

# Continuous Professional Development in Nursing: A Concept Analysis

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**Abstract:** *This paper presents a comprehensive concept analysis of Continuous Professional Development (CPD) in nursing, utilizing the systematic framework proposed by Walker and Avant. The proliferation of medical knowledge, technological advancements, and evolving healthcare demands necessitates that nursing professionals engage in ongoing learning to maintain and enhance their competence. Despite its critical importance, the concept of CPD often suffers from definitional ambiguity and varied interpretations across different contexts and regulatory bodies. This analysis aims to clarify the concept of CPD by identifying its defining attributes, antecedents, and consequences, drawing upon contemporary literature from 2021 to 2026. A model case, borderline case, related case, and contrary case are presented to illustrate the concept's application and boundaries. Furthermore, the paper explores empirical referents for measuring CPD, discusses prevalent barriers and enablers to its engagement, and highlights its global perspectives. The findings underscore the multifaceted nature of CPD and its profound implications for nursing practice, patient safety, and professional growth, offering a refined understanding that can inform educational strategies, policy development, and future research in nursing.*

**Keywords:** Continuous Professional Development; Nursing Practice; Concept Analysis; Professional Competence; Patient Safety

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## 1. Introduction

Continuous Professional Development (CPD) has become increasingly central to nursing practice in contemporary healthcare systems, where nurses are required to deliver safe, high-quality, and patient-centered care under conditions of rapid scientific change, technological advancement, and shifting population health needs. Sustained professional learning is therefore essential for maintaining clinical competence, adapting practice to current evidence, and responding effectively to increasingly complex care environments (Hakvoort et al., 2022). Within this context, CPD functions not only as a mechanism for maintaining professional capability but also as an important component of quality assurance and patient safety in nursing practice (Mlambo et al., 2021). CPD is also closely linked to professional accountability, as nurses are expected to remain responsive to evolving standards of care throughout the career span rather than relying solely on initial training or licensure (Redwood et al., 2024). Despite its importance, CPD remains conceptually imprecise in nursing scholarship and practice. The term is frequently used interchangeably with continuing education, lifelong learning, and professional development, although these concepts are not identical in scope, purpose, or application (Hearle & Lawson, 2019). This conceptual overlap may create inconsistency in how CPD is interpreted, implemented, and assessed across healthcare

organizations and regulatory systems, which in turn may weaken the design and evaluation of professional development initiatives (Merry et al., 2023). A clearer conceptualization is therefore required to distinguish CPD from related constructs, strengthen theoretical consistency, and support more coherent policy and educational approaches to nursing workforce development (Mlambo et al., 2021).

To address this problem, the present study undertakes a concept analysis of CPD in nursing using Walker and Avant's framework, a widely used method in nursing research for clarifying complex or ambiguously defined concepts (Gunawan et al., 2023; Hellman, 2024). The purpose of the analysis is to identify the defining attributes of CPD, examine the antecedents that enable its occurrence, and clarify the consequences associated with engagement in CPD within nursing contexts (Hearle & Lawson, 2019). This approach is particularly appropriate because it supports conceptual differentiation and analytical precision, both of which are needed before CPD can be consistently operationalized in policy, education, and empirical research.

The analysis draws on contemporary literature published between 2021 and 2026 in order to reflect current developments in healthcare delivery, digital learning environments, and professional regulation that may shape the meaning and practice of CPD in nursing. This temporal focus is important because the expectations placed on nurses, and the modalities through which CPD is delivered and documented, have evolved substantially in recent years, particularly in response to digital transformation and system-level disruptions in healthcare (Merry et al., 2023; O'Connor et al., 2023). The study therefore aims to produce a conceptually robust and contextually relevant understanding of CPD that is aligned with current nursing practice realities while remaining grounded in established nursing scholarship.

The significance of this concept analysis lies in its potential to support conceptual clarity across multiple levels of the nursing profession. For nursing educators, a clearer definition of CPD may assist in designing learning strategies that extend beyond attendance-based continuing education and better support reflective, practice-integrated development. For nursing leaders and administrators, conceptual clarity may strengthen organizational approaches to CPD by aligning workforce development strategies with competence, retention, and quality improvement priorities (Hakvoort et al., 2022). For regulators and policymakers, a more precise understanding of CPD may improve the alignment between compliance requirements and meaningful professional development outcomes. By identifying defining attributes, illustrative cases, antecedents, consequences, and empirical referents, this study provides a structured foundation for understanding, implementing, and evaluating CPD in nursing in a manner that is conceptually coherent and professionally relevant (Patel & Metersky, 2022; Merry et al., 2023).

## **2. Methodology: Walker and Avant's Framework**

To establish a conceptually rigorous and analytically transparent understanding of Continuous Professional Development (CPD) in nursing, this study adopted Walker and Avant's concept analysis framework, which remains a widely used approach in nursing scholarship for clarifying concepts that are complex, inconsistently defined, or used interchangeably with related terms (Gunawan et al., 2023; Hellman, 2024). The framework was considered appropriate because CPD is used across educational, clinical, organizational, and regulatory contexts with variable meanings, and this variation may weaken conceptual consistency in interpretation, implementation, and evaluation (Hearle & Lawson, 2019). Walker and Avant's method provides a structured sequence for examining concept use, identifying defining

attributes, constructing cases, and specifying antecedents, consequences, and empirical referents. The methodological purpose of applying this framework in the present study was to produce a contemporary, practice-relevant conceptualization of CPD in nursing that could support greater clarity in education, leadership, policy, and research (Merry et al., 2023).

