., & Duff, D. argue persuasively that student clinicians need to experience clinic vocabulary (CV) not just in classroom assignments but also in clinical training, stating that “nothing can replicate the genuine experience and skills of integrating and applying CV directly in clinical practicum”[10]. Our goal was to teach undergraduate students with CV during empirically supported practice as part of practicum experiences to lay the foundation for later clinical practice that is evidence based.

The procedures and design of the current study were informed by findings of a previous related study [11]. In the study of Perrona K., 10 undergraduate students enrolled in a clinical practicum experience were asked to watch three prerecorded teaching modules that taught empirically supported practices for vocabulary instruction during reading with children.Outcomes were the use of taught strategies on lesson plans and during video-recorded reading book sessions. When participants watched teaching modules, moderate increases in the use of taught strategies were frequently observed. Of the taught strategies, participants were most successful in implementing taught strategies to select appropriate vocabulary targets. This study also had an unexpected finding: The majority of the students did not watch the prerecorded modules. Of the expected 30 viewings, participants watched just 14 teaching modules. This finding was surprising, given that these were high-achieving, engaged students who were selected to participate in the clinical practicum experience. In the current project, we made small adjustments to our procedures to improve engagement with the modules. First, teaching modules were included as part of the curriculum of the practicum experience, rather than a separate opportunity related to a research project. This decision was consistent with the goals of the practicum experience; all students, regardless of enrollment in the research project, were expected to learn for vocabulary instruction in English speaking clinics.

Second, we used the course management system to track students’ use of the teaching modules.

METHODS AND MATERIAL

To increase the use of clinic vocabulary during practice by first –year students, high-quality education and clinical training are necessary. Instructional technology, specifically teaching modules and patient’s card performance feedback, presents an efficient, low-cost opportunity for delivery of evidence-based content that is feasible for implementation. Explicit vocabulary instruction has a strong evidence base and can be readily incorporated into clinical training experiences. The purpose of the current project was to examine the effects of prerecorded teaching modules and patient’s card performance feedback on the use of clinical vocabulary during practice in clinics by first-year students. In Study 1, patient’s card analysis design study was used to determine if there was a functional relation between prerecorded teaching modules and the student clinician’s use of clinic vocabulary. In Study 2, an experimental design was used to determine if patient’s card analysis performance feedback, delivered in conjunction without prerecorded teaching modules, increased student use of clinic vocabulary.

All study procedures were approved by the university institutional review board.

All students who were enrolled in the clinical practicum were invited to participate in the research study; no additional inclusionary or exclusionary criteria were applied. Before the practicum began, the practice tutor and the investigators met with students, explained the purpose

of the study, and obtained consent for participation. All students who were enrolled in the practicum chose to participate. On a brief survey, all participants reported about no previous experiences reading with patients' cards. About half of the students reported some experience reading books with clinic vocabulary (e.g., Human Anatomy discipline), and one reported that they had taught clinic vocabulary. All participants indicated that they had completed some coursework related to English language.

A number of prerecorded teaching modules were organized for the purposes of this project. Each instructional module was prerecorded using PowerPoint slides and video links by the authors, and modules were between 25 and 35 min long. Brief one- to two-page handouts accompanied each module and included an outline of the module content, practice exercises, and key take-home messages. Modules and handouts were available via the MOODLE system of the institute. The teaching modules were developed and refined in an iterative process based on findings from previous studies and feedback from the students of senior courses. For example, in previous studies, participants indicated that PPts were helpful so the modules and handouts were revised to include additional illustrations and tables. In addition, observations of videotaped sessions indicated that some tutors struggled with keeping first-year students engaged in English speaking practice in the clinic. Thus, the content of the modules was revised to include simple strategies to increase student's engagement.

In the current study, a short, introductory module provided a brief overview of study procedures and presented general background on the importance of patient's card analysis. This module also served as an opportunity to familiarize students with how to access the teaching modules and the expectation that they would view the entire module. The modules delivered the instructional content for clinician vocabulary instruction during practice in with analysis of patient's cards.

The clinician vocabulary taught in the teaching modules were drawn from an extensive review and synthesis of the literature conducted for this and other related projects [13] as well as for presentations and professional development sessions conducted by the authors.

The modules focused on three topics: Module 1: Conversation with Clinic staff, Module 2: Doctor and Patient 3: Patient's Card. The foundation for the content was the model of robust vocabulary intervention, and research evidence was synthesized to identify empirically supported practices. In general, these modules were intentional, explicit instructional strategies that emphasized teaching for depth of understanding. To guide students in selecting words within the broad category, good choices for vocabulary targets were defined as words that were new, useful, and could be taught well in the context of patient's card analysis. For Module 2: Doctor and Patient, three professionally supported practice was identified: Use a patient-friendly definition, make connections with the disease and anamnesis, and use examples from the patient's life. For Module 3: Patient's Card, the following specific practices were taught: Use active engagement strategies, give opportunities to analysis the patient's card and tests, and give other meaningful response opportunities.

