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# Introduction of Evidence-Based Practice to Acute Stroke Center Nursing in Jakarta, Indonesia

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# Walden University

College of Health Sciences

This is to certify that the doctoral study by

Tonya Stagner

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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Walden University 2017

## Abstract

# Introduction of Evidence-Based Practice to Acute Stroke Center Nursing in Jakarta, Indonesia

by

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MSN, University of North Carolina, Chapel Hill, 2008

BSN, University of Nevada, Las Vegas, 1996

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

May 2017

## Abstract

Evidence-based practice (EBP) is a relatively new concept for nurses in Indonesia; it has not been integrated into nursing care. This project sought to introduce EBP to nurses at an acute stroke center (ASC). The knowledge transfer team approach guided the project. The goal was to identify and analyze current data and to develop an EBP guideline for clinical nursing practice in the ASC. Sources of evidence that was used to address the practice-focused question included project team members, organizational documents, and a database search to identify EBP guidelines for the nursing care of acute stroke patients. A database search was conducted using the key terms: stroke, nursing care, nurse, guideline, implementation, and evidence-based practice. The search databases included the National Guideline Clearinghouse, CINAHL Plus, ProQuest, and MEDLINE. From 185 articles, 6 guidelines were identified with applicability and relevance to Indonesian nursing practice. The excluded data consisted of guidelines specific to rehabilitation, medication management, and stroke prevention. Guidelines chosen for further analysis were published by international professional organizations. The AGREE II-GRS instrument guided the analysis of the published international guidelines. Four of the 6 analyzed guidelines scored 7 on all AGREE II-GRS criteria, indicating the highest quality. The conclusion of this doctoral project was the positive reception of EBP via a guideline developed for poststroke patients. The process of EBP introduction to nurses not previously exposed will provide data to further nursing's global body of knowledge. Successful strategies to introduce and incorporate EBP in developing countries will provide positive social change for international nursing practice.

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## Dedication

This project is dedicated to my husband and children. Thank you for your unconditional support, love, and patience. Scott, thank you for assuming primary parent duties with the kids so that I could write in quiet and solitude. Even on vacation! And thanks for taking all of those Silver Birds without complaint. You are the love of my life, my touchstone, and my rock. I am truly grateful that you are my husband and partner in all things. You're still my best friend. I am truly a lucky woman. Ethan and Emma, thank you for understanding when Mom needed to work and study. I am so glad that you are my children. Thank you for sharing your Mommy with this project for the past couple of years. This project could not have happened without all of you. I love you, BubBub. I love you, Emma Bean.

I also dedicate this project to the nurses of Indonesia, who work tirelessly for change and improved patient outcomes. You are an inspiration and I look forward to the future growth of our profession in your country! Terima kasih.

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Section 1: Introduction	1
Introduction	1
Problem Statement	1
Purpose	2
Nature of the Doctoral Project	3
Significance	4
Summary	5
Section 2: Background and Context	7
Introduction	7
Concepts, Models, and Theories	7
Knowledge Transfer Team Approach	7
Change to Evidence-Based Practice Model	8
Kotter's Theory of Change	9
Translation Research Model	9
Transformative Learning Theory	10
Outcomes Evaluation Theories and Models	11
Relevance to Nursing Practice	12
Local Background and Context	16
Role of the DNP Student	
Role of the Project Team	20
Summary	23

# Table of Contents

Section 3: Collection and Analysis of Evidence	24
Introduction	24
Practice-Focused Question	25
Sources of Evidence	27
Published Outcomes and Research	27
Archival and Operational Data	
Analysis and Synthesis	
Summary	31
Section 4: Findings and Recommendations	32
Introduction	32
Findings and Implications	
Recommendations	37
Contribution of the Doctoral Project Team	
Strengths and Limitations of the Project	39
Section 5: Dissemination Plan	41
Analysis of Self	41
Summary	43
References	45
Appendix A: AGREE II-GRS Instrument	
Appendix B: Nursing Care Guideline for the Ischemic/Hemorrhagic Stroke Patient	51
Appendix C: AGREE II-GRS Summary Table of Analyzed Guidelines	52

