

ทฤษฎีการเรียนรู้สำหรับผู้ใหญ่: แนวทางการเรียนรู้ต่อเนื่องด้วยตนเองในการปฏิบัติงานวิสัญญีวิทยา

Andragogy: A Self-Directed Approach to Continuous Learning in Anesthesia Practice

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บทคัดย่อ

การทบทวนวรรณกรรมแบบบรรยายนี้เกี่ยวข้องกับบทบาทสำคัญของทฤษฎีการเรียนรู้สำหรับผู้ใหญ่ (andragogy) เพื่อช่วยกำหนดเส้นทางการเรียนรู้อย่างต่อเนื่องของผู้ประกอบวิชาชีพวิสัญญีวิทยา โดยเจาะลึกถึงหลักการและการประยุกต์ใช้ทฤษฎีการเรียนรู้สำหรับผู้ใหญ่ โดยเน้นย้ำถึงความเกี่ยวข้องในการตอบสนองคุณลักษณะเฉพาะ ความต้องการ ตลอดจนแรงจูงใจที่แตกต่างกันของผู้เรียนที่เป็นผู้ใหญ่ในสาขาวิสัญญีวิทยา และครอบคลุมถึงกลยุทธ์เชิงปฏิบัติสำหรับการนำทฤษฎีการเรียนรู้สำหรับผู้ใหญ่ไปใช้ รวมถึงการเรียนรู้ด้วยตนเอง การเชื่อมโยงความรู้ทางทฤษฎีกับการปฏิบัติทางคลินิก การใช้เทคโนโลยีเพื่อเพิ่มประสิทธิภาพประสบการณ์การเรียนรู้

บทความนี้ยังกล่าวถึงความท้าทายของผู้เรียนที่เป็นผู้ใหญ่ต้องเผชิญในการศึกษาด้านวิสัญญีวิทยา โดยนำเสนอกลยุทธ์ที่นำไปปฏิบัติได้จริงสำหรับผู้สอนในการเอาชนะอุปสรรคและสร้างสภาพแวดล้อมการเรียนรู้ที่จะช่วยสนับสนุน นอกจากนี้ยังนำเสนอทิศทางและโอกาสในอนาคต โดยอภิปรายแนวโน้มการพัฒนาทางการศึกษาสำหรับผู้ใหญ่ นวัตกรรมที่อาจเกิดขึ้นในทฤษฎีการเรียนรู้สำหรับผู้ใหญ่ และข้อเสนอแนะสำหรับการวิจัยในอนาคต

โดยสรุปบทความนี้มีจุดมุ่งหมายให้ผู้ประกอบวิชาชีพทางวิสัญญีวิทยาลงมือปฏิบัติอย่างจริงจัง โดยนำแนวทางการเรียนรู้แบบผู้ใหญ่มาใช้ เพื่อตระหนักถึงพลังของการเรียนรู้ด้วยตนเอง การให้คุณค่ากับประสบการณ์ทางวิชาชีพและการส่งเสริมแรงจูงใจภายใน ผู้ประกอบวิชาชีพสามารถยกระดับประสบการณ์การเรียนรู้ส่วนบุคคลของตนเอง รวมถึงการพัฒนาแนวทางการศึกษาที่มีประสิทธิภาพ การเรียนรู้อย่างต่อเนื่องกลายเป็นสิ่งที่ช่วยผลักดันทั้งการเติบโตส่วนบุคคลและการเติบโตทางวิชาชีพต่อไป

คำสำคัญ: ผู้เรียนผู้ใหญ่ ทฤษฎีการเรียนรู้สำหรับผู้ใหญ่ การศึกษาด้านวิสัญญีวิทยา การเรียนรู้ต่อเนื่อง การเรียนรู้ด้วยตนเอง

Abstract

This narrative review article explores the pivotal role of andragogy in shaping the continuous learning journey of anesthesia professionals. Delving into the principles and applications of andragogy, the article highlights its relevance in catering to the distinct characteristics, needs, and motivations of adult learners in the field. The exploration encompasses practical strategies for implementing andragogical practices, including self-directed learning, bridging theoretical knowledge with clinical practice, and leveraging technology for enhanced educational experiences.

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The article also addresses challenges faced by adult learners in anesthesia education, offering actionable strategies for educators to overcome obstacles and create supportive learning environments. Furthermore, it explores future directions and opportunities, discussing evolving trends in adult education, potential innovations in andragogical practices, and recommendations for future research.