Consistent with Walker and Avant's analytic sequence, the process began with selection of the focal concept, namely CPD in nursing, followed by clarification of the analytic purpose, which was to distinguish CPD from related constructs and identify its core conceptual characteristics. The analysis then examined the uses of CPD across scholarly and professional sources to identify both explicit definitions and recurring implicit meanings. These uses were compared iteratively to derive defining attributes, understood as the characteristics most consistently associated with the concept across contexts. Illustrative cases were subsequently developed to clarify conceptual boundaries, including a model case demonstrating all defining attributes, alongside borderline, related, and contrary cases to differentiate CPD from partial or adjacent phenomena. The analysis then identified antecedents as the conditions required for CPD to occur and consequences as the outcomes associated with engagement in CPD. Finally, empirical referents were specified as observable indicators that may be used to assess the presence and extent of CPD in practice. Given the interpretive nature of concept analysis, conceptual categorization was guided by recurrence, conceptual fit, and consistency across sources rather than by statistical aggregation, which is consistent with the epistemological purpose of Walker and Avant's method (Hellman, 2024).

A structured literature search was conducted to ensure that the concept analysis was informed by contemporary and relevant evidence. The search covered four major electronic databases PubMed, CINAHL, Scopus, and Web of Science because these databases index nursing, health professions education, and interdisciplinary healthcare literature relevant to CPD. Search terms were combined using Boolean logic to capture the focal concept and its conceptual dimensions, including "Continuous Professional Development," "CPD," "nursing," "concept analysis," "Walker and Avant," "defining attributes," "antecedents," "consequences," "lifelong learning," "continuing education," "professional development," "competence," "barriers," "enablers," and "empirical referents." The search was limited to publications from January 2021 to February 2026 in order to reflect contemporary developments in healthcare delivery, digital learning, and regulatory expectations that may influence the conceptualization and application of CPD in nursing (Merry et al., 2023; O'Connor et al., 2023). This date range was selected to prioritize conceptual relevance to current practice conditions, while acknowledging that earlier foundational literature remained important for interpretive comparison where necessary (Hearle & Lawson, 2019).

Eligibility criteria were defined to maintain conceptual relevance and scholarly quality. Included sources comprised peer-reviewed journal articles, systematic reviews, and theoretical or methodological papers that explicitly addressed CPD in nursing or offered conceptually relevant analysis of professional development, competence, or related constructs within nursing scholarship. Sources were excluded if they focused primarily on non-nursing professions, addressed training without relevance to ongoing professional development, fell outside the defined publication period, or were non-scholarly in nature. Following retrieval, records were screened for relevance based on title, abstract, and full-text review, and conceptually relevant information was extracted and organized according to Walker and Avant's analytic components, including concept use, defining attributes, antecedents, consequences, and empirical referents. This approach supported a coherent and traceable synthesis process while recognizing that concept analysis relies on interpretive integration

rather than formal evidence grading. The resulting synthesis provided the analytic foundation for the subsequent sections and supported the development of a contextually grounded conceptualization of CPD in nursing that remains sensitive to variation across professional and regulatory settings (Baloyi & Jarvis, 2020; Gunawan et al., 2023).

### 3. Concept Exploration: Uses of CPD

To achieve conceptual clarity regarding Continuous Professional Development (CPD) in nursing, it is necessary to examine how the term is used across the profession and how its meaning shifts according to context. CPD is not a single, fixed construct; rather, it is a context-dependent concept whose emphasis varies across clinical practice, nursing education, organizational leadership, and professional regulation (Merry et al., 2023). This variation reflects the historical development of professional learning in healthcare, which has moved from informal workplace-based learning toward more structured, accountable, and outcomes-oriented systems designed to ensure competence, patient safety, and quality of care (Sherman & Chappell, 2018). In contemporary nursing practice, CPD is most commonly understood as the ongoing process through which nurses maintain, update, and extend their professional competence throughout their careers (Hakvoort et al., 2022). In this usage, CPD includes both formal and informal forms of learning. Formal activities include postgraduate education, specialty certification, and structured in-service training, whereas informal activities include reflective practice, mentoring, peer learning, and self-directed inquiry (Patel & Metersky, 2022). This broad application demonstrates that CPD is not defined merely by participation in educational events, but by sustained engagement in learning that supports safe, current, and effective practice. In this sense, CPD functions as a protective mechanism against professional stagnation by enabling nurses to adapt to new evidence, emerging technologies, and changing patient needs (Rahmah et al., 2022). Within nursing education, the concept is used in a related but distinct way, where it serves as a developmental orientation that frames competence as an evolving capability rather than a static outcome achieved at the point of graduation or licensure (Gcawu & van Rooyen, 2022). Its close connection with lifelong learning reinforces the expectation that professional growth continues across the career span and must remain responsive to shifts in healthcare practice and social needs (Mlambo et al., 2021; Ryan et al., 2025).

In nursing administration, leadership, and workforce planning, CPD is used more strategically as an institutional mechanism for strengthening service quality, workforce capability, and organizational resilience (Redwood et al., 2024). In this context, CPD is not viewed only as an individual responsibility, but also as a system-level investment that contributes to staff retention, improved practice environments, and more reliable care delivery (Alhusban et al., 2026). At the same time, regulatory and employer perspectives often frame CPD as an accountability mechanism through which nurses demonstrate continuing competence, ethical compliance, and alignment with professional standards required for safe practice and licensure (Baloyi & Jarvis, 2020). A central challenge in exploring the uses of CPD is its frequent overlap with related concepts such as Continuing Education (CE), Lifelong Learning (LLL), and Professional Development (PD), which are often used interchangeably despite meaningful conceptual differences (Hearle & Lawson, 2019). CE generally refers more narrowly to structured educational activities and is often quantified through contact hours or credits, whereas CPD is broader because it includes both formal and informal learning and emphasizes the ongoing application of learning to maintain and enhance competence in

practice (Pracilio et al., 2023). Lifelong learning is broader still, representing a general orientation toward continuous learning across the life course, while CPD reflects the profession-specific expression of that orientation within nursing and its accountability structures (Qalehsari et al., 2017). Professional Development may also include career advancement, identity formation, and role transition, but CPD is more explicitly tied to sustained competence and practice improvement. Taken together, these contextual uses show that CPD consistently refers to a continuous, purposeful, and professionally grounded process of learning, but with different emphases depending on whether the focus is clinical competence, educational development, workforce strategy, or regulatory accountability. This conceptual mapping is essential for reducing ambiguity and provides the foundation for identifying the defining attributes, antecedents, and consequences of CPD in nursing in the subsequent stages of the analysis (Merry et al., 2023).

