

altenpflege.de Edition

Brief Textbooks for Nursing Education - Focus on Geriatric Care

Theo Ahrens

Evidence-based Nursing (EBN) in Elderly Care

presented by

YES
ARCH
ITEC
TURE.

Bibliographic Information

Theo Ahrens – Short Biography

Theo Ahrens, born in 1979 near Munich, is a teacher for nursing professions and a dedicated nursing educator. After completing a voluntary social year in a hospital, he trained as a health and nursing professional and gained valuable work experience in the intensive care unit. Driven by his desire to share knowledge, he studied nursing education and began teaching at a vocational school in Munich in 2009. Theo is known for his practical and empathetic teaching style, which prepares future nursing professionals for their demanding careers. Privately, he lives with his wife and two children in Berlin and volunteers for better conditions in nursing education.

This short textbook was formulated from the lesson plans of his teaching, utilizing A.I. The translation was done automatically.

Published by altenpflege.de

Price DE/AT: 3.90 € CH: 5 CHF

Copyright 2024 altenpflege.de

Please send feedback and suggestions to team@altenpflege.de.

1/1-2412181528

preview

Table of Contents

1 Introduction 4	
1.1 Objectives of this Short Textbook on Evidence-based Nursing (EBN) 4	
1.2 Importance of EBN in Elderly Care 4	
1.3 Role of Nurses in the Application of EBN 5	
2 Fundamentals of Evidence-based Nursing (EBN) 7	
2.1 Origin of Evidence-based Nursing (EBN) 7	
2.2 Goals and Principles of EBN 7	
2.3 Differences Between Evidence-Based Nursing (EBN) and Experiential Knowledge 8	
2.4 Relevance of EBN in Nursing Practice 9	
3 The 6 Steps of the EBN Process 10	
3.1 Step 1: Task Definition and Formulation of the Question 10	
3.2 Step 2: Literature Search 10	
3.3 Step 3: Critical Appraisal of the Evidence 11	
3.4 Step 4: Implementation of Evidence into Nursing Practice 12	
3.5 Step 5: Evaluation of the implemented measures 13	
3.6 Step 6: Documentation and Advancement of Care Practice 14	
4 The PICO Method for Formulating Research Questions 15	
4.1 Definition and Purpose of the PICO Method 15	
4.2 Components of the PICO Method 15	
4.3 Examples of Questions Using the PICO Method 16	
4.4 Application of the PICO Method in Elderly Care 17	
5 Literature Search for Evidence-based Nursing 19	
5.1 Importance of Systematic Literature Review 19	
5.2 Sources and Databases for EBN 19	
5.3 Search Strategies and Keyword Search 20	
5.4 Differences Between Primary and Secondary Sources 21	
6 Critical Appraisal of Evidence 22	
6.1 Definition and Significance of Evidence Assessment 22	
6.2 Criteria for Evaluating Study Quality 22	
6.3 Distinguishing Levels of Evidence 23	
6.4 Avoidance of Bias and Methodological Errors 24	
7 Implementation of EBN in Nursing Practice 25	
7.1 Challenges and Barriers in the Implementation of EBN 25	
7.2 Strategies for Overcoming Implementation Barriers 26	
7.3 Involvement of the Care Team in the Implementation of EBN 27	
7.4 Examples of Implementing EBN in Geriatric Care 28	
8 Evaluation of EBN Measures 29	
8.1 Importance of Evaluation in Nursing Practice 29	
8.2 Indicators for Evaluating the Effectiveness of Measures 29	
8.3 Methods of Evaluation 30	
8.4 Documentation and Advancement of Care Practices 31	
9 Roles and Responsibilities in Evidence-based Nursing 32	
9.1 Role of Nursing Professionals in the Application of EBN 32	
9.2 Role of Nursing Leadership and Management in EBN Implementation 33	
9.3 Importance of Interdisciplinary Collaboration 34	
9.4 Support from External Experts 35	
10 Importance of EBN for Care Quality 36	
10.1 Integration of EBN and Quality Management 36	
10.2 Use of EBN for Error Prevention and Risk Minimization 36	
10.3 Significance of EBN for Care Process Planning and Care Outcomes 37	
10.4 Contribution of EBN to Enhancing Patient Safety 38	
11 Examples of Evidence-based Nursing in Geriatric Care 40	
11.1 Fall Prevention Through Evidence-Based Measures 40	
11.2 Pressure Ulcer Prevention Based on Scientific Evidence 41	
11.3 Hygiene Measures to Prevent Infections 42	
11.4 Nutritional Management in Malnutrition 43	
12 Ethical and Legal Aspects of Evidence-Based Nursing 44	
12.1 Relevance of Patient Autonomy in the Application of EBN 44	
12.2 Responsibility of Nurses in Implementing EBN Measures 44	
12.3 Data Protection and Confidentiality in Data Collection and Evaluation 45	
12.4 Legal Foundations 46	
13 Challenges in Implementing EBN in Nursing Practice 48	
13.1 Lack of Time Resources and Time Pressure in Care Practice 48	
13.2 Lack of Knowledge and Training on EBN 49	
13.3 Ethical Conflicts in the Implementation of EBN 49	
13.4 Technological Challenges 50	
14 Training and Continuing Education in Evidence-Based Nursing 52	
14.1 Importance of Continuing Education for Promoting EBN Competencies 52	
14.2 Contents of Training Sessions 53	
14.3 Methods of Training 53	
14.4 Role of Nursing Education Institutions in EBN Training 54	
15 Research and Innovations in Evidence-Based Nursing 55	
15.1 Importance of Nursing Research for the Development of EBN 55	
15.2 Examples of Current Research Findings in Nursing 55	
15.3 Innovations in Nursing Practice through EBN 56	
15.4 Involvement of Caregivers in Research Projects 57	
16 Case Studies and Practical Applications 59	
16.1 Case Study: Application of EBN in Fall Prevention 59	
16.2 Case Study: Application of EBN in Pressure Ulcer Prevention 60	
16.3 Case Study: Evidence-Based Nutritional Interventions for Malnutrition 61	
16.4 Reflection on Nursing Practice Based on Case Studies 62	
17 Self-Reflection and Development of Care Practice 63	
17.1 Importance of Self-Reflection for Improving Care Quality 63	
17.2 Reflection on One's Own Care Practice with Regard to EBN 63	
17.3 Advancement of Nursing Practice through EBN 64	
17.4 Supervision and Peer Consultation for the Implementation of EBN 65	