In conclusion, the article issues a compelling call to action for anesthesia practitioners, urging them to actively embrace andragogical approaches. By recognizing the power of self-directed learning, valuing professional experiences, and fostering intrinsic motivation, practitioners can not only elevate their individual learning experiences but also contribute to the advancement of effective educational practices in the field. The journey of continuous learning becomes a shared endeavor, propelling both personal and professional growth.

Keywords: Adult Learners; Andragogy; Anesthesia Education; Continuous Learning; Self-Directed Learning

Introduction

Andragogy, coined by Malcolm Knowles¹, is the theory of adult learning that emphasizes adults as distinct learners with unique characteristics. Unlike pedagogy, which focuses on teaching children, andragogy tailors principles and practices for effective adult learning. In fields like anesthesia practice, where continuous learning is crucial, recognizing adults as active, self-directed learners gains importance in contemporary education.

Adults, viewed as self-directed learners, seek knowledge immediately applicable to their professional roles. Educational programs should grant them control over their learning, allowing goal-setting, content identification, and method selection². Andragogy taps into adults' life experiences as valuable learning resources, urging educators to integrate real-world examples into content³.

In anesthesia practice, trainees work within a high-pressure, hierarchical surgical team. However, there is a gap in how andragogy accounts for the effects of social pressure or burnout, which could impede a learner's natural self-direction. Andragogy strategically aligns educational activities with the practical challenges that clinicians encounter daily⁴. Driven by the need for immediate relevance,

anesthesia practitioners exhibit a preference for learning that directly addresses their specific professional challenges. Goal-oriented adult learners excel in problem-centered, real-world issue-solving approaches. This article critically examines the application of andragogy as a self-directed learning framework, delving into its foundational principles and offering practical strategies. The overarching objective is to empower anesthesia practitioners, fostering their active engagement in professional development. Additionally, the article aims to contribute meaningfully to the ongoing discourse on effective adult education methodologies, particularly within specialized fields like healthcare. This article emphasizes a narrative review approach through expert synthesis, which relies on experience and ability under self-imposed critical conditions.

The Principles of Andragogy

Andragogy is particularly relevant in professional education⁵. It is anchored in several fundamental principles that collectively establish a framework for comprehending the unique nature of adult learning. These principles offer educators and practitioners valuable insights into the motivations, preferences, and needs of adult learners, emphasizing

that adults bring diverse experiences to the learning process⁶. Readiness to learn stands out as a key principle, highlighting that adults are more inclined to engage with and retain information perceived as immediately applicable.

In the realm of anesthesia practice, characterized by complex and dynamic real-world scenarios, tapping into practitioners' experiences becomes integral for effective learning. Aligning educational content with the readiness levels of practitioners ensures a more engaging and impactful educational process.

Adults, being goal-oriented learners, find purpose and direction crucial, as emphasized by the principle of orientation to learning⁷. In anesthesia education, establishing clear learning objectives becomes instrumental in capturing the attention and commitment of practitioners. Additionally, motivation is a driving force in adult learning, and the principle of motivation in andragogy recognizes the significance of both internal and external factors.

The principles of andragogy include: 1) Need to Know, where adult learners ask "Why?" and want to see the value before dedicating time. 2) Self-Concept of Self-Directed, meaning they desire ownership of their learning and dislike being treated as children. 3) Role of Experience as a Rich Resource, with past experiences serving as a mental library to connect with new information. 4) Readiness to Learn, which occurs when the topic relates to a current, real-life challenge. 5) Problem-Centered Orientation, as they prefer learning how to solve real problems rather than just studying subjects. 6) Motivation, mainly driven by self-esteem, job satisfaction, and personal growth.

In the context of anesthesia practice, understanding and fostering intrinsic motivation among practitioners are crucial for sustaining a commitment to continuous learning⁸. These principles collectively

guide educators in tailoring educational approaches that resonate with the specific characteristics and needs of adult learners in the field of anesthesia.

Strategies for Anesthesia Practitioners

Self-directed learning, a fundamental aspect of andragogy, acknowledges the autonomy and motivation of adult learners. In the realm of anesthesia practice, where continuous learning is imperative, practitioners can employ self-directed learning as a potent strategy to augment their knowledge and skills⁹. By identifying specific areas for growth or improvement, such as mastering new anesthesia techniques, staying abreast of emerging technologies, or refining patient communication skills, practitioners establish clear directions for ongoing professional development. Personalized learning plans, shaped by factors like preferred learning styles, time constraints, and specific professional goals, enable the optimization of the learning journey through a variety of modalities, including workshops, online courses, and hands-on experiences.

