

Chinese nursing postgraduates' views on implementing outcome-oriented academic English course: a descriptive study[†]



Original Article

Jing-Jing Wang*, Qin Chen, Yan-Dan Duan, Bei-Lei Lin, Shan-Shan Wang, Yong-Xia Mei, Pan-Pan Wang

School of Nursing & Health, Zhengzhou University, Zhengzhou, Henan 450007, China

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Abstract: Background: According to previous studies on professional English course teaching, the evaluation of course teaching was positive, but the vast majorities focus on medical English literature reading, professional English vocabulary, and professional English translation. As an alternative, the course design based on academic learning needs under the outcome-oriented education/model emphasizes the improvement of students' comprehensive ability in oral expression, literature reading, writing, and academic communication.

Objectives: The objective of this study was to analyze nursing postgraduates' opinions on learning the outcome-oriented academic English course.

Methods: This is a cross-sectional descriptive study. A total of 150 first-year nursing postgraduates enrolled in the "Academic Professional English for Nursing Postgraduates" course. After completing the course learning, students scanned QR codes generated by the online questionnaire and completed it anonymously within 48 h.

Results: The students who participated in this course strongly believed that it "helped them strengthen their English speakability" (4.8 points), "made them more confident to participate in international academic conferences and exchanges in the future" (4.8 points), and "helped them apply English more in the nursing professional field in the future" (4.7 points).

Conclusions: The implementation of outcome-oriented course teaching helps students to understand the research of foreign scholars and effectively express their own research content with English as a tool. It motivates them to continuously use English for professional and academic communication.

Keywords: *course outcome • curriculum • English for specific purpose • outcome-oriented model • postgraduate nursing education • teaching*

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1. Introduction

The cultivation of research-based nursing talents is the fundamental guarantee for both clinical nursing practice and the quality of clinical nursing. It is the efficient way to promote the formation of scientific solutions to

clinical practice problems, and the formation of nursing research team, better practice, and transformation of research achievements promote the development of nursing discipline. Thus, under the background of

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*Corresponding author.

E-mail: colorfulsunwj@hotmail.com (J. -J. Wang).

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globalization, the internationalization of postgraduate education is increasingly important. There are various forms of internationalization of nursing postgraduate education, mainly through teaching projects including student exchange programs, joint courses, students' research or study abroad, internationalization of curriculum setting, communication between teachers and students with international background, etc., or scientific research projects containing joint research projects, international research centers, international conferences and seminars, publication of articles and papers internationally, etc.^{1,2} However, nursing postgraduates are required to have the ability of international academic exchange in whatever form.³ Therefore, as an essential English course in postgraduate course teaching as to serve both nursing postgraduates' academic ability training and their professional knowledge learning, it is inevitable to adapt to the globalization to cultivate postgraduate students' learning and ability, as well as the ability of communication with international academic peers.

English for specific purpose (ESP) theory has attracted extensive attention from Chinese scholars, and some Chinese universities have set up medical English courses for postgraduates, most of which are based on ESP theory and focus on medical English literature reading, professional English vocabulary, and translation,^{4,5} which makes it difficult to improve the comprehensive communication ability of postgraduates. However, results from a survey suggested that listening and speaking for professional needs of medical students helped learn English.⁶ Additionally, scholars argued that the implementation of designed ESP courses for nursing postgraduates should focus on strengthening the understanding of disciplinary knowledge in nursing science and enhancing international academic communication ability through English language acquisition, for the academic learning needs of students.^{7,8} A curriculum implementation study on "academic English serves nursing postgraduates" confirmed that students' abilities in international academic exchanges can be improved through English language acquisition, task-driven teaching by organizing learning, and a cooperative learning group, of course with the flipped-classroom teaching mode.⁸ However, the lack of effective assessment and feedback makes it difficult for students to make clear their own gap after learning the course.