#### **4. Defining Attributes**

Defining attributes are the characteristics that consistently appear in the literature and are essential for understanding and distinguishing a concept from others. For Continuous Professional Development (CPD) in nursing, a careful review of contemporary literature (2021-2026) reveals several core attributes that collectively encapsulate its essence. These attributes are not merely desirable qualities but are fundamental components without which the concept of CPD, as applied to nursing, would lose its meaning and efficacy. They highlight the active, ongoing, and purposeful nature of nurses' engagement in learning and development.

##### **4.1. Self-Directed Learning**

A key defining attribute of Continuous Professional Development (CPD) in nursing is its self-directed orientation. In practical terms, this means that nurses assume primary responsibility for identifying their learning needs, setting development priorities, selecting suitable learning opportunities, and evaluating how learning influences their practice (Rahmah et al., 2022). Although organizational expectations and regulatory requirements shape participation in CPD, meaningful professional development is sustained by the nurse's own initiative, judgment, and commitment to improvement (Mlambo et al., 2021). This reflects core adult-learning principles, which emphasize active learner engagement in recognizing and addressing competence gaps rather than passive participation in externally assigned training (Qalehsari et al., 2017).

The self-directed nature of CPD is especially important in nursing because roles, specialties, and practice settings differ substantially. A standardized CPD model may not adequately address the specific learning demands of different clinical contexts. In contrast, self-directed learning enables nurses to align CPD activities with their practice responsibilities, career goals, and local service needs, thereby improving the relevance and applicability of professional learning (Pracilio et al., 2023). This flexibility is essential for maintaining competence in a profession characterized by rapid clinical, technological, and organizational change (Hakvoort et al., 2022).

Self-directed CPD also strengthens ownership of professional growth and accountability for practice improvement. When nurses actively choose and pursue learning pathways, they are more likely to remain engaged, motivated, and committed to applying new knowledge and

skills in clinical settings (Redwood et al., 2024). This is more effective than a purely compliance-based approach in which CPD is completed only to satisfy formal requirements. Accordingly, self-direction should be understood not merely as a learning strategy, but as a foundational orientation that supports effective, sustained, and practice-relevant CPD in nursing (Merry et al., 2023).

#### **4.2. Lifelong Commitment**

CPD in nursing is fundamentally characterized by a lifelong commitment to learning. This means that professional development does not end at graduation or initial licensure; rather, it continues across the nurse's entire career, from entry into practice through retirement (Mlambo et al., 2021). Lifelong learning is closely aligned with CPD because it emphasizes continuous adaptation to new evidence, technologies, and evolving models of care. In a healthcare environment where clinical standards and best practices change rapidly, sustained engagement in learning is essential to maintaining professional competence (Ryan et al., 2025).

This commitment extends beyond formal education and includes informal, practice-embedded learning experiences. CPD therefore involves an ongoing process of learning, unlearning, and relearning in response to clinical demands and professional responsibilities. For example, nurses may engage in self-study, peer discussion, reflective practice, or workplace-based learning to address emerging patient-care needs. These informal learning activities are central to the lifelong nature of CPD, even when they do not result in formal credits or certification (Qalehsari et al., 2017).

The lifelong commitment inherent in CPD also reflects nurses' professional responsibility to maintain public trust and ensure safe, effective care. Patients and communities expect nurses to remain current with the best available evidence and professional standards. When nurses disengage from ongoing development, competence may stagnate, which can adversely affect care quality and patient safety. For this reason, lifelong learning is not merely a personal preference but a professional imperative, often reinforced through re-licensure and continuing competence requirements established by regulatory and professional bodies (Baloyi & Jarvis, 2020). Sustained participation in CPD helps ensure that nurses can respond effectively to changing population health needs and contribute to a resilient healthcare system (Merry et al., 2023).

#### **4.3. Competence Maintenance and Enhancement**

A central defining attribute of CPD in nursing is its emphasis on maintaining and enhancing professional competence. In nursing, competence involves the consistent and judicious application of knowledge, clinical skills, communication, reasoning, values, and reflective judgment in practice to serve patients and communities effectively (Al-Jabri et al., 2021). CPD is designed to support both the preservation of existing competencies and the development of new capabilities, thereby strengthening overall professional performance. This function is especially important in contemporary healthcare, where evolving diseases, treatment approaches, and patient expectations require nurses to continually update their knowledge and skills (Hakvoort et al., 2022).

Competence maintenance requires ongoing review and reinforcement of foundational knowledge and core clinical skills to prevent skill decay over time. In practice, this may include refresher training in basic life support, medication safety, infection prevention, and other essential nursing functions. Such activities help nurses sustain minimum standards of safe

practice. However, CPD extends beyond maintaining baseline competence; it also promotes competence enhancement by enabling nurses to broaden their scope of practice, develop specialty expertise, and strengthen advanced clinical judgment (Rahmah et al., 2022).