The modules were designed to maximize learning of participants and included information about the rationale for the practice, detailed procedures, and opportunities for active learning. In each module, a brief explanation of the rationale for a specific clinician's vocabulary (i.e., the "anamnesis") was followed by detailed procedures for implementing that practice. As an example, in the last module, the first few minutes provided an overview of the conditions in the clinic to express vocabulary explicitly. Then, the module explained specific components of clinician's vocabulary, including providing a patient-friendly definition, using the context, and sharing an example relevant to the patient's life. Each module included opportunities for participants to engage in active learning. For example, in the first instructional module, Choose Appropriate Words, the module and accompanying handout guided participants through the process of selecting vocabulary targets. At each step in the process, participants were given opportunities to work through the example on the accompanying handout. The clinical practicum took place in program affiliated with the institute Department of Foreign Languages.

RESULTS

The purpose of the single-case design study was to evaluate the effects of the teaching modules, with or with- out analysis of patient's card performance feedback, on use of vocabulary instruction during English speaking supported practice for by first year students. Using an online

calculator, data from each participant and each phase of intervention were entered. When an increasing baseline trend was present, a correction was applied to the calculation. Mean effect sizes and confidence intervals for each group and condition are provided in Table 1. High variability in baseline was observed for all participants. However, many participants had a high degree of overlap between baseline and intervention.

Table 1.

Effect sizes for the single-case design study

Outcomes	Only Modules	Without Modules	Feedback
1 Study	87%	65%	76%
2 Study	48%	58%	54%

Note: % is a percentage of efficiency on number of participants

DISCUSSION

The purpose of the two studies was to implement and evaluate an approach for teaching clinician vocabulary during English speaking clinic practice to undergraduate student. All participants watched prerecorded teaching modules that taught specific empirically supported strategies for learning vocabulary during analysis of patient's cards. Half of the participants worked with performance feedback online. The results of Study 1 provide some evidence of an effect of the intervention and an increase in use of taught strategies. In each condition, visual analyses indicated a functional relation for at least three participants, but effects were not consistent across participants. In Study 2, participants who did not watch teaching modules made errors in their selection of appropriate vocabulary words or in their use of explicit vocabulary strategies. Patterns of performance were inconsistent both within and across participants. However, even an incremental increase in use of empirically supported practices may have important implications for children's learning. Particularly for the outcomes of clinician's vocabulary explicitly and teaching with interaction, we can noticed an improvement. Participants rarely scored at the top of the range for either of these outcomes, indicating that undergraduate student were rarely able to use explicit and interactive learning strategies consistently for clinician's words in the practice. Student during practice are likely to need additional support to use strategies proficiently. Additional research that can inform refinements to efficient and effective ways to teach these practices is necessary.

One important strength of the current study is that we chose to measure how student as future clinicians could apply new knowledge and skills when working with patients in real-world settings. As teachers and supervisors, we have frequently experienced that student practicing in English speaking clinic often have difficulty transferring what they know into what they do. By measuring what student could do in an authentic, practical setting, the findings of the current study provide insight into how linguistically supported practice might best be taught to improve clinical vocabulary.

The second study was that student clinicians did not watch the teaching modules. Changes to procedures in the current study appeared to address this problem; the course management system report in the MOODLE platform indicated that not all participants watched all modules. Of course, this report is not an indication that students were truly engaged with the content. When instructional technology is incorporated into clinical practicum experiences, careful decisions will need to be made about ways to promote student engagement.

CONCLUSION

Young B.J. describes the potential of implementation science to address the gap between what we know from research and what we do in practice[12]. In the current study, we applied an implementation science frame work to examine a method to learn clinician's vocabulary to first-year student during practice in the English-speaking clinic as one approach to bridge that gap. Findings from this study suggest that prerecorded teaching modules may be an effective way to teach targeted clinician's vocabulary to undergraduate student. Analysis of patient's card feedback did not appear to provide a substantial advantage for implementation of the learned strategies. Additional research can examine the use of similar approaches to teach medical vocabulary to undergraduate students in the English-speaking clinic.

The findings of this study highlight several important directions for future research. One, the use of instructional technology, specifically teaching modules and feedback in analysis of patient's cards, was effective in increasing use of the specifically learned clinician's vocabulary during

English speaking clinic practice. Future studies can examine the use of this approach to teach empirically supported practices in other areas of instruction and intervention. In this study, the outcome of interest was the use of clinician's vocabulary by undergraduate students. In future studies, it would be important to examine the ways in which the use of those practices relates to English specific purposes learning.

