

A NEEDS ANALYSIS OF ENGLISH FOR INPATIENT NURSES: IMPLICATIONS FOR ESP SYLLABUS DESIGN

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ABSTRACT

The English language plays a critical role in the global hospital setting, where nursing professionals must communicate with foreign patients and international medical staff and understand the English-language hospital information system (HIS). However, existing English-language training programs may not fully meet the specific needs of nurses in their professional work settings. This situation highlights the need to develop an English for Specific Purposes (ESP) syllabus supported by a Needs Analysis (NA). The purpose of this study is to examine the professional English needs of inpatient nurses working at an international hospital environment through a comprehensive Needs Analysis and to develop an English for Specific Purposes (ESP) syllabus to bridge the gap between nurses' English proficiency and the English demands of the workplace. The research design of this study adopts a qualitative-dominant approach, supported by a combination of limited quantitative data from the Target Situation Analysis (TSA) and the Present Situation Analysis (PSA). The data for this study were collected from experienced nurses through questionnaires, semi-structured interviews, document analysis of the hospital information system, and audio recordings of nurse-patient interactions. The findings show a clear gap between the level of English proficiency required in the clinical environment and the competence currently exhibited by nurses. The TSA findings indicate that nurses are expected to accurately read and interpret HIS instructional texts, comprehend medical terminology, and communicate effectively with foreign patients. By contrast, the PSA findings indicate that approximately 60% of nurses are unable to understand English-language instructional texts and rely on translation tools such as Google Translate, which may result in incorrect system entries and comprehension issues. Moreover, nurses also have difficulty communicating with patients due to limited vocabulary and low confidence. Therefore, based on the NA, this study suggests a task-based ESP syllabus comprising 7 sessions, starting with reading accuracy on HIS texts and medical terminology, and then incorporating speaking skills in nurse-patient interactions. This study provides evidence for the importance of NA in ESP and offers valuable suggestions for designing English programs that meet the needs of healthcare professionals in the workplace.

Keywords: Needs Analysis; ESP; Inpatient Nurse; TSA; Hospital Information System

ABSTRAK

Bahasa Inggris memiliki peranan penting dalam lingkungan rumah sakit berstandar global di mana tenaga keperawatan dituntut untuk mampu berkomunikasi dengan pasien asing dan tenaga medis internasional, serta memahami Hospital Information System (HIS) berbasis bahasa Inggris. Namun, program pelatihan Bahasa Inggris yang ada saat ini belum sepenuhnya memenuhi kebutuhan spesifik perawat dalam menjalankan tugas profesional sehari-hari. Oleh karena itu, kondisi ini menunjukkan perlunya pengembangan silabus English for Specific Purposes (ESP) yang didukung oleh Needs Analysis (NA). Tujuan penelitian ini adalah untuk mengkaji kebutuhan Bahasa Inggris perawat rawat inap profesional yang bekerja di sebuah rumah sakit bertaraf internasional melalui Needs Analysis yang komprehensif, serta mengembangkan silabus English for Specific Purposes (ESP) guna menjembatani kesenjangan antara tingkat kemampuan Bahasa Inggris perawat dan tuntutan penggunaan Bahasa Inggris di tempat kerja. Metode yang digunakan dalam penelitian ini adalah pendekatan kualitatif yang dominan dengan dukungan data kuantitatif terbatas dari Target Situation Analysis (TSA) dan Present Situation Analysis (PSA). Data penelitian dikumpulkan dari perawat berpengalaman melalui kuesioner, wawancara semi-terstruktur, analisis dokumen dari Hospital Information System (HIS), serta rekaman audio interaksi antara perawat dan pasien. Hasil penelitian menunjukkan adanya kesenjangan yang jelas antara tingkat kemampuan bahasa Inggris yang dibutuhkan dalam lingkungan kerja dan kemampuan bahasa Inggris yang dimiliki oleh perawat saat ini. Temuan dari TSA menunjukkan bahwa perawat diharapkan mampu membaca dan menafsirkan teks instruksi dalam HIS secara akurat, memahami terminologi medis, serta berkomunikasi secara efektif dengan pasien asing. Sebaliknya, hasil dari PSA menunjukkan bahwa sekitar 60% perawat belum mampu memahami teks instruksi berbahasa Inggris dan bergantung pada alat penerjemahan seperti Google Translate, yang berpotensi menimbulkan kesalahan input pada sistem dan masalah pemahaman. Selain itu, mereka juga mengalami kesulitan dalam berkomunikasi dengan pasien karena keterbatasan kosakata dan kurangnya rasa percaya diri. Oleh karena itu, berdasarkan hasil NA, penelitian ini merekomendasikan penyusunan silabus ESP berbasis tugas yang terdiri atas tujuh sesi pertemuan, dimulai dengan peningkatan akurasi membaca teks HIS dan pemahaman terminologi medis, kemudian dilanjutkan dengan pengembangan keterampilan berbicara dalam interaksi antara perawat dan pasien. Penelitian ini memberikan bukti empiris mengenai pentingnya Needs Analysis dalam pengembangan ESP serta memberikan rekomendasi yang tepat bagi penyusunan program bahasa Inggris yang sesuai dengan kebutuhan tenaga kesehatan di lingkungan kerja.