Competence enhancement is often achieved through engagement in evidence-based practice, quality improvement activities, and the adoption of innovative care approaches. For example, nurses may pursue training in new clinical procedures, develop proficiency with emerging technologies, or improve patient education strategies for chronic disease management. These forms of CPD directly improve the quality and effectiveness of nursing care and support better patient outcomes. In this sense, the continuous enhancement of competence is a core marker of professional excellence and an important driver of innovation in nursing practice (Redwood et al., 2024). Competence maintenance and enhancement are also closely linked to patient safety. Ongoing professional development helps ensure that nurses remain current with clinical standards, make sound decisions, and reduce risks in care delivery. As a result, CPD functions as a practical safeguard that supports safer care, stronger clinical performance, and improved health outcomes across healthcare settings (Katantha et al., 2025).

#### 4.4. Reflective Practice

Reflective practice is a core defining attribute of CPD in nursing because it requires nurses to deliberately examine their clinical experiences, actions, and decisions in order to improve future practice (Patel & Metersky, 2022). Rather than focusing only on task completion, reflective practice emphasizes critical appraisal of what was done, why it was done, and how similar situations can be managed more effectively in the future. In this way, everyday clinical experience becomes a structured source of professional learning and development (Froneman et al., 2023). Reflection may occur informally through self-questioning after a clinical encounter or more formally through debriefings, supervision, and written reflective accounts. Regardless of format, the process typically involves revisiting an event, examining one's thoughts and responses, evaluating the effectiveness of interventions, and identifying lessons that can guide future action. This process strengthens clinical judgment, ethical decision-making, and emotional awareness, all of which are essential for safe and effective nursing practice (Patel & Metersky, 2022).

For example, a nurse may reflect on a difficult conversation with a patient's family by analyzing communication dynamics, identifying missed opportunities for clarity or empathy, and planning better communication strategies for future encounters. Similarly, reflection on a complex patient case can deepen understanding of clinical reasoning, care coordination, and interprofessional collaboration. Through this process, reflection supports not only technical improvement but also more person-centered and context-sensitive care (Pereira et al., 2024). Reflective practice also plays a critical role in strengthening evidence-based practice because it encourages nurses to compare their routine actions with current knowledge and professional standards. This allows them to identify gaps, challenge ineffective habits, and integrate updated evidence into care delivery. Without reflection, learning from practice remains superficial and CPD risks becoming a procedural requirement rather than a transformative professional process. Accordingly, reflective practice should be understood as a professional discipline that sustains the continuous development of nursing expertise and supports high-quality, person-centered care (Mlambo et al., 2021).

#### 4.5. Integration of Theory and Practice

The final defining attribute of CPD in nursing is the integration of theory and practice. This attribute emphasizes that effective professional development connects formal knowledge acquisition with its application in real clinical contexts. CPD is not limited to accumulating theoretical information, nor is it confined to routine task performance without conceptual understanding. Rather, it involves a reciprocal process in which theoretical knowledge informs clinical decision-making, while practice-based experiences generate new questions that stimulate further learning and inquiry (Merry et al., 2023).

This integration is what makes CPD relevant and practice-oriented. For example, when a nurse attends training on a new pharmacological intervention, learning is meaningful only when theoretical understanding (e.g., mechanism of action, contraindications, and adverse effects) is translated into safe administration, patient monitoring, and context-specific patient education in clinical practice. In this sense, the value of CPD lies in its capacity to convert knowledge into improved nursing care and better clinical performance (Hakvoort et al., 2022).

The integration of theory and practice is also essential for strengthening critical thinking and problem-solving. Nurses who can relate theoretical concepts to actual patient situations are better positioned to interpret complex clinical data, make informed judgments, and adapt interventions to individual patient needs. This ability to synthesize research evidence, clinical knowledge, and situational assessment is a hallmark of advanced nursing competence and professional maturity (Al-Jabri et al., 2021).

In addition, this attribute highlights the importance of practice-based learning within authentic care environments. Through preceptorship, mentorship, clinical teaching, and interprofessional collaboration, nurses refine their skills, test theoretical assumptions, and receive immediate feedback from experienced colleagues. These workplace learning experiences are central to professional growth because they embed development within the realities of nursing work rather than separating learning from practice (Gcawu & van Rooyen, 2022). Accordingly, integrating theory and practice ensures that CPD remains a clinically grounded and professionally meaningful process that continuously strengthens nursing expertise in response to evolving healthcare demands (O'Connor et al., 2023).

### 5. Cases

To further clarify the concept of Continuous Professional Development (CPD) in nursing and delineate its boundaries, Walker and Avant's methodology necessitates the presentation of various cases. These cases model, borderline, related, and contrary serve as illustrative examples that demonstrate the concept in its purest form, its partial manifestations, its close relatives, and its complete absence, respectively. By examining these diverse scenarios, a more nuanced and comprehensive understanding of CPD in nursing can be achieved, bridging theoretical definitions with practical applications.

#### 5.1. Model Case

A model case is a quintessential example that embodies all the defining attributes of the concept. It represents CPD in its ideal and complete form, showcasing self-directed learning, lifelong commitment, competence maintenance and enhancement, reflective practice, and the integration of theory and practice.

**Scenario:** Nurse Emily, a registered nurse with 10 years of critical care experience, demonstrates a clear example of CPD in practice. After identifying an increase in ventilator-associated pneumonia (VAP) cases in her unit, she independently reviews current evidence-based prevention guidelines and enrolls in an online advanced certificate program in respiratory care and infection control, reflecting the self-directed and lifelong nature of professional learning in nursing (Mlambo et al., 2021). At the same time, she applies this learning in practice by presenting evidence to her unit's quality improvement committee and collaborating with colleagues to revise VAP prevention protocols, illustrating competence enhancement and the integration of theory with clinical practice (Hakvoort et al., 2022). Following implementation, Emily evaluates intervention outcomes through patient data review, team discussions, and ongoing adjustment of her practice, which reflects the central role of reflective practice in CPD (Patel & Metersky, 2022). She also mentors junior nurses on the updated protocols and continues to seek learning opportunities, indicating that her development is driven not merely by compliance but by intrinsic motivation, professional accountability, and commitment to patient safety (Redwood et al., 2024).