The outcome-based education (OBE) model is a design approach that organizes an educational system around the basic goals that students want to achieve from their learning experience and encourages all of them to achieve those essential outcomes.⁹ In this approach, course planning starts with defining learning outcomes, followed by a backward design of

learning tasks and assessments to foster and assess the intended learning outcome.¹⁰ During this process, teachers focus on devising learning experiences that are likely to achieve the desired outcomes and reinforce a systematic course design approach that prioritizes the constructive alignment between learning outcomes, tasks, and assessments.¹¹ The OBE model includes the following 3 components: (1) a statement of the targeted learning outcomes; (2) an analysis of the learning context (e.g., learner characteristics, time constraints, and class size); and (3) a sequence of learning tasks with a pedagogical justification.⁹

Educators also recognize the need to demonstrate that their teaching programs can meet the needs of different constituents. The OBE model enables teachers to design a course and test its effectiveness in a principled manner. Comparable outcomes are essential to OBE planning since the process keeps emphasizing not only the understanding of the desired, expected, and actual outcomes of teaching programs but also a comparison.^{12,13} As a result, these outcomes need to be stated in the same observable and/or measurable terms.¹⁰ Learning outcomes and assessment are incorporated as a means to get an improvement. This specific approach shares traits with crossover learning, assessment for learning, learning to learn, self-learning, adaptive teaching, action learning and flipped-classroom.^{12,14} Thus, the OBE model conceptualizes course design as a goal-oriented process of crafting and strategizing the use of design patterns to address various learning outcomes to conduct pattern-informed learning analytics to guide teaching and redesigning.¹¹ It is an efficient way to bridge the gap between theory and practice.

Considering the needs of nursing postgraduates in improving the ability of international academic exchange as there is no research evidence for the implementation of the OBE model for nursing postgraduate course teaching, we consider it useful to design such a teaching plan using effective course implementation.

To summarize, the aim of this study is to measure the satisfaction of nursing postgraduates with the outcome-oriented course teaching aimed at helping them in their course learning process, as well as assess its impact on postgraduates' studying.

2. Methods

2.1. Study design and sample selection

A descriptive, transversal, quantitative interventional study was conducted among postgraduate nursing students from Zhengzhou University. An intentional sampling survey was made among 150 students enrolled

in the “Academic English for Nursing Postgraduates” course, which is set as a selective course in the full-time postgraduation training program from 2019 to 2021 (39 enrolled in 2018, 42 enrolled in 2019, and 69 enrolled in 2020). All students were at the same level and in the first year of the postgraduate nursing degree.

A brief learning needs survey was conducted 1 month after students enrolled in the nursing postgraduate program. Among all the surveyed students’ learning needs, the top ones of students’ learning goals were “to understand English academic lectures” (148 students, 98.67%), “to give oral presentations in English at international conferences” (96 students, 64.00%), “to publish academic papers in international journals” (87 students, 58.00%), “to search and read English professional literature (85 students, 56.67%),” and “to communicate with nursing peers orally” (79 students, 52.67%).

2.2. Design and implementation of the course teaching for postgraduate nursing students

A learning needs-oriented course syllabus was developed by the teaching team, which consisted of 7 teaching staffs. This course was carried out within 9 weeks in the second semester of the first academic year, with a total 32 academic hours. The teaching objective is to comprehensively improve students’ oral expression, literature reading, writing ability, and participation in academic activities. The students have completed core courses including nursing theory (32 h), nursing research methods I (quantitative research methods, 32 h), and evidence-based nursing (32 h) in the previous semester. Students were learning nursing research methods II (qualitative research methods, 16 h) while attending this course. They were able to check with the course schedule (Table 1) at the beginning of the semester.

In order to realize the purpose of “English application ability serves nursing academic research and professional communication” and ensure a more efficient course teaching, published nursing research papers shown as examples in course teaching are all from the “paper library” composed of 30 papers indexed in Science Citation Index (SCI) selected by the course teaching team.

The implementation of the course used case teaching and group-learning mode. For the teaching content of literature reading, the structure of scientific research paper, and the writing strategies of each part, teachers all used the content in papers as teaching cases that are from the “paper library”. Students received these papers at the beginning of the semester and reviewed them according to the course schedule, as required by the teachers. In the classroom teaching process, students need to discuss in groups according to the questions raised by the teacher. Usually, after students participated in these classroom learning activities, they need to share their ideas or the results of the group discussion orally to all students outside the group. Additionally, there were also some written tasks that need to be completed independently.