INTRODUCTION

The English language plays an important role in education, the workplace, and professional life. One field that requires English language skills is the healthcare industry, where medical professionals, such as nurses and doctors, must interact with multilingual patients, international medical staff, and English-language computer systems. In international hospital settings, nurses are expected to provide high-quality patient care, interpret written instructions, document clinical information, and communicate effectively in English. These demands highlight the need for English for Specific Purposes (ESP) instruction aligned with nurses' actual workplace tasks rather than general English proficiency goals.

ESP is driven by the needs of specific learners in a specific professional context. Therefore, Needs Analysis (NA) serves as the starting point for any ESP course design. As Hutchinson and Waters (1987) argue, ESP is not a product but an approach whose purpose is to determine what certain groups of learners need to do with language in their target situations. For this reason, NA becomes "inextricably intertwined" with ESP, serving as the basis for defining goals, selecting materials, and ensuring that instruction responds to authentic workplace demands rather than generalized English requirements.

The primary objective of an NA is to conduct a gap analysis that identifies the differences between the Target Situation Analysis (TSA)—what learners need in their workplace—and the Present Situation Analysis (PSA)—their current proficiency, knowledge, and strategies. Therefore, the "lack" refers to the gap between learners' current capabilities and the level of linguistic and communicative competence required in their workplace. For inpatient nurses in an international hospital setting, this lack became most apparent in tasks involving understanding written materials and accessing digital tools, such as HIS (Hospital Information System) instructions in English. Although institutional training and a handbook are provided to nurses, preliminary interviews with stakeholders indicate that nurses still struggle to understand medical terminology, interpret procedural instructions, and complete documentation accurately. Therefore, conducting a structured Needs Analysis is essential as a reference for the ensuing ESP curriculum design, which should respond to learners' actual challenges and support nurses' professional performance (Richards, 2001; Basturkmen, 2010). The output of this NA will serve as the foundation for syllabus design in English learning that bridges the gap between nurses' current English proficiency and the requirements of their clinical roles.

As an international institution, nurses are required to have a strong command of English because they rely on English-language resources, including Hospital Information Systems (HIS), medical terminology, and written procedural instructions, when communicating with foreign patients. Although the institution provides professional training and an English-language instruction manual is available, stakeholder feedback indicates ongoing difficulties understanding written English instructions and using appropriate language in the healthcare setting. The PSA findings indicate that many nurses use tools such as Google Translate and have difficulty interpreting explanatory texts in the hospital information system, which could affect the accuracy and efficiency of their clinical documentation. Therefore, a comprehensive Needs Analysis is essential for designing a relevant ESP curriculum.

Based on the facts above, this study aims to determine which syllabus design is appropriate for inpatient nurses at the hospital for learning English. The purpose of this paper is to examine the specific professional English needs of inpatient nurses at the hospital and to propose a suitable syllabus for inpatient nurses, based on the English needs analysis.

The study focuses on identifying the gap in TSA and PSA among inpatient nurses. It examines reading and interpreting English-language instructions in the Hospital Information System (HIS) and selected aspects of communicative strategies for responding to real patient-care interactional demands. However, because the proposed study focuses only on inpatient nurses at one hospital, the identified gap may differ across other healthcare settings.

This study will identify the types of English needed in nurses' daily work and how ESP courses can be designed to meet those needs (Hutchinson & Waters, 1987; Dudley-Evans & St John, 1998). Previous studies in Indonesia have shown that many English training programs for nurses do not fully align with the real demands of hospital settings. Therefore, this study aims to design a more suitable program that helps nurses improve their English and, in turn, enhance the quality of healthcare.

