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Reflection as an Educational Strategy in Nursing Professional Development

CE 2.5 ANCC Contact Hours

An Integrative Review

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Reflection is a critical component of professional nursing practice and a strategy for learning through practice. This integrative review synthesizes the literature addressing the use of reflection as an educational strategy and reports outcomes from the use of reflective strategies. Reflection education is primarily nested in programs to meet specific clinical goals, structured with group facilitation. Findings suggest that reflective strategies stimulate learning in practice, enhance readiness to apply new knowledge, and promote practice change.

INTRODUCTION

In recent years, reflection has gained increased recognition as a critical component of professional nursing practice and as an educational strategy to acquire knowledge and learn through practice (Asselin & Fain, 2013; Kim, 1999; Perry, 2000). Although there is no agreed upon definition, reflection is generally understood as the deliberate process of critically thinking about a clinical experience, which leads to development of insights for potential practice change (Asselin & Fain, 2013). Scholars contend that reflection offers nurses the opportunity to build on existing knowledge through clinical experiences (Johns, 1995; Kuiper & Pesut, 2004; Perry, 2000), develop clinical judgment (Nielsen, Stragnell, & Jester, 2007; Tanner, 2006), promote strong communication skills, build collaborative practice, and improve patient care (Horton-Deutsch, 2012; Peden-McAlpine, Tomlinson, Forneris, Genck, & Meiers, 2005).

Although it is generally assumed that nurses know how to reflect, findings from recent studies suggest that nurses' reflective thinking may be prolonged by pauses and they may need assistance in systematically moving insights to practice change (Asselin & Fain, 2013; Asselin, Schwartz-Barcott, & Osterman, 2013). Consequently, continuing education on reflection and reflective practice is viewed as a vehicle to enhance professional practice, promote evidence-based practice, and potentially improve patient outcomes. As an educational strategy, reflection allows nurses to explore clinical experiences and the thoughts and feelings associated with the experience, allowing for a change in beliefs and assumptions, emergence of new knowledge, and a transformation of clinical practice (Asselin & Fain, 2013; Dube & Ducharme, 2014; Horton-Deutsch, 2012; Johns, 1995; Perry, 2000). Although numerous articles have been published exploring the concept of reflection and the use of reflection as an educational strategy, there has been no attempt to synthesize existing literature presenting the use of reflection as an educational strategy in nursing professional development (NPD). This article provides an integrative review of the literature addressing the use of reflection as an educational strategy for nurses. The review is focused on ways that reflection has been used as an educational strategy in NPD and reported outcomes from the use of reflective education strategies.

BACKGROUND

The concept of reflection is not new to education; it has long been appreciated as a means to develop knowledge, beginning with the ancient philosophers Aristotle and Socrates. Modern day understanding of reflection has been informed by the works of philosopher and educator John Dewey. Dewey (1933) believed that learning took place as a result of experiences and that reflecting on experiences allowed connections to be made between thoughts, beliefs, and actions. The work of Donald Schön (1983) extended the work of Dewey, focusing the concept of reflection on professional practice and further expanding the understanding of how professionals think and develop insights as a result of reflecting on experience. Schön also introduced the notions of reflection-in-action and reflection-on-action. Reflection-in-action is defined as the thought process that occurs as an experience unfolds, guiding action with the experience (Schön, 1983). Reflection-on-action is defined as the process of thinking back on an experience to gain new knowledge or come to a new understanding (Schön, 1983). Reflective

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teaching strategies utilize the concept of reflection-on-action or thinking back to structure new knowledge and understandings and to gain insights for practice change.

Reflection is the cornerstone of professional nursing practice. Through reflection, nurses are able to make meaning of experience (Hartrick, 2000), connect theoretical knowledge to the context of clinical practice (Jenkins, 2007), develop fresh insights, and modify clinical practice (Bailey & Graham, 2007). There is a limited number of empirical studies that explore the use of reflection as an educational strategy in the NPD setting. The paucity of empirical evidence warrants a closer examination of how we are currently using reflection in NPD and what outcomes are being reported.