1 Introduction

1.1 Objectives of this Short Textbook on Evidence-based Nursing (EBN)

This concise textbook pursues multiple goals to provide you with a deep understanding of Evidence-based Nursing (EBN) and to enhance your professional skills in elderly care.

First, the book aims to familiarize you with the fundamentals and principles of EBN. You will acquire knowledge about its origins and meanings in practice, enabling you to make informed decisions in nursing. Through concrete examples and processes, you will learn to combine traditional experiential knowledge with scientific findings.

Another goal is to convey a structured approach through the EBN process. This process consists of six important steps, from formulating the question to documenting and further developing nursing practice. This enables you to work systematically and evidence-based.

The book also aims to explain the practical application of methods to improve care quality. This includes well-known approaches such as the PICO method for formulating research questions, critical appraisal of evidence, and literature search techniques.

Moreover, an understanding of potential challenges and barriers to implementing EBN, as well as strategies for overcoming them, is established. By incorporating case studies and examples from practice, you will learn how EBN can be concretely implemented in elderly care.

Finally, the importance of continuous education is emphasized. The textbook illustrates how you can further develop your nursing practice through education and self-reflection. It also focuses on the ethical and legal aspects of nursing, which are essential for professional practice.

In summary, this textbook aims to equip you with the necessary tools and knowledge to successfully apply EBN in your daily practice and to improve care quality.

1.2 Importance of EBN in Elderly Care

Evidence-based Nursing (EBN) is of central importance in elderly care to sustainably improve the quality of care. In elderly care, the individual needs and well-being of residents are the primary focus. EBN enables the planning and implementation of nursing measures based on the best available evidence, ensuring more effective and efficient care processes.

By applying EBN in elderly care, better health care outcomes can be achieved, as health issues can be addressed in a scientifically sound manner. Nursing professionals can, for example, minimize risks such as pressure ulcers and falls by referencing current research findings and applying them in practice.

EBN also promotes the adaptation of care to new insights and changing conditions. In elderly care, it is crucial to operate at the cutting edge of science to address the complex and often chronic health needs of residents. EBN supports this by systematically integrating scientific knowledge into everyday practice.

Furthermore, EBN strengthens professionalism and self-responsibility in elderly care. Nurses are encouraged to critically question whether current nursing practices align with the best available scientific knowledge. This mindset leads to continuous improvement of care quality and promotes a culture of evidence-based practice.

In summary, EBN is essential in elderly care to optimize care practices and ensure the safety and satisfaction of residents. The use of EBN means a stronger connection between theory and practice, thus ensuring high-quality, scientifically grounded care.

