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Navigating Neurodiversity:

Effective Learning Approaches in Nursing Education

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Neurodivergence

- ▶ Overview of Neurodivergence:
 - ▶ Encompasses conditions like ADHD, autism, dyslexia, dyspraxia, and others
- ▶ Neurodivergence in healthcare:
 - ▶ Unique challenges in traditional educational settings, such as difficulties with multitasking, information overload, or maintaining focus

Executive Function

- ▶ Includes:
 - ▶ Planning
 - ▶ Organizing
 - ▶ Problem-solving
 - ▶ Working Memory
 - ▶ Inhibition
 - ▶ Flexible Thinking (Shifting)

Source: Roselló et al., 2020

Strategies Tailored To Neurodivergent Learners

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Breaking tasks into smaller steps:

▶ Classroom

- ▶ **Strategy:** When presenting complex topics, break them into smaller, digestible steps with clear timelines for each part.
- ▶ **How to Implement:** Structure lessons or assignments into sequential parts and provide an estimated time for each step.

▶ Clinical

- ▶ **Strategy:** Simplify clinical procedures into smaller steps with clear timelines for each.
- ▶ **How to Implement:** Demonstrate clinical tasks in stages, such as “We’ll spend the next 15 minutes on vitals, then take a short break before moving to medication administration.”

Use Visual Supports and Cues

▶ Classroom

- ▶ **Strategy:** Incorporate visual aids like diagrams, charts, and timelines.
- ▶ **How to Implement:** Use PowerPoint slides, whiteboards, or handouts with visuals to reinforce lessons.

▶ Clinical

- ▶ **Strategy:** Provide visual guides for clinical tasks.
- ▶ **How to Implement:** Create laminated cards or visual posters showing step-by-step protocols for common clinical tasks to *reinforce learning and minimize cognitive overload*.

Provide Written Instructions

▶ Classroom

- ▶ **Strategy:** Offer clear written instructions for tasks.
- ▶ **How to Implement:** Distribute printed or digital copies of key points, project instructions, and deadlines, so students can refer to them when needed.

▶ Clinical

- ▶ **Strategy:** Include written guides to coincide with verbal demonstrations
- ▶ **How to Implement:** After clinical demonstrations, give students written protocols they can refer to during practice or on the floor.

Use Repetition and Summarization

- ▶ **Strategy:** Have learners repeat instructions or summarize lessons.
- ▶ **How to Implement:** After delivering instructions, ask students to paraphrase what they've learned, either verbally or in writing, to reinforce retention.

Use Step-by-Step Demonstrations

▶ Clinical

- ▶ **Strategy:** Have learners repeat instructions or summarize lessons.
- ▶ **How to Implement:** Show learners each step of a clinical skill, such as how to set up medical equipment, and allow them to replicate it immediately

Simplify Instructions and Avoid Overloading

- ▶ **Strategy:** Present information in simplified, clear steps.
- ▶ **How to Implement:** Use concise language, focusing on key concepts rather than overloading students with details. Allow time for questions and clarifications.

Limit Multitasking

▶ Clinical

- ▶ **Strategy:** Focus on one step at a time.
- ▶ **How to Implement:** During clinical simulations, ensure learners focus on one objective (e.g., patient assessment or administering medication), to reduce cognitive overload.

Provide Fidget Tools

▶ Classroom

- ▶ **Strategy:** Offer stress-relief tools like stress balls or fidget spinners.
- ▶ **How to Implement:** Have a collection of non-distracting fidget items available for students to use during lectures, especially when covering content-heavy topics. (i.e pipe cleaners, fidget cube, etc)

Provide Movement Breaks

▶ Clinical

- ▶ **Strategy:** Encourage brief movement between clinical tasks.
- ▶ **How to Implement:** Schedule breaks or transition periods between clinical sessions to allow learners to move, stretch, or practice physical exercises that can reset focus and energy.

Simplify Instructions and Avoid Overloading

▶ Classroom

- ▶ **Strategy:** Present information in simplified, clear steps.
- ▶ **How to Implement:** Use concise language, focusing on key concepts rather than overloading students with details. Allow time for questions and clarifications.

▶ Clinical

- ▶ **Strategy:** Use checklists or memory aids during practice.
- ▶ **How to Implement:** Provide students with pre-printed checklists to follow while performing clinical tasks, so they can track their progress and ensure no steps are missed.

How nursing professional development (NPD) practitioners can integrate inclusive strategies into their practice.

The logo for Nursing Professional Development (NPD) features a stylized 'N' composed of three parallel diagonal lines in shades of purple and blue, followed by the letters 'NPD' in a bold, dark blue sans-serif font.

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Inclusive Strategies

- ▶ Customize Learning Approaches Based on Cognitive Diversity
- ▶ Create Inclusive Physical Learning Environments
- ▶ Implement Inclusive Educational Practices
- ▶ Tailor Feedback and Assessment
- ▶ Provide Support for Clinical Adaptations
- ▶ Advocate for Organizational Change

Case Study: Navigating ADHD and Autism in Nursing: Untapped Strengths and Workplace Challenges



Background

- ▶ This case study is based on a qualitative study conducted with 17 nurses who have been diagnosed with ADHD and/or autism. It focuses on their experiences working in various healthcare settings, ranging from hospital wards to primary care, and highlights how their neurodivergent conditions affect their professional lives.

Participant Profiles

▶ Participants:

- ▶ 17 nurses (16 women, 1 man), aged 22-51, with a median work experience of 4 years. They worked in diverse settings, including emergency departments, nursing homes, and administrative roles.

▶ Diagnosis:

- ▶ 11 had ADHD, 3 had autism, and 3 had both ADHD and autism.

▶ Workload:

- ▶ Six nurses worked full-time, while others were on part-time work or sick leave due to stress-related issues.

Challenges

▶ Work Environment:

- ▶ Participants noted that the physical environment—noise, interruptions, and sensory overload—was overwhelming. They struggled with handling multiple responsibilities and often found hospital wards particularly challenging due to unpredictability and high workload.

▶ Organizational Issues:

- ▶ Many nurses felt that their managers did not fully understand ADHD and autism, which limited the effectiveness of accommodations. For example, while some nurses were allowed to take breaks, their coworkers would still assign them more tasks, assuming they had free time

▶ Support:

- ▶ Few nurses received meaningful accommodations, such as quiet spaces for documentation or adjustments to their schedules. A recurring theme was that managers showed goodwill but lacked the knowledge or resources to effectively support them.

Strengths

▶ Empathy and Patient Care:

- ▶ Many participants were highly attuned to patient needs, with the ability to pick up on subtle emotional cues or physical discomforts.

▶ Creative Problem Solving:

- ▶ Some nurses used their impulsivity to quickly propose and implement new solutions for patient care improvements, such as suggesting informational handouts for patients or adjusting care routines.

▶ Memory and Attention to Detail:

- ▶ Nurses with ADHD/autism noted their ability to remember faces, recognize patterns in patient symptoms, and quickly identify deviations in patient conditions, which made them valuable in clinical settings.

Workplace Adaptations

- ▶ Clearer expectations
- ▶ Predictable routines
- ▶ Structured task assignments
 - ▶ crucial for minimizing the anxiety that comes with the unpredictability of their work environment.

Conclusion

- ▶ This case study illustrates that nurses with ADHD and/or autism bring unique strengths to their roles but often feel like an "untapped resource" due to the physical and organizational constraints of their work environment. Better support from managers, through accommodations such as quiet workspaces, flexible schedules, and structured routines, could help these nurses fully utilize their talents and contribute to high-quality patient care.

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