### Section 1: Introduction

#### Introduction

Since evidence-based practice (EBP) is a relatively new concept for nurses in Indonesia and has not been integrated into nursing practice, it became the problem of study for this project. This Doctorate of Nursing Practice (DNP) project aimed at introducing EBP to Acute Stroke Center (ASC) nurses at a private community hospital in Jakarta, Indonesia. There is a potential for positive social change implications as a result of this doctoral project. The acceptance and integration of EBP will improve the status and credibility of nursing within the organization and improve the quality and standard of care provided to patients.

## **Problem Statement**

The problem with local nursing practice was the development of a nursing guideline for the ASC. The current operational guideline was developed without the input or feedback of nurses, and did not contain the most recent evidence. This highlighted the local relevance of the need to address the problem. The current stroke guidelines at the practice site referred to information from the American Heart Association and from the Indonesian stroke guidelines. The references for the Indonesian guidelines could not be ascertained. Translation of the organization's current guideline (from Bahasa to English) and development of a new version that incorporated the best available evidence were produced and introduced to the nurses in the ASC. As a developing third world country, the health care system and providers are struggling with a fragmented educational system and a lack of resources (Hennessy, Hicks, Hilan, & Kawonal, 2006). The quality and safety movement is a particularly important concept in today's international system of health care. The tremendous growth of new knowledge poses exciting possibilities and challenges for health care providers (White & Dudley-Brown, 2012). Despite the abundance of published research, there is documented evidence that a significant delay exists in integrating new evidence into clinical practice. This delay has resulted in a failure of best care expertise for patient care (White & Dudley-Brown, 2012). Another issue of concern is the inconsistent application of evidence-based interventions to address clinical problems (Douglas & Berry, 2011; Matthew-Maich, Ploeg, Jack, & Dobbins, 2010; Titler, 2010). The process of EBP introduction to nurses not previously exposed will add data to further nursing's global body of knowledge. Thus, the doctoral project holds significance for the field of nursing practice.

### Purpose

Indonesian nurses require an introduction to EBP and how best to integrate it into current practice. The ASC at a private community hospital in Indonesia is seeking to market itself as the premier destination for neurological treatment and care. However, standardization of nurse education and training has only recently been introduced; as such, it continues to require guidance (Suba & Scruth, 2015). The current state of nursing, along with a lack of knowledge about EBP, has produced a meaningful gap in practice. This doctoral project has the potential to address this practice gap by introducing EBP to nurses via the development of an ASC guideline that is applicable and operationalized to the current scope of practice and organizational culture. The guideline has the potential to improve standards of care for stroke patients because the current accepted practice in Indonesia is not necessarily based on evidence, but rather on tradition and history.

How can EBP be integrated into the nursing practice of the ASC at a private community hospital in Indonesia? The question was focused on guiding practice and was addressed by

developing a guideline that incorporated current evidence that was relevant and applicable to current nursing practice in the ASC. The document was then introduced to the organization and the nursing staff of the ASC.

## Nature of the Doctoral Project

The purpose of this doctoral project was to introduce EBP to the nurses who care for acute stroke patients at a community hospital in Indonesia, which connected the gap in practice to the anticipated findings from the analysis. The findings from the analysis supplied evidence from the literature regarding best practices and their integration for acute stroke nursing care.