RESEARCH METHOD

Research Design

This research used a qualitative-dominant Needs Analysis (NA) approach, supported by limited quantitative data, to investigate the English language needs of inpatient nurses in a hospital setting. In ESP research, Needs Analysis is inherently interpretive because it focuses on how language is used in specific professional contexts rather than merely measuring linguistic competence (Basturkmen, 2010). Therefore, this study prioritized qualitative data to capture authentic workplace practices and communicative challenges.

The study is grounded in the Needs Analysis framework proposed by West (1994), which differentiates between Target Situation Analysis (TSA) and Present Situation Analysis (PSA). TSA identifies the language demands of the workplace, while PSA examines learners' current abilities. Comparing these two components enables the identification of learners' gaps, which serve as the basis for ESP course design (Hutchinson & Waters, 1987). Although a questionnaire was used to collect supporting data, the study primarily relies on qualitative methods, including interviews, document analysis, and performance data. This aligns with the view that Needs Analysis in ESP should be grounded in real-world language use and contextualized interpretation (Dudley-Evans & St John, 1998).

Participants

The participants were 13 inpatient nurses working across different hospital wards. All participants had more than six years of experience and held senior or supervisory roles. These nurses were responsible not only for direct patient care but also for supervising junior nurses, coordinating with doctors, and ensuring that communication standards were met in their units. These participants were selected purposively because they are key informants directly involved in patient care and the documentation process. This sampling technique is appropriate for qualitative research, which seeks depth of understanding rather than generalizability (Richards, 2001).

Data Collection Methods

Data were collected through multiple qualitative instruments to ensure triangulation. First, the researcher analyzed authentic workplace texts, including Hospital Information System (HIS) instructions, SOAP notes, and assessment forms such as pain, fall risk, nutritional screening, and functional status. This analysis aimed to identify the linguistic features, terminology, and genres required in nurses' daily tasks.

Second, the researcher conducted semi-structured interviews with inpatient nurses and the head nurse. These interviews explored difficulties understanding English texts, challenges in communicating with patients, and perceived priorities for English learning. Semi-structured interviews provided flexibility while maintaining focus, making them suitable for exploring participants' experiences in depth.

Third, the researcher analyzed a recorded nurse-patient interaction to observe the actual language used. This provided insight into vocabulary limitations, the use of pauses and fillers, and communication strategies. Such performance data are important in ESP because they reflect real communicative behavior rather than self-reported ability.

Additionally, a questionnaire was distributed to collect data on general patterns of English use, perceived difficulties, and confidence levels. It used a Likert scale and open-ended questions. However, the questionnaire data served as supporting evidence, while the main interpretation was derived from qualitative findings.

Data Analysis

Thematic coding was used to analyze the qualitative data, following the Needs Analysis framework proposed by Hutchinson and Waters (1987) and operationalized by West (1994). This framework compares Target Situation Analysis (TSA) and Present Situation Analysis (PSA) to identify learners' gaps, which represent the gap between workplace language demands and current learner abilities.

The analysis was conducted in the following stages. First, the researcher examined workplace data, including HIS documents, assessment forms, and clinical communication, to determine the language tasks and competencies required of inpatient nurses. Second, data from interviews, questionnaires, and recorded interactions were analyzed to identify learners' current English proficiency, difficulties, and communication strategies. Third, TSA and PSA findings were compared to identify discrepancies between required and existing skills, particularly in reading comprehension of HIS texts, medical

vocabulary, and spoken interaction. Finally, the identified gaps were grouped into key themes, including reading comprehension, vocabulary knowledge, and spoken communication.

This analytical process reflects the principle that Needs Analysis in ESP is not merely descriptive but also interpretive, requiring the researcher to prioritize and synthesize learners' needs in relation to real-world tasks (Dudley-Evans & St John, 1998; Basturkmen, 2025).

RESULT AND DISCUSSION

The findings of this study reveal a clear discrepancy between workplace language requirements and inpatient nurses' current English proficiency. Drawing on qualitative data from interviews, document analysis, and performance observations, this section interprets inpatient nurses' language needs. The discussion is organized around TSA and PSA to identify the underlying gaps in workplace communication.