REFERENCES

1. Buranova D.D. "To teach or not to teach English for medical students" Psychology and education(2021) 58(3), p.907 (//Учить или не учить английскому языку медицинских сутдентов// Tibbiyot talabalari uchun ingliz tilini o'rgatish yoki o'rgatmaslik)
2. Golinkoff, R. M., De Villiers, J. G., Hirsh-Pasek, K., Iglesias, A.,Wilson, M. S., Morini, G., &Brezack, N. (2017). User's manual for the Quick Interactive Language Screener (QUILS): A measure of vocabulary, syntax, and language acquisition skills in young children. Brookes.(// Измерение словарного запаса, синтаксиса и навыков владения языком у детей младшего возраста// Yosh bolalarda lug'at, sintaksis va tilni o'zlashtirish ko'nikmalarining o'lchovi)
3. Gordon, K. R. (2020). The advantages of retrieval-based and spaced practice: Implications for word learning in clinical and educational contexts. Language, Speech, and Hearing Services in Schools, 51(4), 1–11. https://doi.org/10.1044/2020_LSHSS-19i-00001 (//Преимущества практики, основанной на извлечении информации, и интервальной практики: Последствия для изучения слов в клинических и образовательных контекстах// Qidiruvga asoslangan va intervalgacha amaliyotning afzalliklari: Klinik va ta'lim kontekstida so'zlarni o'rganishga ta'siri)
4. Johnson, G., Gersten, R., &Carnine, D. (1987). Effects of instructional design variables on vocabulary acquisition of LD students: A study of computer-assisted instruction. Journal of Learning Disabilities, 20(4), 206–213. (//Влияние переменных учебного дизайна на усвоение лексики студентами с языковым барьером// Til to'sig'i talabalrning so'z boyligini o'zlashtirishga o'quv dizayni o'zgaruvchilar ta'sir)
5. Maslova A.M. Guide book of English language for medical high schools, M.2018(//Справочник по английскому языку для медицинских вузов// Tibbiyot oliy ta'lim muassasasilari uchun ingliz tili bo'yicha qo'llanma)
6. Maynard, K. L., Pullen, P. C., & Coyne, M. D. (2010). Teaching vocabulary to first-grade students through repeated shared storybook reading: A comparison of rich and basic instruction to incidental exposure. Literacy Research and Instruction, 49(3), 209–242. https://doi.org/10.1080/19388070902943245 (//Обучение лексике первокурсников через многократное совместное чтение рассказов// Birinchi kurs talabalariga hikoyalar kitobini takroriy o'qish orqali lug'atni o'rgatish)
7. McGregor, K. K., & Duff, D. (2015). Promoting diverse and deep vocabulary development. In T. Ukrainetz (Ed.), School-age language intervention: Evidence-based practices (pp. 247–278). Pro-Ed. (//Содействие развитию разнообразного и глубокого словарного запаса// Turli va chuqur so'z boyligini rivojlantirishga yordam berish)
8. Nowicki, B. L., Sullivan-Watts, B., Shim, M. K., Young, B., &Pockalny, R. (2013). Factors influencing science content accuracy in elementary inquiry science lessons. Research in Science Education, 43(3), 1135–1154. https://doi.org/10.1007/s11165- 012-9303-4 (//Факторы, влияющие на точность научного содержания на уроках начальной школы/ Boshlang'ich so'rov tabiatshunoslik darslarida fan mazmunining aniqligiga ta'sir qiluvchi omillar)
9. Perona, K., Plante, E., & Adam, R. (2005). Diagnostic accuracy of the Structured Photographic Expressive Language Test–Third Edition(SPELT-3). Language, Speech, and Hearing Services in Schools,36(2), 103–115. https://doi.org/10.1044/0161-1461(2005/010) (//Диагностическая точность структурированного фотографического теста экспрессивного языка// Strukturaviy fotografik ekspressiv til testining diagnostik aniqligi)
10. Sharipova F.I. "Learn and work" Study book for the 1st course students. T., 2022 (//Учись и работай//O'qi va ishla)
11. Steele, S. C. (2020). Vocabulary intervention: A national survey of school-based speech language pathologists. Communication Disorders Quarterly, 41(3), 151–161. https://doi.org/10.1177/ 1525740119827008 (//Словарное вмешательство// Lug'atga aralashuv)
12. Young, B. J., & Lee, S. K. (2005). The effects of a kit-based science curriculum and intensive science professional development on elementary student science achievement. Journal of Science Education and Technology, 14(5–6), 471–481. https://doi.org/10.1007/s10956-005-0222-2 (// Влияние учебной программы по естественным наукам на основе комплектов и интенсивного профессионального развития в области естественных наук на успеваемость студентов первых курсов по естественным наукам// To'plamga asoslangan fan o'quv dasturi va intensiv fan kasbiy rivojlanishining boshlang'ich kurs talabalarning fan yutuqlariga ta'siri)
13. Williams, K. T. (2007). Expressive Vocabulary Test–Second Edition. Pearson. https://doi.org/10.1037/t15094-000 (//Тест по экспрессивной лексике// Ekspressiv lug'at testi)