## 5.2. Borderline Case

A borderline case contains some, but not all, of the defining attributes of CPD. It shares similarities with the concept but lacks one or more essential characteristics, making its classification as true CPD ambiguous.

**Scenario:** Nurse David, a medical-surgical nurse, participates in a mandatory annual hospital training session covering fire safety and basic life support (BLS) recertification, completes the required modules, and passes the practical assessment. This participation reflects a minimum level of ongoing professional engagement and competence maintenance required for safe practice and regulatory compliance (Baloyi & Jarvis, 2020; Rahmah et al., 2022). However, David approaches the training primarily as a compliance obligation rather than a developmental opportunity. He does not seek additional learning beyond the required content, nor does he critically reflect on how the training could improve his day-to-day patient care or support his longer-term professional growth, which indicates weak alignment with self-directed learning and reflective practice as core attributes of CPD (Patel & Metersky, 2022; Pracilio et al., 2023). As a result, although his participation satisfies institutional and regulatory expectations, it does not demonstrate the deeper, proactive, and practice-integrated engagement that characterizes comprehensive and transformative CPD in nursing (Redwood et al., 2024).

## 5.3. Related Case

A related case is similar to CPD but represents a distinct concept. It shares some common features but possesses unique attributes that differentiate it from CPD.

**Scenario:** Sarah, a newly graduated nurse, completes her nursing degree, passes the licensure examination, and then enters a structured hospital orientation program that includes training on institutional policies, electronic health records, and unit-specific procedures. This stage involves intensive learning, supervised practice, and the application of theoretical knowledge in a real clinical environment, which supports initial competence acquisition and the early integration of theory into practice (Al-Jabri et al., 2021; Gcawu & van Rooyen, 2022). However, this phase is more accurately classified as initial professional preparation and workplace orientation rather than Continuous Professional Development (CPD). Its primary purpose is to establish foundational competence and enable safe entry into a specific practice

setting, not to sustain competence development across the nurse's career (Hearle & Lawson, 2019; Merry et al., 2023). Although this transition period is essential and forms the basis for later professional growth, it remains distinct from CPD, which is characterized by ongoing, self-directed, and lifelong competence maintenance and enhancement after entry into practice (Mlambo et al., 2021; Redwood et al., 2024).

#### 5.4. Contrary Case

A contrary case is a clear example of what the concept is not. It lacks all the defining attributes of CPD and represents its antithesis.

**Scenario:** Michael, a nurse who has worked in the same nursing home for 25 years, continues to rely on outdated methods and shows little interest in new evidence, technologies, or updated practice standards. He avoids optional training, dismisses revised protocols, and depends on junior staff when unfamiliar equipment or procedures are introduced. This pattern reflects a clear absence of CPD because it demonstrates disengagement from self-directed learning, resistance to competence development, and a lack of responsiveness to changing clinical demands (Hakvoort et al., 2022; Pracilio et al., 2023). It also contradicts the core principle of lifelong learning in nursing, which requires ongoing adaptation to new knowledge and evolving models of care throughout the professional career (Mlambo et al., 2021; Ryan et al., 2025). In addition, Michael's refusal to examine and improve his practice indicates a lack of reflective practice, which is essential for translating experience into professional growth and safer care (Patel & Metersky, 2022). Taken together, this scenario represents professional stagnation rather than CPD and may place care quality and patient safety at risk (Redwood et al., 2024; Rahmah et al., 2022).

These cases collectively illustrate the nuanced nature of CPD in nursing, highlighting its essential components and distinguishing it from other forms of learning or professional activities. They underscore that true CPD is a holistic and continuous process driven by individual initiative, supported by organizational structures, and aimed at fostering excellence in patient care through perpetual learning and adaptation.

### 6. Antecedents and Consequences

Understanding the concept of Continuous Professional Development (CPD) in nursing also requires an examination of its antecedents the events or conditions that must be present for CPD to occur and its consequences the outcomes or results that follow from its engagement. This analysis provides a comprehensive view of the factors influencing CPD and its impact on individual nurses, the nursing profession, and healthcare systems.

#### 6.1. Antecedents

Antecedents are the precursors to CPD; they are the necessary conditions that enable or facilitate a nurse's engagement in ongoing professional learning. Without these foundational elements, the initiation and sustained participation in CPD would be significantly hindered.

### 6.1.1. Individual Motivation

At the core of effective CPD in nursing is individual motivation, particularly intrinsic motivation to improve practice and sustain professional excellence. Nurses who are curious, self-aware, and proactive in identifying their learning needs are more likely to engage meaningfully in CPD rather than participate only to satisfy formal requirements (Pracilio et al., 2023; Redwood et al., 2024). This internal drive is closely tied to professional responsibility, because nurses who view learning as part of their role are more likely to pursue development opportunities that strengthen competence and improve patient care (Rahmah et al., 2022).

Intrinsic motivation also supports deeper and more sustained engagement with lifelong learning. In a rapidly changing healthcare environment, nurses must continuously update their knowledge, skills, and clinical judgment, and this is more likely to occur when CPD is driven by personal commitment rather than external pressure alone (Mlambo et al., 2021; Ryan et al., 2025). Without such motivation, mandatory CPD requirements may result in minimal compliance, with limited reflection, weak knowledge transfer, and little impact on practice improvement (Redwood et al., 2024).

### 6.1.2. Institutional Support

Institutional support is a key antecedent of CPD in nursing because it shapes whether nurses can realistically participate in meaningful professional learning. This support includes tangible resources (e.g., funding for courses, paid study time, access to learning platforms, and educational materials) as well as structural mechanisms such as mentorship and career development pathways (Merry et al., 2023). In addition, organizational culture matters: when healthcare institutions treat professional development as a strategic investment and leaders actively encourage learning, nurses are more likely to engage consistently in CPD (Hakvoort et al., 2022).