PURPOSE/AIM

The purpose of this integrative review is to explore the literature on the use of reflection as an educational strategy in the postlicensure nursing population. The following two questions guided the review: (a) In what ways has reflection been used as an educational strategy in NPD? (b) What outcomes are reported for reflective educational strategies?

METHODS

The integrative review method outlined by Whittemore and Knafl (2005) was used to synthesize the literature on reflection. This method allows for exploration of both empirical and theoretical literature and has the potential to inform evidence-based nursing practice and direct future research. Steps in the integrative review include problem identification, literature search, data evaluation, and data analysis (Whittemore & Knafl, 2005). As stated earlier, there is a need to identify the ways in which reflection has been used as an educational strategy, explore the outcomes of reflective educational strategies, and identify recommendations for future research.

Search Strategy

Literature published between 1985 and December 2013 was reviewed using the Cumulative Index to Nursing and Allied Health (CINAHL), Education Resources Information Center (ERIC), and MEDLINE databases. The search terms "reflection," "professional development," "staff development," and "nursing" were used. Hand searching of the Journal for Nurses in Professional (Staff) Development and Journal of Continuing Education in Nursing was also done. Ancestry searching was completed from the reference lists of identified key articles.

Search findings were reviewed for primary empirical studies exploring the use of reflection as an educational strategy in NPD and publications that discussed the use of reflection as a defined process and a deliberate educational strategy in the clinical practice setting. Gray literature (conference proceedings and dissertations) was not reviewed for inclusion. Simulation literature was not included in the review; although the debriefing component has threads of reflection, reflection is often not described as a defined and deliberate process within the debriefing. Inclusion criteria for published works included (a) works in English and (b) empirical and nonempirical works that explored the application of a reflective educational strategy with postlicensure nurses in a clinical setting. Publications were excluded that (a) focused on the use of reflection in the student nurse population; (b) described personal reflective exemplars; and (c) discussed the process of reflection, without application of reflection as an educational strategy in a clinical setting.

Five hundred fifty-three articles were reviewed using the stated inclusion and exclusion criteria; 179 records were excluded after a review of titles and abstracts. The first author assessed 326 full-text articles for eligibility, consulting with the second author when there was a question about eligibility; 301 full-text articles were excluded. Twenty-five articles subsequently met inclusion criteria, serving as the sample to address the research questions (see Table 1 for a summary of articles included in the review).

Quality Appraisal

The quality of the empirical data was evaluated using a tool developed by Hawker, Payne, Kerr, Hardey, and Powell (2002). The revised appraisal tool scored nine methodological criteria as "good," "fair," "poor," or "very poor" with the authors attributing numerical scores of 1 (*very poor*) to 4 (*good*). The scores from this tool were converted to "high" (4.0–3.0) or "low" (2.9–1.0). The nonempirical articles were evaluated on their relevance in answering the questions guiding the search and analysis and were classified as "high" or "low." The first and second authors independently rated one third of the articles and compared scores; high interrater reliability was established. The first author then independently evaluated the remainder of the articles, consulting the second author if there was a question about the quality or relevance of an article.

The range of quality scores for the empirical studies was 3.33–4.0, and the range of relevance scores for the nonempirical studies was 2–4. None of the reviewed studies were excluded from the review because of rank. Articles scoring "high" were used to develop the main themes throughout the analysis; articles scoring "low" were used to support and further develop the themes to answer the questions.

DATA ANALYSIS

The first author read each article separately, noting patterns and themes addressing identified questions, and recorded data in a matrix format. The second author was consulted with emerging themes and asked to validate content and synthesis of themes. Articles that ranked low in relevance