Various sources of evidence were collected to meet the purpose of this doctoral project. Important sources of evidence were provided by the project team, which included the nursing leadership, physicians, nursing staff, patients, allied health professionals, and nonclinical administrators. Cultural and organizational data were obtained from the literature and from personal communication with project team members within the organization. Several professional organizations and societies, as well as governmental entities, offered excellent resources available to inform the revision of the guideline for the stroke center. Databases were also a source of evidence for developing this project. The literature was analyzed for current EBP guidelines pertinent to the nursing care of acute stroke patients. Other sources of evidence that were collected to meet the purpose of this doctoral project included the current operational ASC guideline and relevant documents. Literature that examined the successful implementation of guidelines into nursing practice were also examined in order to inform the project's introduction of EBP to ASC nurses. The primary source for the project was evidence-based guidelines from recognized international professional organizations specializing in stroke care. In order to organize and analyze the evidence, the current documents were translated from Bahasa Indonesia to English; the evidence was operationalized to fit the scope of practice of Indonesian nurses as well as the organization's protocols and culture. Translation services were provided by the clinical practice site via bilingual translators (English and Bahasa Indonesia). Web-based translation services, such as Google Translate, were also used. A translator accompanied me for ASC visits, because the majority of the nursing staff did not speak English. In addition, the Appraisal of Guidelines, Research and Evaluation II – Global Rating Scale (AGREE II-GRS) instrument was used to analyze the published guidelines (Brouwers et al., 2012).

## Significance

The members of the project team included the nursing staff, physicians (general practitioners and neurologists), and administrative and nursing leadership. The end users of the guideline were identified as the ASC nursing staff. All project team members could be affected by addressing the local problem. Nurses may need to change current practices and interventions. Physicians may or may not support these changes to nursing practice. Leadership may need to adjust protocols and expectations

I identified the potential contributions to nursing practice and transferability to similar practice areas as a result of this doctoral project. Based on positive outcomes, the guideline can be expanded and operationalized to incorporate other specialty units at the hospital. EBP guidelines are defined as clinical guidelines produced through the translation of research, support from a general consensus of recognized experts, and confirmed by positive clinical outcomes (Grove, Burns, & Gray, 2013). Standards of care are the basic levels of care considered acceptable by a profession, or the skills and aptitude exhibited by members of the profession (Yoder-Wise, 2014). Following the development of a guideline to inform nursing practice of the ASC, the standard of care can be defined as integrating EBP guidelines for nursing practice in every unit of the hospital (emergency department, surgical, maternity, pediatric, outpatient, intensive care, special procedures, and general medical).

The implications for positive social change were also identified. Nurses in Indonesia are struggling to improve their professional and public image in Indonesia. Incorporating EBP and understanding its association with quality nursing care is expected to do much to enhance the standards and competencies that are a foundation for global professional nursing practice.

#### **Summary**

The state of nursing science in Indonesia requires the introduction of EBP to guide interventions and decision-making. This EBP project focused on developing a guideline that incorporates EBP and informs the bedside nursing care of acute stroke patients. The documents that were currently available for the ASC had not been developed in collaboration with nurses. Organizational documents, communication with project team members, and an analysis of published data were used to develop an EBP guideline that was applicable and relevant to the nursing practice of Indonesian nurses at the doctoral project site.

The development of the project, including the guiding theories and models, will be described in the following section. Theories, models, and concepts that will be discussed include: the knowledge transfer team (KTT) approach (Singh et al., 2015), Rosswurm and Larrabee's change to evidence-based practice model (1999), Kotter's theory of change (1995), the translation research model (Titler, 2010), transformative learning theory (Matthew-Maich et al.,

2010), the AGREE II-GRS instrument (Brouwers et al., 2012), and various outcomes evaluation theories and models.

## Section 2: Background and Context

### Introduction

EBP has not been integrated into the culture of nursing practice in Indonesia. The practice problem that was described previously was the need to introduce and incorporate EBP to Indonesian nursing care. The practice-focused question was the integration of EBP into the nursing practice of ASC nurses at a private community hospital in Indonesia. The purpose for this doctoral project was to improve the awareness of Indonesian nurses of EBP and the impact it has on nursing quality.

In Section 2 I cover the following topics: the concepts, models, and theories that informed this EBP project; the existing scholarship obtained from a literature search that identifies the relevance to nursing practice; the local background and context of the project; and my role and that of the project team.