Target Situation Analysis (TSA): Workplace Language Demands

The TSA findings indicate that inpatient nurses need to read and interpret English-language instructions in the Hospital Information System (HIS), understand specialized medical terminology, and communicate effectively with foreign patients in their daily clinical practice.

Document analysis of HIS materials shows that nurses must process instructional texts, system prompts, and assessment forms that contain procedural language and technical vocabulary. In addition, interviews with the head nurse emphasize that accurate interpretation of these texts is essential, as misinterpretation may lead to incorrect data entry and affect patient care.

Furthermore, nurses need strong English communication skills to interact with foreign patients, particularly when explaining procedures, providing instructions, and addressing concerns. These findings indicate that target-language use is task-specific and requires reading accuracy and communicative competence.

Present Situation Analysis (PSA): Current Language Abilities

PSA findings indicate several challenges with nurses' current English proficiency, based on questionnaire data, interviews, and performance observations. Questionnaire data (n=13) show that English is used regularly at the nurses' workplace, particularly for reading HIS instructions and interacting with foreign patients. However, approximately 60% of participants reported difficulty understanding English instructions in the HIS. These findings suggest that more than half of nurses have difficulty understanding and processing the written English required for clinical documentation, as they do not feel adequately equipped to use it effectively. Table 1 summarizes the key questionnaire findings.

Table 1. Summary of Questionnaire Findings

<i>No.</i>	<i>Items</i>	<i>Findings</i>
1.	Difficulty understanding HIS instructions	60%
2.	Limited medical vocabulary	Majority reported
3.	Low confidence in speaking English	Frequently reported
4.	Use of translation tools	Common practice

The questionnaire findings are further supported by qualitative data from interviews and recorded nurse-patient interactions. From interviews with nurses, the researcher found that nurses often rely on a translation tool, such as Google Translate, when encountering difficult or unfamiliar terms in the HIS. However, this strategy may lead to misunderstandings, as translations are not always accurate. One of the participants stated:

"Saya menggunakan Google Translate karena tidak memahami istilah medis."

("I use Google Translate because I do not understand medical terms.")

In addition, performance data from recorded interactions indicate that nurses have difficulty with spoken communication. They often use hesitation, pauses, and fillers, indicating limited fluency and confidence.

By comparing TSA and PSA findings, this study identifies a clear gap between workplace language demands and current learner abilities. These deficiencies are as follows: 1) nurses have difficulty interpreting procedural and explanatory texts in English; 2) limited familiarity with medical terminology affects comprehension and communication; 3) nurses lack confidence and fluency when interacting with foreign patients.

This section examines the methodological and social issues that arise from the Needs Analysis process. It highlights the researcher's values and beliefs, recognizing that Needs Analysis is not a theoretically neutral process. The discussion is divided into two main parts: conceptual issues and methodological and social considerations.

Conceptual Issues

This study adopts the view that English serves as a tool for performing tasks in a professional setting. From this perspective, the researcher measures nurses' English proficiency by assessing how effectively they complete workplace tasks, such as reading HIS instructions, understanding medical terminology, and communicating with foreign patients in clinical settings.

By comparing the findings of the Target Situation Analysis (TSA) and the Present Situation Analysis (PSA), the researcher can identify specific gaps in learners' competencies and use these insights to inform the design of a relevant curriculum. The analysis indicates that learners' reading and speaking skills need improvement. According to Dudley-Evans and St John (1998), Needs Analysis is not just about collecting data; it requires the researcher to interpret the findings and determine which needs should be prioritized in instructional design.

Methodological and Social Issues

This study adopts a qualitative Needs Analysis approach, drawing on data from interviews, document analysis, and supporting questionnaire responses. Despite this, several methodological limitations should be acknowledged. First, the data from interviews and questionnaires primarily reflect learners' perceptions, which may not fully reflect actual workplace language use. Second, speaking-related needs were identified from a recorded video provided by the head nurse, rather than from direct observation of authentic nurse-patient interactions in real-time clinical settings.

The analysis also reveals differing perspectives among learners and the head nurse on English language needs. Learners emphasized the need to improve their speaking skills to build confidence when interacting with foreign patients. By contrast, the head nurse highlighted weaknesses in reading accuracy, particularly in interpreting English instructions within the HIS. In this study, both perspectives were considered necessary; therefore, the Needs Analysis synthesizes these viewpoints to inform the development of a curriculum that addresses both communicative competence and task-based reading accuracy in the clinical context.