TABLE 1 Summary of Articles Included in Integrative Review

Author/s (Year), Country	Sample Setting	Reflective Strategy	Outcome
1. Asselin and Fain (2013), United States	Twenty RNs from two acute care community hospitals in Northeastern United States	• Three-part reflective practice CE program	• Structured reflection increases nurses' engagement in self-reflection and enhanced reflective thinking in practice.
		• Structured reflective narratives	
		• Researcher-facilitated group discussions	
2. Bailey and Graham (2007), Ireland	Eight palliative care nurses (only seven completed)	• Eight 2.5-hour sessions to introduce, facilitate, and evaluate guided reflective practice	• Guided reflection allowed staff to meet away from the clinical environment and work together to "find fresh insights to inform practice."
		• Structured reflective diary keeping	• Supporting reflective practice is a strategy to support palliative care nurses.
		• Educator-facilitated group reflection	
3. Curry, Middleton, and Brown (2009), Ireland	Four nurses and eight care assistants in two nursing homes	• Four modules based on palliative care, communication, pain and symptom management, and bereavement care	• This project has enhanced provision of palliative care to residents.
		• Facilitated reflective learning groups	• Staff reported increased confidence in their roles; increased knowledge about palliative care; improved morale and motivation; and change in awareness regarding value of knowing residents, importance of listening, value of building relationships with families, and importance of a person-centered approach in palliative care.
4. Dube and Ducharme (2014), Canada	Twenty-one nurses at five medical/surgical care units at university hospital	• Eight workshops with content on reflective practice and interventions relating to medication, mobilization, and discharge planning of older adults	• Experimental group had significantly more positive attitudes regarding older adults after reflective practice intervention.
		• Structured reflective journal assignments	• Experimental group significantly improved knowledge of older adults without a significant change in the control group.
5. Edwards, Holroyd, Rowley, Taylor, and Unwin (2005), Australia	Four RNs 30–45 years old, 10–15 years of clinical nursing experience	• Embedded into action research project	• Action research and reflection are practice processes for nurses to examine their practice issues and improve nursing care. An action plan was generated for improving assertiveness at work.
		• Written journal reflections of practice experiences (using participant observation)	
		• Researcher-facilitated group discussions	

Continued

TABLE 1 Summary of Articles Included in Integrative Review, Continued

Author/s (Year), Country	Sample Setting	Reflective Strategy	Outcome
6. Fomeris and Peden-McAlpine (2007), United States	Six novice nurse–preceptor dyads	• Embedded into contextual learning intervention • Structured reflective journaling • Facilitated discussion groups	• Three themes were developed to describe the novice nurses' development of critical thinking. Contextual learning can be a model of clinical learning in nursing education that develops components of critical thinking.
7. Gamble (2001), United Kingdom	Nurses from a large medical units (medical assessment unit, cardiac care unit, and eight medical wards)	• Structured debriefings after a cardiac arrest	• Debriefing gives nurses the ability to acknowledge their emotional response to the experience and identify learning needs.
8. Gustafsson and Fagerberg (2004), Sweden	Four female nurses from diverse clinical areas (psychiatry, nephrology, intestinal surgery, and vascular surgery)	• Structured interviews focused on the implications of the nurses' reflections	• Reflection may promote nursing professional development and develop nursing care.
9. Hart et al. (2000), Australia	Ninety-five RNs at six different hospitals, 74 nurses successfully finished one of the programs	• 14-week program • Peer consultation • Group discussions	• Participants showed improvements in their empathetic responses to patients, their sense of hope, and some aspects of their work environment.
10. Hart, Yates, Clinton, and Winsor (1998), Australia	Registered nurses working with terminally ill patients	• Written practice incidents using reflective framework	• Shared and collaborative approaches to the planning, implementation, and evaluation of nursing care were emphasized.
		• Group discussion	• Creative solutions and collective actions were developed to address complex organizational issues.
11. Hartrick (2000), Canada	Multidisciplinary team of pediatric healthcare practitioners	• Embedded within four educational activities • Structured questionnaires and journaling • Reflective group dialogues	• Team members were able to make meaning of their experiences and theoretical ideals of health promotion and begin to transform their understandings and actions.
12. Holdsworth, Belshaw, and Murray (2001), United Kingdom	Thirteen nurses working in four A&E departments, two minor injury units, and two MAUs	• Embedded within five half-day workshops	• Increased knowledge and skill related to the assessment of an immediate management of deliberate self-harm.
		• Participants completed "Summary Diary Sheets" with information about patient, triage, and outcomes where analyzed.	• Decreased level of work-related stress