Leadership and organizational priorities also influence CPD participation through policy and performance systems. When CPD is embedded in appraisal processes, promotion pathways, and workforce planning, nurses are more likely to view it as integral to practice rather than optional or burdensome (Redwood et al., 2024). By contrast, limited funding, staffing shortages, workload pressure, and weak managerial support are well-established barriers that reduce participation and undermine sustained engagement in CPD (Pracilio et al., 2023).

### 6.1.3. Regulatory Frameworks

Regulatory frameworks established by professional nursing councils and governmental authorities constitute a key antecedent of continuing professional development (CPD) in nursing because they formalize expectations for ongoing learning and link professional registration to evidence of continued competence (Baloyi & Jarvis, 2020). In many jurisdictions, these frameworks require nurses to complete a specified number of CPD hours or approved learning activities to maintain licensure or revalidation, thereby supporting public protection and minimum professional standards (Merry et al., 2023). Although such requirements may sometimes be experienced as administrative obligations, they function as an important external driver of CPD participation, particularly when intrinsic motivation is limited, and they help ensure consistent engagement in professional learning across the workforce (Hearle & Lawson, 2019).

#### **6.1.4. Technological Access and Infrastructure**

In the digital era, technological access and infrastructure have become essential antecedents of continuing professional development (CPD) in nursing. Access to reliable internet connectivity, e-learning platforms, virtual simulation technologies, and digital knowledge resources (e.g., online journals and databases) substantially improves the accessibility, flexibility, and continuity of CPD participation, particularly for nurses managing shift work and competing clinical demands (O'Connor et al., 2023). Digital delivery models also expand access to professional learning across geographically dispersed settings, making CPD more feasible for nurses who may otherwise face barriers to attending face-to-face programs (Merry et al., 2023). At the same time, unequal access to technology and digital infrastructure remains a major barrier to CPD engagement, especially in low-resource contexts. Limitations such as poor internet connectivity, inadequate digital devices, and restricted access to online learning systems can prevent nurses from participating consistently in CPD, even when motivation is high (Baloyi & Jarvis, 2020). Therefore, equitable investment in technological infrastructure is not simply a logistical issue but a foundational prerequisite for broad, sustainable, and inclusive CPD implementation in nursing (Merry et al., 2023).

### **6.2. Consequences**

The engagement in CPD yields a wide array of positive consequences that extend beyond the individual nurse to impact patient care, the nursing profession, and the broader healthcare system. These outcomes underscore the value and necessity of continuous learning.

#### **6.2.1. Improved Patient Outcomes**

Perhaps the most significant consequence of effective CPD is improved patient outcomes. When nurses continuously update their knowledge and skills, they are better prepared to deliver safe, evidence-informed care, which contributes to better patient safety, fewer clinical errors, stronger infection prevention practices, and higher patient satisfaction (Merry et al., 2023). Competent, current nursing practice translates directly into better health outcomes for individuals and communities. For example, nurses who remain updated on infection prevention and control procedures are better positioned to reduce healthcare-associated infections, while nurses who strengthen clinical judgment through ongoing learning can identify deterioration earlier and intervene more effectively, thereby reducing adverse events and improving care quality (Al Jabri, 2023).

#### **6.2.2. Professional Empowerment and Growth**

CPD fosters professional empowerment and growth among individual nurses. Engagement in ongoing learning activities can strengthen self-confidence, improve job satisfaction, and create pathways for career progression (Ryan et al., 2025). Nurses who feel competent and supported in their professional development are more likely to assume leadership responsibilities, pursue specialization, and contribute to policy and practice development (Fosah & Llahana, 2025). This sustained growth also reinforces professional identity and cultivates pride in nursing practice. In addition, CPD may enhance professional prestige and recognition within the healthcare community, which can support both attraction and retention of nursing talent (Sadeghnezhad et al., 2023).

### 6.2.3. Enhanced Nurse Retention

Investment in CPD has been consistently associated with stronger nurse retention. When healthcare organizations provide meaningful professional development opportunities, nurses are more likely to feel valued, supported, and invested in their careers, which contributes to higher job satisfaction and lower turnover intentions (NHS Employers, 2024). Opportunities for growth and learning are a major factor in nurses' decisions to remain with an employer (Hakvoort et al., 2022). In contrast, limited access to CPD can contribute to professional stagnation, burnout, and intentions to leave. Thus, well-structured CPD programs support not only competence development but also workforce stability and long-term sustainability in nursing services (Pracilio et al., 2023).

### 6.2.4. Adaptability to Healthcare Changes

CPD enables nurses to demonstrate adaptability to ongoing healthcare change. The healthcare landscape continues to evolve in response to emerging diseases, technological innovation, demographic transitions, and policy reform. Nurses who engage regularly in CPD are better positioned to respond to these shifts, integrate updated practices, and contribute to innovative solutions in care delivery (Merry et al., 2023). Recent global health crises, including the COVID-19 pandemic, sharply underscored the importance of a nursing workforce able to rapidly acquire new knowledge and skills to manage unprecedented challenges. CPD helps ensure that nurses remain agile and resilient, with the capacity to function effectively in complex and unpredictable practice environments (Ryan et al., 2025).

### 6.2.5. Social Justice and Health Equity

Finally, CPD contributes to social justice and health equity. By equipping nurses with the knowledge and skills needed to address the health priorities of diverse and vulnerable populations, CPD can help reduce persistent health disparities (Zeydani et al., 2023). For example, training in cultural competence, community health assessment, and advocacy skills enables nurses to deliver more equitable, responsive care, especially in underserved settings and among marginalized groups. Through CPD, nurses can become effective agents of change, advocating for policies and practices that promote health for all, thereby fulfilling a central social mandate of the nursing profession (Merry et al., 2023).