2.3. Course assessment and composition of scores

Participants will be graded according to the course learning tasks they have completed. The total 100 marks were graded based on attendant rate (10%), research paper reading (10%), abstract writing (20%), poster production (20%), and simulated oral presentation of international academic conference (40%). The requirements set and criteria for each assessment task are described in Table 2. Intensive reading notes, abstract writing of research papers, and poster production assigned according to the main content of the lecture are all tasks that students should be completed after class. After reviewing these tasks, teachers gave feedback

Week	Contents	Academic hours
1	Course introduction: overview of research and thesis writing	2
2	Reading skills of English research papers for nursing major	4
3	Core writing skills and training: title and abstract	4
4	Core writing skills and training: introduction, method and result	4
5	Core writing skills and training: discussion, conclusion and references	4
6	Core writing skills and training: a workshop	4
7	Introduction, submission and academic communication skills of major international journals in nursing	4
8	Communication skills for international conference: oral presentation and PPT production	4
9	Communication skills for international conference: poster making and on-site communication	2

Table 1. Schedule for academic English for nursing postgraduates.

for students to think and for their further independent practice, laying a foundation for learning the follow-up course content. In week 10, the week following the end of the course, 4 groups of students completed their simulated oral presentations of international conference in 15 min and answered questions that was rated as consuming extra 5 min. Questions were raised about research methods used in the research paper presented by students, statistical methods, presentation of results, discussion surrounding the results, etc. Questions were also asked about students' perceptions of the implementation process of the presented research paper and contents that are still need to be improved in the writing of the reported paper. Each group has three raters from the teaching team and faculties invited from the school with good English reading and writing skills as well as experience in attending international conferences. They evaluate and grade the students' statements reflectively. The average score of the three raters would be recorded as students' final scores for this assessment

task. Papers used in the oral presentation are published SCI papers selected by the students themselves. The papers and students' presentation Powerpoint (PPT) were sent to the raters 2 weeks before the presentational assessment so that the raters had enough time 2 preview the papers and PPT contents in advance.

2.4. Study variables and data collection

The study data were collected through an online questionnaire creator. Students scanned the Quick Response (QR) code generated by the online questionnaire with their mobile phones and completed it anonymously within 48 h after the simulated oral report assessment. Each respondent is only allowed to fill in the online questionnaire once.

The sociodemographic variables "sex" and "age" were collected. As outcome variables, responses to questions were assessed on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree) as shown in Table 3.

Item (total score, %)	Task dispatch time/commit time	Task requirements	Evaluation criteria
Attendant rate (10)	—	Fully attend in this course	1 point will be deducted for absence in 1 course session; last 1 score for attending in the simulated oral report
Research paper reading (10)	Week 2/week 6	Based on a given research paper: briefly explain the purpose of the research topic, research methodology, statistical methods, outcomes, findings, and related researches worthy of further exploring.	The completeness and validity of the purpose of the research topic (1%), research methodology (2%), statistical methods (2%), outcomes (2%), findings (2%), and related research studies worthy of further exploring (1%)
Abstract writing (20)	Week 3/week 7	Based on a given research paper: write out objectives, methods, results, conclusions	Each of the 4 parts scored 5% and is graded for content integrity and grammatical expression
Poster production (20)	Week 1/week 9	Develop a given research paper into a poster	Scores were given based on typeset layout (4%), detailed information distribution (4%), information accuracy (4%), readability (4%), and artistic creativity (4%)
Simulated oral report of international academic conference (40)	Week 1/week 10	Students selected 1 research paper from 10	Scores were given from PPT production quality (10), accuracy of paper content (10), oral expression (10), and responses to questions raised by raters (10)

Table 2. Assessment of academic English for nursing postgraduates.

Item	Mean score
The course design and implementation help to strengthen my ability to use English	4.8
This course can help me improve the efficiency of reading English literature	4.7
This course helps me improve my ability to write English research papers and reports	4.6
Learning this course confers me more confidence to participate in international academic conferences and exchanges in the future	4.8
The course content and teaching methods help me pass the course assessment	4.8
I really enjoy learning this course	4.5
Learning this course help me apply English more in the nursing professional field in the future	4.7

Note: 1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; 5 = strongly agree.

Table 3. Mean scores for the questionnaire items.

3. Results

A total of 150 students participated in this course and completed the questionnaire. There are 145 female students and 5 male students, with an average age of 23.6 years old. The average scores of the course assessment, attendant rate, research paper reading, abstract writing, poster production, and simulated oral report of international academic conference were 83.11, 10%, 6.45, 16.58, 16.65, and 33.57, respectively. The answers to all questions showed an average score of ≥ 4.5 (Table 3). The responses with the highest score (4.8 in each case) were “the course design and implementation strengthen my ability to use English,” “learning this course confers me more confidence to participate in international academic conferences and exchanges in the future,” and “the course content and teaching methods help me pass the course assessment.”