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TABLE 1 Summary of Articles Included in Integrative Review, Continued

Author/s (Year), Country	Sample Setting	Reflective Strategy	Outcome
13. Jenkins (2007), United Kingdom	A nurse lecturer and a team of district nurses	• Embedded within cooperative inquiry • Facilitated, structured group reflections	• Participants linked theory and practice, made sense of experience, and improved work dynamically.
14. Kemp (2009), United Kingdom	Thirteen and 5 staff nurses from two adjacent acute inpatient wards	• Embedded within workshop with multiple sessions	• Increased team identity, increased time spent with service users (patients)
		• Reflective diaries • Facilitated group reflection	• Participants reported feeling more assertive, increased level of confidence, and gaining more effective skills that allowed them to be more supportive for patients.
15. Kuiper (2002), United States	Thirty-two new graduate nurses on clinical units	• Structured, reflective journals	• Using self-regulation reflective strategies would encourage metacognitive strategies and implies a benefit for learning flexibility and adaptability.
16. McDonald, Jackson, Wilkes, and Vickers (2012), Australia	Fourteen nurses and midwives	• Embedded within six structured workshops	• Outcomes included closer group dynamics, more supportive communication, and assertiveness and confidence in the clinical setting.
		• Facilitated group discussion	• Analysis also suggested growth in participants' knowledge of personal resilience and willingness and ability to monitor and maintain resilience strategies for themselves and their colleagues.
17. Oyamada (2012), Japan	Fourteen midcareer nurses employed in three hospitals in Japan (5–15 years of experience)	• Structured reflective narratives	• A change in frame of reference was noted in two participants.
		• Facilitated group discussions	• Ten participants reported a change in practice.
18. Peden-McAlpine, Tomlinson, Forneris, Genck, and Meiers (2005), United States	Eight pediatric critical care nurses in two children's hospitals in the Midwest	• Embedded within reflective practice intervention • Written narratives • Reflective discussions	• Stimulated a change in attitudes about family, enhanced communication with families, and an integration of family care into nursing practice
19. Peterson, Hakendorf, and Guscott (1999), Australia	Fifteen nurses from 10 health units in rural settings	• Embedded within a six-module, problem-based course • Structured journals	• Nurses developed a holistic view of aged care. Journaling enabled participants in reflecting on their practice. Nurses were motivated to make changes in their workplace.

Continued

TABLE 1 Summary of Articles Included in Integrative Review, Continued

Author/s (Year), Country	Sample Setting	Reflective Strategy	Outcome
20. Rittman (1995), United States	Nurses working in a hospital setting; no stated numbers	• Narratives and group interpretive analysis	• Narratives and interpretive analysis proved a powerful staff development approach as recognition is given to the expertise and meaning within clinical nursing practice.
21. Rosenal (1995), Canada	Novice nurses with less than 6 months of experience Twenty-five nurses who served as preceptors Both populations were employed in a pediatric health center.	• Structured, reflective narratives	• Critical incident methodology can be used in nursing education to foster self-reflection, inform educators of the reality and impact of nurses' experiences, conduct learning needs assessments, and gather exemplars for teaching purposes.
22. Sewell et al. (2006), United Kingdom	Two diabetes nursing teams in two secondary care trusts in the United Kingdom	• Combined with collaborative partnership and mentoring • Structured reflection	• Regular, critical evaluation of critical care is important in care delivery, service development, and professional development.
23. Turner (2009), United Kingdom	Twelve psychiatric nurses	• Embedded within action research • Reflective sessions	• An audit showed that children's needs were considered and information was appropriately shared to safeguard children.
24. von Klitzing (1999), Switzerland	Seven female nurses on one unit	• Nested within Baliant group • Group discussion	• Nurses selected terminally ill patients for group discussions, reflective functions increased throughout the year, and nurses' reflections about self declined significantly over time.
25. Walker, Cooke, Henderson, and Creedy (2013); Australia	Fifty-six nurses, 33 students, and 1 clinical supervisor in two acute care hospital wards	• Embedded within concept of learning circles • Facilitated, structured group discussion	• Learning circles provided participants the sense of security enabling them to voice concerns around 10 identified personal and professional practice themes.