1.3 Role of Nurses in the Application of EBN

Nurses are central actors in the implementation of Evidence-based Nursing (EBN). Their role includes both the initiation and the execution and evaluation of evidence-based care processes. Nurses are encouraged to critically assess scientific findings and transfer them into practice. In this regard, the application of current research results in daily nursing care is of essential importance.

Taking on these tasks requires nurses to have a solid understanding of scientific methods and the ability to critically evaluate nursing practices. By doing so, they contribute to the continuous updating and improvement of care quality. Nurses act as a bridge between theory and practice, applying new knowledge in nursing and regularly questioning and adjusting established processes.

Moreover, they play a crucial role in interdisciplinary exchange. Nurses must be able to communicate scientific knowledge clearly to promote collaboration with other professional groups in healthcare. This cooperation is necessary to ensure holistic patient care and support the transfer of knowledge into practical work.

Another aspect is their role model function. Through their actions and attitudes, nurses influence the development of an evidence-based nursing culture in their institutions. By actively participating in knowledge transfer and continuously furthering their education, they contribute to raising awareness for evidence-based practice.

Finally, their role also involves participating in or supporting research projects. This makes it possible to identify and answer practical questions, as well as to examine the impact of implementation strategies on care quality and patient satisfaction. Therefore, nurses are not only users but also co-creators of evidence-based practice.

preview

2 Fundamentals of Evidence-based Nursing (EBN)

2.1 Origin of Evidence-based Nursing (EBN)

Evidence-based Nursing (EBN) has its origins in Evidence-based Medicine (EBM), which established a new form of medical practice in the 1990s. EBM was influenced by the expertise of David Sackett, Gordon Guyatt, and others at McMaster University in Canada. The approach aimed to make medical decisions based on the best available scientific evidence rather than relying solely on expert experiences.

This scientific approach was soon extended to other health areas, including nursing, where the name was adapted to Evidence-based Nursing. Its adoption in nursing was a step towards systematizing nursing decisions with the goal of optimizing nursing interventions and increasing patient safety.

Through the integration of research results and clinical experience, complemented by considering patients' preferences and values, EBN aims to bridge the gap between theory and practice. The therapeutic nursing benefit is based on a continuous cycle of research, practice, and systematic review of nursing processes. This cycle empowers nurses to actively participate in improving care quality through evidence-based decisions and to continuously evaluate and develop their practice.

Internationally, interest in EBN steadily increased, and numerous networks and institutions emerged to advance its development. Organizations like the Cochrane Nursing Care Field promoted the application of EBN principles by addressing practice-relevant questions and raising awareness within the nursing community.

Today, EBN is considered an essential prerequisite for professional nursing and is integrated into many educational and quality management programs, as it enables nursing professionals to make informed decisions that contribute to the optimal care of those in need.

2.2 Goals and Principles of EBN

Evidence-based Nursing (EBN) strives to improve the quality of care through informed decision-making. A central goal of EBN is to ensure the best possible care based on current scientific knowledge. EBN aims to optimize the nursing process by systematically integrating research findings, clinical expertise, and patient preferences.

A principle of EBN is the use of the best available evidence. This requires a critical assessment of study quality and the application of scientifically validated nursing interventions. EBN promotes continuous practice improvement through ongoing evaluation and adaptation. Additionally, interprofessional collaboration plays a crucial role as it facilitates the exchange of knowledge and a holistic consideration of the patient.

EBN also implies patient-centered care. This means integrating the wishes and values of patients into the care process to develop tailored care plans. Another principle is to promote the autonomy of nursing professionals through training and access to relevant information, which strengthens their professional decision-making capacity.

In summary, the goals and principles of EBN are aimed at enhancing the quality and safety of care measures, individualizing patient care, and fostering the professional development of nurses. Implementing these goals and principles helps nurses effectively navigate a changing care environment.

2.3 Differences Between Evidence-Based Nursing (EBN) and Experiential Knowledge

Evidence-Based Nursing (EBN) and experiential knowledge differ in their approach to nursing decisions. EBN is based on the systematic use of scientific research results to make informed decisions. In contrast, experiential knowledge relies on the personal insights and practical experiences of nursing professionals in their everyday work.

The scientific approach of EBN follows a systematic method based on controlled studies and objective data. Decisions are made on the basis of the best available evidence. The goal is to rationalize and standardize nursing concepts to improve patient safety and care quality. Evidence-based practice requires that nurses are familiar with current research findings and incorporate them into their decision-making process.