The practical application of knowledge is a vital component of andragogy, particularly in fields like anesthesia where theoretical understanding must seamlessly integrate with clinical practice¹⁰. Bridging strategies facilitate the connection of theoretical concepts learned in educational settings with the dynamic realities of clinical situations and decision-making abilities. From simulation exercises and hands-on training to reflective practices, anesthesia professionals bridge the gap between theory and practice, thereby enhancing competence and confidence in delivering optimal patient care. Case-based learning approaches, involving real or simulated cases for analysis, diagnosis, and treatment plan development, provide an interactive method for practitioners to sharpen problem-solving abilities, critical thinking skills, and overall clinical judgment.

Moreover, incorporating learner experiences is a cornerstone of andragogy, recognizing the wealth of professional experiences that adult learners bring to the educational setting⁶. Valuing professional experience establishes mutual respect between educators and anesthesia practitioners, fostering an inclusive and collaborative atmosphere¹¹. Detailed exploration of practical tips and strategies for educators to actively recognize and respect the professional backgrounds of anesthesia practitioners is provided. By cultivating a learning environment that values and utilizes this expertise, educators enhance the relevance and applicability of anesthesia education, ultimately benefiting both educators and practitioners.

Motivating Adult Learners in Anesthesia Education

Understanding adult motivation involves recognizing and leveraging key factors that drive engagement and learning in adult learners¹². The distinctive aspects of adult motivation can be elucidated through the importance of relevance, autonomy, and aligning learning experiences with personal and professional goals.

Relevance: Adult learners are often motivated when they see the direct applicability of the learning content to their current roles or future aspirations. In the context of anesthesia practitioners, relevance can be established by connecting educational activities to real-world scenarios they may encounter in their profession¹³. Making the content meaningful and applicable to their day-to-day challenges fosters a sense of purpose, increasing the motivation to actively participate in the learning process.

Alignment with Professional Goals: Aligning learning objectives with the career goals of anesthesia practitioners is crucial for motivation. This alignment

ensures that the educational experiences directly contribute to their professional development and career advancement. By understanding the specific needs and aspirations of adult learners, educators can tailor the learning environment to address those goals, creating a more personalized and motivating experience.

Autonomy: Adults value autonomy in their learning experiences¹⁴. Allowing anesthesia practitioners to have a degree of control over their learning path, pace, and content choices enhances motivation. Providing opportunities for self-directed learning, allowing learners to choose topics of interest, and involving them in decision-making processes can empower adult learners and make the learning experience more engaging.

Competence: The principle of competence is tied to the idea that adults are motivated when they feel a sense of mastery and accomplishment¹⁵. Educators can design learning activities that progressively challenge anesthesia practitioners, helping them build competence and confidence in their skills. Recognizing and celebrating achievements, whether big or small, reinforces a positive learning experience and encourages continued effort and engagement.

Relatedness: Creating a supportive learning community is vital for adult learners. Establishing connections with peers, mentors, and educators fosters a sense of relatedness, making the learning experience more enjoyable and motivating¹⁶. Group activities, collaborative projects, and opportunities for networking contribute to a sense of belonging and community, enhancing the overall motivation of anesthesia practitioners.

Technology and Andragogy

Technology plays a pivotal in facilitating self-directed learning for anesthesia practitioners in

many respects.

Empowering Self-Directed Learning:

Technology serves as a catalyst for self-directed learning, allowing anesthesia practitioners to take charge of their educational journeys¹⁷. Online platforms offer a plethora of resources, such as e-books, video lectures, and interactive modules, enabling learners to access information at their own pace and convenience.

Online Courses and Interactive Modules:

The availability of online courses and interactive modules caters to the diverse learning preferences of anesthesia practitioners. These resources not only provide flexibility in terms of timing and accessibility but also offer engaging and interactive content that enhances understanding and retention of complex anesthesia concepts.

Self-Assessment Tools:

Technology facilitates self-assessment through quizzes, simulations, and other interactive tools. These resources allow practitioners to gauge their understanding of topics, identify areas for improvement, and tailor their learning path accordingly. Continuous feedback from technology-driven assessments contributes to a personalized and adaptive learning experience.

Online Platforms and Virtual Communities:

The wealth of online platforms, including forums, discussion groups, and educational websites, creates a virtual ecosystem for anesthesia practitioners. These platforms foster collaboration, enabling learners to engage in discussions, share experiences, and seek advice from peers and experts. Virtual communities contribute to a sense of belonging and provide a supportive network for professional development.

Access to Up-to-Date Information:

Technology ensures that anesthesia practitioners have access to the latest information and advancements in the field. Online resources can

be regularly updated to reflect current practices, guidelines, and research, keeping learners abreast of the rapidly evolving landscape of anesthesia.