Note. RNs = registered nurses; CE = continuing education; A&E = accident and emergency; MAUs = medical admissions units.

were then read and analyzed; data from these articles were used to support themes developed from the articles ranking high in relevance and rigor. Key patterns identified in the literature were clustered as appropriate and summarized in narrative format.

FINDINGS

The final sample of articles represented the use of reflection in eight countries: United Kingdom (n = 6); Australia (n = 6); United States (n = 5); Canada (n = 3); Ireland (n = 2); and one each from Japan, Sweden, and Switzerland. The population of nurses described had clinical nursing experience spanning a broad range of years. Most articles had no purposeful sampling of defined years of experience; however, several articles explored reflection in specific nursing populations from the new graduate level (Kuiper, 2002), to novice nurses with less than 6 months of experience (Forneris & Peden-McAlpine, 2007; Rosenal, 1995), to midcareer nurses with 5–15 years of experience (Oyamada, 2012).

Eleven articles highlighted the use of reflective educational strategies across diverse clinical practice settings,

from acute care hospital-based units to clinical office practices. Four articles explored the use of reflection to address the needs of nurses working in palliative care or with terminally ill patients. Three articles addressed the use of reflective strategies within the setting of mental health/psychiatric care. In addition, the use of reflective strategies has been reported in elder care (Dube & Ducharme, 2014; Peterson et al., 1999), family practice (Hartrick, 2000), and maternity/pediatric settings (McDonald et al., 2012; Peden-McAlpine et al., 2005).

Reflection as an Educational Strategy in NPD

Two themes emerged from the synthesis process related to the goal or intent of the reflective educational strategies: using a reflective strategy to meet a specific clinical practice goal and teaching nurses how to reflect to enhance individual reflective practice. Seventeen articles described using a reflective strategy as a means to meet a specific clinical practice goal. For example, Turner (2009) developed a mandatory training program that included a reflective strategy to enhance healthcare providers' ability to meet patients' mental health needs. Kemp (2009) developed a work-based initiative that included reflective diaries to enhance therapeutic communication with service users in acute mental health settings.

Six articles described the process of teaching nurses how to reflect to promote reflective practice, insight, and reflective thinking (Asselin & Fain, 2013); explore the benefit of reflective programs for midcareer nurses (Oyamada, 2012); promote reflective practice through group-guided reflection (Bailey & Graham, 2007); gain deeper levels of reflection on clinical practice (Edwards et al., 2005); explore the impact of reflective journaling on the metacognitive process (Kuiper, 2002); and describe the experience of reflection in relation to nursing and understand how nurses reflect (Gustafsson & Fagerberg, 2004).

Three themes emerged regarding the way in which reflection was used as an educational strategy: reflection nested into multifaceted educational programs, individual- versus group-facilitated reflection, and structured versus unstructured reflection. Although one may argue these are not mutually exclusive in each reflective strategy, they represented three delivery approaches worthy of discussion.

Nested reflective strategies

Of the articles that addressed the use of reflection to meet a specific clinical practice concern or to impact individual reflective practice (n = 19), most (n = 12) described multifaceted educational programs that nested a reflective teaching strategy in the program to meet a program goal. In these programs, information pertinent to the clinical practice setting and educational goals of the project were presented to participants and paired with a reflective educational strategy. Although not all authors explicitly stated why reflective strategies were added to multifaceted programs, pairing a reflective strategy with the presentation of new knowledge, mentoring, and other educational strategies were used to stimulate learning in practice and develop tactic knowledge (Turner, 2009), result in a change in behavior, enhance readiness for application of new knowledge (Hartrick, 2000; Sewell et al., 2006), prepare nurses to "tackle problems in the real world" (Curry et al., 2009, p. 21), and implement practice solutions (Edwards, Holroyd, Rowley, Taylor, & Unwin, 2005). In addition, Kemp (2009) stated that participants highly valued reflection on practice experiences to further enhance learning.