Experiential knowledge, on the other hand, results from the practical application of nursing knowledge over many years. It is characterized by personal assessments, intuition, and understanding individual needs, which are based on empathic relationships with care recipients. Such knowledge is considered situational and flexibly adaptable, but it often lacks objective validation through scientific proof.

A significant difference lies in verifiability: EBN allows for clearer traceability of applied measures through documented evidence. Experiential knowledge is often harder to document and transfer, as it relies on subjective experiences. Both approaches can intermesh. A balanced use of EBN and experiential knowledge offers a holistic care strategy, as scientific insights can be complemented by the practical experiences of nursing staff.

The interaction of EBN and experiential knowledge can thus further enhance the quality of care by combining the evidence-based rigor of EBN with the adaptive responsiveness of experiential knowledge. It is crucial to integrate both approaches in the context of patient-centered care to achieve optimal outcomes for care recipients.

2.4 Relevance of EBN in Nursing Practice

EBN is crucial for daily nursing practice as it forms the foundation for scientifically supporting nursing actions. The application of evidence allows nurses to prioritize effective interventions, standardize procedures, and thereby measurably improve the quality of care. The integration of evidence-based practices leads to a reduction in risks and errors by identifying and eliminating unnecessary or outdated measures.

EBN bridges the gap between science and practice, providing the opportunity to continuously question and optimize nursing processes. Thus, EBN promotes a dynamic learning environment for nurses focused on the practical application of research findings. This not only enhances professionalism but also increases job satisfaction, as nurses are able to make evidence-based decisions that contribute to the well-being of those in their care.

Another aspect of the relevance of EBN is strengthening evidence-based communication within interdisciplinary teams. Through a common evidence-based framework, collaboration with doctors, therapists, and other health professionals improves, leading to more comprehensive and effective care. Furthermore, EBN serves as the foundation for quality-oriented nursing management, helping to efficiently allocate resources and reduce care costs through targeted measures.

EBN encourages active participation in the advancement of nursing. Nurses are empowered to engage in scientific projects and generate new insights, which can, in turn, be integrated into practice. This feedback loop of knowledge expansion and practical application is essential for the advancement and adaptation of nursing to current challenges. Thus, EBN becomes the driving force behind innovative approaches in nursing practice, which must meet the demands of an increasingly complex care environment.

3 The 6 Steps of the EBN Process

3.1 Step 1: Task Definition and Formulation of the Question

In the first step of the Evidence-based Nursing (EBN) process, the focus is on clearly defining a nursing task or a care-relevant problem. A precise question is crucial in order to specifically search for evidence-based solutions. The question should be specific, concise, and relevant to nursing practice. This facilitates the subsequent searching and analysis of the available evidence.

Formulating the question involves identifying the problem, understanding the specific needs of the affected patient group, and clarifying the desired care outcomes. A structured approach to the question forms the basis for effective research and the application of evidence-based insights in practice.

A proven method for creating precise research questions is the PICO method, which is discussed in detail in a separate chapter. It helps systematically identify and organize the essential elements of a question. Using the PICO method not only clarifies the question but also makes the subsequent literature search more efficient.

An example of a precisely formulated question might be: "How does the regular implementation of an exercise program affect the fall rate among nursing home residents compared to conventional exercise practices?" Here, the problem, intervention, comparison group, and desired outcome are clearly defined, laying the foundation for an evidence-based analysis.

3.2 Step 2: Literature Search

In the second step of the evidence-based nursing process, a systematic literature search is conducted. The aim is to identify relevant, current, and high-quality evidence to answer the formulated question. A structured search prevents information gaps and ensures a comprehensive data basis for decision-making.

First, the selection of suitable databases is essential. Central to this are medical and nursing databases such as PubMed, CINAHL, or Cochrane Library. For German-language studies, LIVIVO is often helpful. Each of these sources offers specific advantages and disadvantages regarding access possibilities and covered subject areas.

A precise search strategy maximizes the efficiency of the search. Consider which keywords and search terms fit best. Use synonyms and technical terms to expand the search. Also note the possibility of using Boolean operators like AND, OR, and NOT to direct the search purposefully. A skillful combination of these terms significantly contributes to the relevance and number of sources found.

7 This is just a preview

The complete book is available at <https://www.altenpflege.de> for registered users. Registration and use are free of charge. Those who do not want to register can transfer the amount mentioned on page 2 via PayPal to buchhaltung@factsoft.de and include both the book title and email address. They will then receive the PDF via email.

In addition to free access to the short textbooks, registering on [altenpflege.de](https://www.altenpflege.de) enables you to apply directly for jobs and also post a free job advertisement yourself. Become part of the [altenpflege.de](https://www.altenpflege.de) community too.