Combining Face-to-Face Interactions

and Online Resources: Integrating technology into traditional educational settings allows for a blended approach, combining the benefits of face-to-face interactions with the flexibility and accessibility of online resources. This approach accommodates the diverse needs of learners, offering a balance between hands-on experiences and the advantages of technology-driven tools.

Flexibility and Accessibility:

Technology provides flexibility by allowing practitioners to learn at their own pace and on their own schedule. Whether accessing educational content during off-duty hours or through mobile devices, technology ensures that learning opportunities are accessible to anesthesia practitioners regardless of their location or time constraints.

Interactive Learning Experiences:

Technology-driven tools can create interactive learning experiences, such as virtual simulations and case studies. These tools enable practitioners to apply theoretical knowledge in practical scenarios, enhancing critical thinking and decision-making skills in a risk-free environment.

Practical Strategies for Integration:

Educators can employ practical strategies to seamlessly integrate technology into traditional educational settings. This may include incorporating multimedia presentations, virtual labs, and collaborative online projects. Training educators and learners on the effective use of technology ensures a smooth integration process.

Challenges and Solutions in Applying Andragogy to Anesthesia Education

Time Constraints

Adult learners in the field of anesthesia frequently grapple with time constraints arising from demanding work schedules¹⁸. This limitation can impede their ability to participate in continuous education.

Solution: To address this challenge, provide comprehensive training and resources on effective time management. This support will assist anesthesia professionals in allocating dedicated time for learning amidst their busy schedules. Consider integrating specialized time management workshops or modules into the educational program.

Balancing Professional and Educational Commitments

Anesthesia professionals find themselves navigating the delicate balance between work responsibilities and educational commitments, creating potential conflicts¹⁹. This balance challenge can lead to stress and difficulties in prioritizing educational pursuits.

Solution: Tackle this challenge by incorporating creative and interactive teaching methods tailored to the learning preferences of adults. Employ techniques such as protected academic time, spaced repetition, or audio learning and real-world scenarios to enhance practical understanding and application. These innovative instructional methods contribute to a more engaging educational experience.

Potential Barriers to Engagement

Challenges and Solutions in Applying Andragogy to Anesthesia Education

Adult learners may encounter obstacles that hinder active participation and engagement in the learning process²⁰. The lack of engagement can compromise the effectiveness of andragogical

methods and impede the acquisition of new knowledge and skills. *Solution:* Overcome this challenge by offering flexible learning formats, including online courses or blended learning. This approach allows learners to access educational content at their convenience. Additionally, provide recorded lectures, webinars, and interactive online platforms to accommodate varied schedules and preferences.

As a result, the implementation of these strategies enhances accessibility, enabling anesthesia professionals to engage in continuous learning without compromising their professional responsibilities²¹.

The combination of innovative instructional methods and flexible formats contributes to increased motivation and active engagement, fostering a more conducive learning environment. By effectively addressing time constraints and other challenges, educators can elevate the overall learning experience, leading to improved retention and application of knowledge in anesthesia practice.

Key Findings

A strategic shift toward safety, Andragogy is not merely an educational preference but a critical safety strategy. In anesthesia, human errors are less common when clinicians access knowledge under pressure. Ensuring that training aligns with the six assumptions—particularly Readiness to Learn and Problem-centered Orientation—makes knowledge more ‘action-ready.’ Valuing practitioners’ prior experience and self-concept fosters a ‘Safety Culture.’ When clinicians are empowered as self-directed experts rather than passive students, they are more motivated to keep their skills sharp, leading to a more resilient healthcare workforce.

Limitations of the Review

Institutional constraints, such as high

workloads or rigid hierarchies in self-directed learning, stem from “Hidden Curricula” that limit learner autonomy.

Conclusion

This article has thoroughly examined the foundational significance of andragogy in the ongoing learning odyssey of anesthesia professionals. Through a detailed exploration of its principles and applications, we have underscored how this learner-centric approach seamlessly aligns with the unique characteristics, needs, and motivations of adult learners in anesthesia practice. The comprehensive review of andragogical practices emphasizes its pivotal role in empowering anesthesia professionals to seize control of their educational experiences and steer their continuous professional development.

The call to action resonates with embracing andragogical approaches to augment the continuous learning journey in anesthesia²². Acknowledge the potency of self-directed learning, appreciate the richness of your professional experiences, and nurture intrinsic motivation in the relentless pursuit of excellence in anesthesia practice. Through active engagement with andragogical principles, anesthesia practitioners not only enhance their individual learning experiences but also contribute to the evolution of effective and innovative educational practices in the field. The journey of continuous learning is a collaborative endeavor, and their commitment to andragogy can propel both personal and professional growth²³.

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