4. Discussion

This paper aimed to analyze the views of Chinese nursing postgraduates on the implementation of the academic English course. To our knowledge, the outcome-oriented model has not been employed in nursing postgraduates' course teaching in all Chinese universities. According to the students, this teaching model helps them understand the research of foreign scholars and effectively express their own research content with English as a second language. It is worth to continuously develop it as a useful complement to the core curriculum of nursing postgraduate education.

The efficient course design and course implementation process make students feel that learning objectives and learning tasks are clearer, and the feedback of learning evaluations is conducive to their own substantive ability of reading, writing, and expressing with English, in line with the findings of the previous studies on the use of the OBE model.^{15–17}

Although students' opinions and reported experiences are conducive to other modes of nursing professional course implementation, all previous reports in this area have described course implementation on sets of on reading and writing strategies for nursing research reports.^{5,8} The course design and implementation in this study pays more attention to students' needs and their ability to efficiently read literature, write research reports, and ultimately share academic research results. Academic research sharing includes not only publishing in international journals but also presenting the findings at international academic exchange conferences, so as to facilitate more exchanges in professional research experience. These are expected

competences that are highly important for nursing postgraduates.^{8,18} A previous study presented that medical students needed communicative skills and strategies for reading English journal articles to finish their studies for academic needs of their learning English.⁶ In our study, the designed learning content of literature reading (course contents include strategies for literature reading, effectively selecting papers for reading, intensive reading for designing research program or writing research protocol, etc., setting of teaching contents and teaching method were different from previous study),⁵ research report writing and task feedback all ultimately serve international academic exchange. Combined with the assessment activity of simulating oral presentation at the end of the course, the training aims to improve nursing postgraduates' integrative competence of international academic exchange in English. Furthermore, as after-class tasks, the workload of intensive reading notes of the research paper, abstract writing, poster making, and preparing PPT slides for simulating the oral report of the academic conference were not too heavy for nursing postgraduates.

Since it is difficult for first-year nursing postgraduates to write an academic research paper, we did not set this as the unified requirement of the course to all students participated in this course. In the course teaching content of literature reading, thesis writing, and the final simulating oral presentation assessment activity, selected published research papers were used not only by the teaching team to improve teachers' efficiency in course teaching preparation and teaching example analysis in class but also for the students to formulate a PPT content for simulating oral presentation so as to practice and improve their ability to communicate in academic conferences.

4.1. Other implications of developing the course

While the tailored course implementation of the OBE model can effectively deal with professional academic exchanges needs of postgraduate students, it also requests higher quality of the teaching team. Teachers' ability to control in-class teaching and to express the academic content of nursing in English are important factors that affect students' learning outcome. The teachers also need to spend more time to review the students' submitted tasks and give feedback. In preparation for the simulated oral report of international academic conference, teachers should read the research papers and preview PPT slides that student are going to present in the simulated oral report carefully in advance. In the face of the growing capacity of postgraduate education, these problems will become obstacles to the sustainable development of the practicing OBE model.¹⁹ Therefore,

more efficient evaluation approaches or mutual evaluation among students should be developed.

4.2. Study limitations

The application of the OBE model in nursing academic English course for nursing postgraduates is a new attempt of effective postgraduate teaching practice, which provides a new idea for an efficient design of nursing postgraduate courses. However, it is conducted only among a limited number of postgraduates from 1 educational institution without a randomized sample selecting process. Before and after the implementation of the course teaching, the learning competitiveness of nursing graduate students can be evaluated, such as indicative critical thinking, so as to promote course development and further generalization.

5. Conclusions

According to the nursing postgraduates consulted in this study, the outcome-oriented course teaching implementation is very helpful to meet students' learning needs and allows them to understand the research of foreign scholars and effectively express their own research content with English. Moreover, it motivates

them to continue the use of English for professional and academic communication from the overall feedback of course learning evaluation. These competencies that nursing postgraduates obtained from this course will accompany them into their future nursing practice and will potentially affect the quality of nursing practice and the sustainable development of nursing service. In short, this kind of course implementation model is conducive to effective learning and worthy of continuous development.

Author contributions

All the authors contributed to the design, teaching implementation, data collection, data analysis, and manuscript writing and approved the final version of the manuscript.

Ethical approval

Ethical issues are not involved in this paper.

Conflict of interest

All contributing authors declare no conflicts of interest.

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