The remaining seven articles explored the impact of reflection as a stand-alone educational strategy to meet an educational goal or improve individual reflective practice (Asselin & Fain, 2013; Bailey & Graham, 2007; Gustafsson & Fagerberg, 2004; Hart et al., 1998; Kuiper, 2002; Oyamada, 2012; Walker et al., 2013).

Individual versus group reflection

Twenty articles discussed the use of group dialogues or discussions as the foundation of reflective educational strategies. In roughly half of the 20 articles presenting the use of group discussions (n = 11), participants were first asked to write a reflective narrative on a clinical situation about which they had given considerable thought; the written narrative was then discussed in a group setting. In the remaining articles presenting the use of group discussions (n = 9), participants reflected on clinical stories or experiences supplied by the educator or researcher. The remaining three articles presented reflective interventions focused on individual written narratives designed to explore a clinical experience (Kuiper, 2002; Rittman, 1995; Rosenal, 1995). The reflective narratives were only shared with the researcher or educator and resulted in learning or expanded understanding for the individual who contributed the narrative.

An additional notion within the theme of reflective group discussions was the use of a facilitator to guide and direct the reflective dialogue. Twelve articles discussed the use of facilitators to guide, direct, and expand the reflective exploration of shared narratives in the group setting. Of these 12 articles, one used participants from within the peer group to serve as facilitators, rotating the role of the facilitator among group members (Jenkins, 2007). In four articles, educators (n = 3) or nurse leaders (n = 1) served as facilitators. Four articles discussed the role of the facilitator being filled by nurse researcher (n = 3) or external clinical nurse specialist (n = 1). The remaining three articles did not clearly describe who served in the role of facilitator for the group dialogues.

Structured versus unstructured reflection

Prescriptive models or frameworks, including structured questions cues, can be used to provide guidance and structure to the reflection exercise. Of the articles that asked

participants to reflect on a clinical narrative (n = 24), nine of the articles described the reflective strategy without mention of a guiding reflective framework or model. Most (n = 15) articles described the use of a reflective model or structured questions to provide guidance with the exploration of a clinical experience.

Nine articles described researcher- or educator-developed questions created to guide the reflective process. For example, Oyamada (2012) developed structured reflective questions aimed at encouraging midcareer nurses in Japan to uncover the validity of their own values and assumptions. Peterson et al. (1999) developed questions to focus on issues and concerns embedded within the context of their clinical practice. Gustafsson and Fagerberg (2004) developed guiding questions based on findings from nursing literature and critical thinking attributes to prompt novice nurses in reflective journaling.

Six articles described educational interventions shaped around existing reflective frameworks or models. Bailey and Graham (2007) and Dube and Ducharme (2014) utilized Johns' (2006) model for structured reflection as the guiding framework for reflective narratives. Sewell et al. (2006) and Hart et al. (2000) each presented reflective processes that were informed by the work of Boud, Keogh, and Walker (1985). Asselin and Fain (2013) developed their reflective intervention based on the Critical Reflective Inquiry Model (Kim, Lauzon Clabo, Burbank, Leveille, & Martins, 2010). Finally, Walker et al. (2013) adapted and relabeled the four-step model of critical reflection (Noble, Macfarlane, & Cartmel, 2005) and used it as a framework for reflection in group discussions.

What Outcomes are Reported From Reflective Educational Strategies?

Outcomes of the reflection education were reported in 11 research-based articles and 14 articles describing reflection education. Authors of four articles, one quantitative and three mixed methods research, reported the use of measurement tools that captured the outcome data needed to explore the impact of reflection on the identified research question (Asselin & Fain, 2013; Dube & Ducharme, 2014; Hart et al., 2000; von Klitzing, 1999). One secondary analysis developed qualitative themes using research study field notes (Walker et al., 2013). The six qualitative articles reported thematic outcomes developed and synthesized from qualitative data provided by study participants (Edwards et al., 2005; Forneris & Peden-McAlpine, 2007; Gustafsson & Fagerberg, 2004; Kuiper, 2002; Oyamada, 2012; Peden-McAlpine et al., 2005).