## 7. Empirical Referents

Empirical referents are observable and measurable indicators used to demonstrate the presence of a concept in practice. In the context of continuing professional development (CPD) in nursing, empirical referents are essential for evaluating whether CPD is occurring in meaningful ways, assessing the effectiveness of CPD initiatives, and ensuring accountability across individual, organizational, and regulatory levels (Hearle & Lawson, 2019). Although CPD is associated with important intrinsic outcomes, such as professional confidence and reflective growth, empirical referents provide the external and verifiable indicators needed for systematic assessment and comparison across settings (Merry et al., 2023). In this way, empirical referents serve as the practical bridge between the conceptual definition of CPD and its observable expression in nursing practice.

### **7.1. Certificates and Credits**

One of the most widely used empirical referents of CPD is the documented accumulation of certificates and educational credits. This includes verifiable participation in workshops, seminars, conferences, short courses, online learning modules, and formal academic programs. In many nursing systems, professional bodies and regulatory authorities assign credit hours (e.g., Continuing Education Units [CEUs]) to approved learning activities, and the number of credits earned functions as a quantitative indicator of engagement in formal CPD (Merry et al., 2023). CPD frameworks linked to revalidation and licensure maintenance commonly specify minimum hours and, in some cases, participatory learning requirements, as seen in UK-based CPD models and similar regulatory systems (Hearle & Lawson, 2019). Accreditation-based systems also use credit documentation to support quality assurance in continuing nursing education and CPD provision (Baloyi & Jarvis, 2020). Although certificates and credits primarily measure participation rather than competence transfer, they remain a foundational and auditable indicator of sustained engagement in professional learning.

### **7.2. Competency Assessments**

Competency assessments constitute a more direct empirical referent of CPD because they evaluate the knowledge, skills, and professional capabilities developed or strengthened through ongoing learning. Unlike attendance records, competency assessments provide evidence of whether CPD has translated into improved practice performance. These assessments may take several forms. Performance evaluations conducted by supervisors or peers can assess clinical judgment, adherence to standards, and the application of newly acquired knowledge in practice (Al Jabri, 2023). Clinical audits provide another important indicator by systematically reviewing care processes and outcomes to identify whether professional development activities are associated with measurable improvements in quality and safety (Al Jabri, 2023). Skills checklists and simulation-based assessments are especially useful for high-risk procedures, competency validation, and the introduction of new clinical technologies, as they permit objective evaluation in controlled settings (O'Connor et al., 2023). Objective Structured Clinical Examinations (OSCEs) similarly offer a standardized method for assessing clinical competence, including the integration of technical skills, communication, and decision-making in simulated patient encounters (Hull, 2024). Collectively, these approaches provide stronger empirical evidence of CPD impact by demonstrating capability development rather than participation alone.

### **7.3. Career Progression and Role Expansion**

Career progression and role expansion are important longitudinal empirical referents that reflect the cumulative impact of CPD on a nurse's professional trajectory. Advancement into specialized clinical roles (e.g., clinical nurse specialist or nurse practitioner), leadership positions (e.g., charge nurse or nurse manager), or academic appointments (e.g., nurse educator) typically requires sustained CPD engagement and the development of advanced competencies over time (Fosah & Llahana, 2025). Likewise, attainment of specialty certifications provides a concrete indicator of focused professional development and validated expertise within a defined area of practice. These markers are particularly useful because they reflect not only episodic learning but also the sustained integration of learning into professional capability and role readiness. As such, career progression and role diversification serve as

practical indicators that CPD contributes to broader professionalization, specialization, and workforce development within nursing (Sadeghnezhad et al., 2023).

#### **7.4. Self-Assessment Tools and Portfolios**

Self-assessment tools and professional portfolios are empirical referents that capture the reflective, self-directed, and developmental dimensions of CPD. These indicators are especially relevant because CPD is not solely a matter of attendance or performance outcomes; it also involves critical reflection, self-monitoring, and intentional planning for future learning. Instruments such as the CPD-REACTION scale can be used to assess a nurse's intention to adopt new professional behaviors following CPD activities, thereby offering insight into the behavioral change mechanisms associated with CPD engagement (Lizotte et al., 2026). Professional portfolios, which are often required in regulatory and revalidation systems, provide structured documentation of learning activities, reflective accounts of how learning influenced practice, and prospective learning goals (Hearle & Lawson, 2019). These portfolios may include reflective writing, project summaries, peer feedback, and other forms of practice-based evidence. Although portfolio evidence is often self-reported, it remains valuable for assessing engagement in reflective practice and the integration of learning into professional identity and practice development (Patel & Metersky, 2022). Accordingly, self-assessment tools and portfolios complement quantitative indicators by capturing the qualitative and developmental aspects of CPD that are central to nursing professionalism (Mlambo et al., 2021).

### **8. Discussion and Implications**

The present concept analysis clarifies Continuous Professional Development (CPD) in nursing as a multidimensional and practice-oriented concept that is best understood as a sustained professional process rather than a discrete educational activity or a narrow compliance requirement. The synthesis indicates that CPD is constituted by interrelated attributes self-directed learning, lifelong commitment, competence maintenance and enhancement, reflective practice, and integration of theory with practice which function collectively to support continuous professional capability in changing clinical environments. This integrated conceptualization is important because it distinguishes CPD from narrower constructs such as continuing education, which may capture attendance in structured learning but may not adequately represent reflective engagement, learning transfer, or competence development in practice (Hearle & Lawson, 2019; Mlambo et al., 2021). The findings also indicate that a conceptually valid understanding of CPD requires multidimensional evaluation, as participation-based indicators alone cannot sufficiently demonstrate whether professional learning has translated into improved practice capability or sustained professional development (Merry et al., 2023; Patel & Metersky, 2022).