This section presents a proposed curriculum design that synthesizes the results of the Target Situation Analysis (TSA) and the Present Situation Analysis (PSA) to identify learners' target and learning needs.

Needs Analysis Findings

The Needs Analysis identified a clear gap between the English-language demands of inpatient nurses in performing their tasks at the workplace and their current English abilities.

TSA data show that nurses are required to read and interpret English-language instructions in the HIS and to understand specialized medical terminology. In addition, interviews with the head nurse indicate that nurses need strong English communication skills when communicating with foreign patients. These findings suggest that nurses need to develop accuracy in reading, comprehension of medical information, familiarity with domain-specific vocabulary, and the ability to communicate effectively in routine clinical situations.

In contrast, PSA findings show that many nurses have difficulty understanding English instructions in the HIS due to limited medical vocabulary. Although they have received a 5-day training program and have access to a translation handbook, nurses continue to rely on tools such as Google Translate, which may lead to misinterpretations. Furthermore, the data indicate that nurses also need to

improve their speaking skills, particularly in terms of confidence and clarity when communicating with foreign patients.

Based on the above findings, it can be concluded that reading and speaking skills are important areas to address. Reading skills are essential for meeting institutional requirements, particularly for ensuring accurate interpretation of HIS instructions, while speaking ability is the basic skill for patient communication.

Synthesis of Learner Context

The working environment of nurses is diverse and challenging, characterized by heavy workloads, long shifts, and high levels of stress. These factors limit nurses' opportunities to participate in additional language training outside working hours.

Given this context, learning strategies must be efficient, task-focused, and closely aligned with workplace tasks. Institutional expectations that emphasize accuracy further suggest that an ESP syllabus should prioritize functional language use over abstract grammar instruction. Therefore, authentic materials, such as HIS screenshots, system prompts, and clinical scenarios, can serve as learning materials.

Moreover, instructional approaches should support gradual improvement while accounting for nurses' limited time and cognitive load. Therefore, task-based and context-driven activities are considered most appropriate for this learner group.

Establishment of Target and Learning Needs

Based on the TSA and PSA findings, nurses need to improve their skills in accurately reading and interpreting HIS English instructions, understanding common medical terminology, and communicating clearly and confidently with foreign patients.

To achieve these targets, the identified learning needs include: 1) developing reading strategies for processing HIS-related texts; 2) expanding job-specific vocabulary, particularly medical terminology; and 3) improving speaking confidence, clarity, and functional communication. The proposed syllabus is therefore designed to address the gap between the requirement to perform clinical tasks independently and accurately and the current reliance on translation tools and limited speaking confidence.

Justification for Curriculum Focus and Course Design

The syllabus was designed based on the findings of the Needs Analysis (Saragih, 2014). Therefore, the researcher proposed an English syllabus focusing on reading and speaking skills, with greater emphasis on reading accuracy in the initial stages. Reading-focused instruction should cover HIS-related texts, medical terminology, and system prompts. In subsequent stages, the syllabus should address speaking skills by focusing on everyday nurse-patient interactions, emphasizing clarity, confidence, and functional communication rather than native-like fluency.

To accommodate learners' needs and busy schedules, the course is structured into 7 sessions. The first four sessions focus on reading skills, and the remaining three on speaking skills. Sessions are held once a week and last 90 minutes each, keeping the program manageable within nurses' work schedules.

CONCLUSION

This study underscores the importance of conducting a structured Needs Analysis (NA) to bridge the gap between English language requirements and the actual proficiency of inpatient nurses in an international hospital setting. The findings reveal a significant discrepancy: while the workplace requires nurses to read the Hospital Information System (HIS) instructions accurately and communicate effectively with foreign patients, approximately 60% of nurses currently struggle with these tasks and rely heavily on translation tools.

The proposed 7-session task-based ESP syllabus addresses these specific challenges by prioritizing reading accuracy for clinical documentation and enhancing speaking confidence for patient interactions. By aligning the curriculum with authentic workplace materials and the workload of healthcare professionals, this study ensures that the language training is relevant and practical. Ultimately, implementing a tailored ESP program not only supports the professional development of nurses but also plays an important role in ensuring patient safety and improving the quality of healthcare delivery in a globalized medical environment.

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