The outcomes reported in the 14 articles describing reflection education were most often linked to the goals of the education and frequently gathered through program evaluation questionnaires and self-report measures. Findings from this review highlighted an increase in knowledge and two additional themes within the reported outcomes of reflective strategies: the role of reflection in changed attitudes, values, beliefs, and assumptions of individual participants and the potential for group reflective strategies to make a meaningful impact at the organizational level.

All of the articles within the final sample reported outcomes at the individual participant level; the use of reflective strategies resulted in increased knowledge (Bailey & Graham, 2007; Curry et al., 2009; Dube & Ducharme, 2014; Peterson et al., 1999; Rosenal, 1995; Sewell et al., 2006); enhanced clinical skills (Curry et al., 2009; Dube & Ducharme, 2014; Holdsworth et al., 2001; Kemp, 2009; Peterson et al., 1999; Turner, 2009); and/or changed attitudes, beliefs, or assumptions (Hart et al., 2000, Hartrick, 2000; McDonald et al., 2012; 1998).

Beyond the transfer of knowledge and the enhancement of clinical practice, reflection allows participants the time and space to explore the values, beliefs, and assumptions that drive clinical action. Twelve of the articles discussed the impact that the educational intervention had on the participant's values, beliefs, and assumptions. Hartrick (2000) found that reflection education supported the development of health promoting family practice. Authors reported that critical reflection allowed practitioners to explore the personal biases they carried into practice and the ways in which these biases impacted their practice of providing family-centered care. The transformed understandings led to transformed practice.

Authors reported that, when reflection occurred as a group process, there was the potential to enhance teamwork and impact organizational-level practice. In a supportive, collaborative practice environment, group reflection aided in exploration of practice issues and concerns and empowered staff to own individual practice and drive practice change (Curry et al., 2009). Hart et al. (1998) presented the belief that group reflective discussions about practice contribute to the collective culture of nursing care and that the outcome of reflection has the most organizational impact when shared experiences, rather than individual experiences, are the focus of reflection.

DISCUSSION AND IMPLICATIONS FOR NPD

As noted in the findings, reflection is often nested in multifaceted educational programs making it a challenge to identify key articles through database searches. Despite reviewing an extensive number of articles for inclusion, it is possible that key articles addressing the research questions were not identified through utilized search methods.

The findings from this integrative review offer several important implications for NPD specialists. Nurses reported positive impact from participating in reflective education (Bailey & Graham, 2007; Kemp, 2009; Rittman, 1995); however, not all nurses are equally skilled in reflection (Asselin &

Fain, 2013; Clark, 2009; Perry, 2000; Rosenal, 1995). Many of the articles within the final data set explored a reflective component within an educational program without teaching nurses about reflection or how to reflect on clinical experiences. Perhaps, it has been assumed that reflection is an intuitive process. To achieve intended outcomes from reflective strategies, it may be beneficial to expose nurses to content focusing on the process and benefits of reflection before expecting them to engage in reflective learning (Walker et al., 2013). NPD specialists should consider including education on reflection in orientation, preceptor/team leader training (Asselin & Fain, 2013), new graduate nurse programs, and educational programs that contain reflective strategies.

NPD specialists may find that providing nurses with a guiding reflective framework, or model, will facilitate a reflective process that can be incorporated in practice and ultimately result in enhanced learning, improved professional practice, and better patient outcomes (Asselin & Fain, 2013; Johns, 1995; Peterson et al., 1999). In addition to providing a guiding structure for exploring a clinical experience, a reflective model or framework may prevent nurses from getting stuck in the reflective process (Asselin et al., 2013; Jenkins, 2007). In the absence of a formal reflective framework, providing individuals with guiding questions or prompts may assist in the development of higher level thinking (Kuiper, 2002).

Group reflective discussions have been found to assist individuals in reaching a deeper level of exploration (Asselin & Fain, 2013; Hart et al., 2000; Jenkins, 2007). Although there is some risk in sharing personal experiences in a group setting (Holdsworth et al., 2001), findings from this review highlighted the belief that group reflection in a safe and secure setting (Jenkins, 2007; Peterson et al., 1999; Walker et al., 2013) can validate (Jenkins, 2007) and empower (Hart et al., 2000) nurses. Group reflection can also lead to individuals uncovering more objective truths (Jenkins, 2007). Hart et al. (1998) suggest that group reflection on practice contributes to a culture of nursing care, with the potential for eventual organizational change.