Several practical and logistical conditions shaped the scope and interpretation of the analysis and should be considered when evaluating the findings. The review was intentionally limited to literature published between 2021 and 2026 in order to capture contemporary developments in nursing practice, digital learning systems, and regulatory expectations; however, this temporal focus may have reduced the visibility of earlier foundational conceptual work that continues to inform CPD discourse. In addition, the CPD literature is distributed across clinical, educational, organizational, and regulatory domains, and this dispersion creates synthesis

challenges because similar terminology is often used with different meanings and levels of specificity (Gunawan et al., 2023; Hearle & Lawson, 2019). Variation in reporting standards and national regulatory frameworks further complicates interpretation, particularly where CPD is operationalized differently across jurisdictions. These contextual differences do not invalidate the conceptual findings, but they do indicate that application of the model across settings should be undertaken with attention to local regulatory structures, institutional capacity, and professional expectations (Baloyi & Jarvis, 2020; Merry et al., 2023).

The findings are broadly consistent with previous scholarship that frames CPD as a career-long process linked to competence, professional identity, and adaptation to healthcare change, but the present analysis adds conceptual precision by explicitly organizing these elements into a coherent attribute–antecedent–consequence structure. The emphasis on lifelong learning and self-directed development aligns with prior nursing literature showing that sustained professional growth is shaped by both individual responsibility and evolving practice demands (Mlambo et al., 2021; Rahmah et al., 2022). The identification of institutional support, regulatory expectations, and technological access as antecedents is also consistent with studies indicating that CPD engagement is strongly affected by organizational resources, leadership support, and policy structures (Hakvoort et al., 2022; O’Connor et al., 2023). The analytical contribution of the present section lies in demonstrating that these factors should not be treated as separate influences only, but as interdependent conditions that may determine whether CPD remains procedural or becomes developmentally meaningful. In particular, the findings suggest that CPD participation may have limited developmental value when reflective practice and theory–practice integration are absent, even when formal attendance requirements are met (Patel & Metersky, 2022).

The consequences identified in the analysis are also generally aligned with prior studies, although the evidentiary basis supports stronger confidence for some outcomes than others. The literature indicates that CPD can strengthen proximal outcomes such as professional confidence, perceived competence, role development, and adaptability to clinical change, particularly when supported by favorable organizational conditions (Redwood et al., 2024; Ryan et al., 2025). By contrast, distal outcomes such as patient-level improvement, retention, and system performance should be interpreted more cautiously because many studies infer these effects indirectly through competence indicators, workplace perceptions, or organizational proxies rather than through longitudinal outcome designs (Merry et al., 2023). Alternative explanations therefore need to be considered, including staffing adequacy, leadership effectiveness, workplace culture, and concurrent quality-improvement initiatives, all of which may influence outcomes often attributed to CPD (Hakvoort et al., 2022; Fosah & Llahana, 2025). This interpretation strengthens the discussion by avoiding deterministic claims and by recognizing that CPD may exert its influence through interaction with broader organizational and regulatory conditions rather than as an isolated intervention.

The findings support the conclusion that CPD should be treated as a strategic and professionally grounded mechanism for sustaining nursing competence, not merely as an administrative requirement for revalidation or licensure. This conclusion has practical significance for policy, leadership, and evaluation because it implies that CPD systems should combine participation records with stronger evidence of reflection, competence application, and practice improvement if they are to reflect the full conceptual meaning of CPD (Hearle & Lawson, 2019; Al Jabri, 2023). The empirical referents identified in the preceding analysis are therefore important not only as measurement tools but also as a framework for aligning conceptual clarity with implementation and accountability. Future research may need to test this conceptual

model across different health systems and resource contexts to determine how digital access, regulatory expectations, and organizational support interact to shape CPD engagement and outcomes in practice (Merry et al., 2023; O'Connor et al., 2023). Such work could strengthen both the conceptual robustness and applied relevance of CPD scholarship in nursing.

## 9. Conclusion

Continuous Professional Development (CPD) stands as an indispensable pillar of modern nursing, essential for navigating the complexities of an ever-evolving healthcare landscape. This concept analysis, grounded in the rigorous framework of Walker and Avant, has meticulously deconstructed CPD, revealing its core attributes as self-directed learning, lifelong commitment, competence maintenance and enhancement, reflective practice, and the integration of theory and practice. These attributes collectively define a dynamic process that empowers nurses to remain proficient, adaptable, and responsive to the diverse needs of patients and healthcare systems.

The exploration of antecedents highlights that effective CPD is not an isolated endeavor but is nurtured by a confluence of individual motivation, robust institutional support, clear regulatory frameworks, and accessible technological infrastructure. Conversely, the profound consequences of CPD ranging from improved patient outcomes and professional empowerment to enhanced nurse retention and adaptability to change underscore its critical role in fostering a high-quality, safe, and equitable healthcare environment. The identified empirical referents provide tangible means to measure and validate the impact of CPD, moving beyond mere participation to demonstrable improvements in practice.

In an era marked by rapid medical advancements, technological disruption, and global health challenges, the clarity provided by this concept analysis is more pertinent than ever. It offers a refined understanding of CPD that can serve as a foundational guide for nursing educators in designing relevant curricula, for leaders in cultivating supportive organizational cultures, and for policymakers in formulating effective regulatory mandates. Ultimately, by embracing and strategically investing in a well-defined and comprehensively understood CPD, the nursing profession can continue to uphold its commitment to excellence, ensure patient safety, and contribute significantly to the health and well-being of communities worldwide. The ongoing commitment to professional growth, as illuminated by this analysis, is not merely an option but a professional imperative that shapes the future of nursing and healthcare.

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