In the reviewed articles, authors noted that the support of a facilitator was valuable in reflective group discussions (Bailey & Graham, 2007). To create the safe and supportive environment necessary to encourage open and engaged learning in a group setting, it is critical that the facilitator be skilled and sensitive (Kemp, 2009). The role of facilitator was filled by a broad range of individuals, including peers, nurse researchers, and clinical educators. Whereas Jenkins (2007) found that peer facilitation was valued by the group, others found that the role of the facilitator would be best filled by an outsider (Kemp, 2009). Facilitators who are perceived to have power or authority over the group may impact comfort level of the group and may hinder the openness and sharing that occurs during reflective discussions (Bailey & Graham, 2007). The role of facilitator is critical in developing the safe and secure environment necessary to engage staff in a transparent exploration of self. In selecting a facilitator, it will be important to consider the skill, training, and perceived power of the individual chosen (Bailey & Graham, 2007; Gamble, 2001; Kemp, 2009; McDonald et al., 2012).

Including reflective strategies within educational programs may assist staff to make meaning of experience (Hartrick, 2000), gain fresh insights, and inform practice (Bailey & Graham, 2007). As a nested strategy, reflection enables nurses to link new knowledge to the context of clinical practice and facilitate practice change (Peterson et al., 1999). Reflection enables individuals to explore and challenge the beliefs, assumptions, and values that guide their clinical practice (Hart et al., 2000, Hartrick, 2000; McDonald et al., 2012; 1998). Ultimately, it is this transformed awareness that leads to fresh insights and informed practice (Bailey & Graham, 2007).

IMPLICATIONS FOR FUTURE RESEARCH

Although it is generally understood that reflection offers nurses the ability to learn from their clinical experiences, there is a dearth of empirical evidence to support the use of reflection as an educational strategy. There is a need for rigorous, well-designed empirical studies exploring the impact of reflection on individual professional practice, organizational change, and patient outcomes. This integrative review illuminated some questions that could be explored more thoroughly. Examples include such questions as follows: Does individual reflection promote the same level and depth of reflection as group reflection? What is the role of the facilitator in guided reflection? What role is most effective for NPD specialists in assisting staff to gain skill in reflective practice? What is the role of reflective models in framing the clinical experience? What reflective frameworks or models are most effective in transforming a clinical experience into a learning event? In what ways can reflection enhance patient safety or nurse sensitive outcomes? Does interprofessional reflection enhance team communication and collaboration? Is interprofessional reflection more effective than discipline-specific reflection in achieving patient outcomes? In what ways can reflection impact organizational change?

There is also a need to develop a measurement tool to assess reflection. Developing tools that effectively measure the impact of reflective educational strategies would enable findings to be generalizable beyond the specific setting and educational goal explored.

CONCLUSION

Reflection is a deliberate process of critically thinking about a clinical experience to develop new insights and transform clinical practice. Frequently nested within a multifaceted educational program, reflective educational strategies paired

with presentation of clinically relevant knowledge, mentoring, and other educational strategies stimulate learning in practice and enhance readiness for application of new knowledge into the clinical setting. Structured reflection and facilitated group reflective dialogues offer nurses the opportunity to reach a deeper level of exploration and arrive at a higher level of thinking.

Reported outcomes suggest that reflection impacts clinical practice at both the individual and organizational level. At the individual level, reflection enhances knowledge; transforms assumptions, values, and beliefs; and informs clinical practice. At the organizational level, reflection empowers nurses to explore practice concerns and drive practice change. Although reflection is appreciated as a way to learn through practice, more empirical evidence is needed to support the use of reflection as an educational strategy. As stated, future nursing research could focus on developing rigorous studies to explore the design, impact, and utility of reflective learning strategies within the context of NPD and interdisciplinary patient care.

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