## **Concepts, Models, and Theories**

In this subsection, I describe all concepts, models, and theories that inform this project and rationale for their use. A synthesis of primary writings by relevant theorists and scholars is presented. Terms used in this doctoral project (EBP, guideline) are generally and universally accepted in nursing practice and thus do not require clarification of meaning.

## **Knowledge Transfer Team Approach**

The interrelationship between knowledge, theory, research, and EBP guided the project in several ways. The knowledge considered was the currently available information on implementing clinical guidelines in practice. The model that guided introduction of EBP was the KTT approach (Singh et al., 2015). This method of translating evidence into practice included recognition of knowledge champions, highlighting interprofessional collaboration, and including web-based learning strategies. Knowledge champions are identified and developed to provide support to nursing staff and to model best practices to the unit staff. These nurses can encourage open communication and problem solving strategies. Interprofessional collaboration involves the membership of nurses, physicians, nurse managers, clinical nurse educators/preceptors, administrators, therapists (physical, occupational, speech), nutritionists, pharmacists, and religious clergy members (as requested by the patient). The work of this interprofessional team can provide invaluable evidence to assess the effectiveness of implementing the guideline, the quality of nursing care, and the sustainability of the change process.

#### **Change to Evidence-Based Practice Model**

Change can be difficult to achieve or sustain within organizations. The use of a model or framework to govern the planning and design of EBP changes can enhance the probability of successful implementation and adoption of the change. For this project, developing an acute stroke nursing guideline, Rosswurm and Larrabee's EBP model (1999) was used. Rosswurm and Larrabee's change to evidence-based practice model is particularly relevant to the development of clinical guidelines for nursing practice. This model uses six steps to conduct the process of change:

- Step 1 is the assessment of practice to determine a need for change. There was an identified need for EBP at the project site (community hospital in Indonesia).
- Step 2 involves the linkage of the clinical problem to interventions and outcomes. The proposed intervention was development of an EBP guideline, and the outcome was the

successful production of an evidence-based guideline that was operationalized to the organization and needs of end users.

- Step 3 encompasses the analysis and synthesis of evidence obtained from a literature search.
- Step 4 is the design of an implementation to change practice.
- Step 5 is the actual implementation of that change and the subsequent evaluation.
- Step 6, the final step of this model, is the integration, or dissemination of the change. This final step also involves the tools and tasks to sustain or maintain the practice change.

The steps are fluid; for example, research conducted at Step 3 could result in a return to Step 2 in order to determine more appropriate interventions or outcomes.

#### **Kotter's Theory of Change**

Kotter's theory of contemporary change also provided a foundation for this project. According to Kotter (1995), there are eight steps to organizational change: (a) establishing a sense of immediacy, (b) building a visionary coalition, (c) developing a goal and strategy, (d) communicating the goal and strategy, (e) introducing the change and empowering change agents, (f) producing immediate, tangible success, (g) combining successes to produce further change, and (h) disseminating the change and ensuring sustainability.

## **Translation Research Model**

Strategies must address the needs of both the individual and the organization in order to ensure successful implementation of the change process (Titler, 2010). The translation research model is a useful guide to inform the selection of strategies. The effective adoption of EBP change is influenced by the nature of the proposed change (nursing guidelines, for example) and

the method of diffusion to the end users (nurses, physicians) within the organization (community hospital). The four primary concepts of the translation research model include the communication process, social system, users of the EBP, and the rate and extent of adoption (Titler, 2010). The characteristics of the EBP affect the interactions of these four systems, and communication is the primary strategy as defined within the context of this model.

## **Transformative Learning Theory**

Transformation theory also informed this project. Many of the interventions and concepts in the EBP guideline were foreign or new to the nursing staff. Transformative learning theory describes specific strategies to encourage nurses to adopt a change in their practice (Matthew-Maich et al., 2010). Through a translator, critical reflection will begin the change process. This will be especially important in this setting, as social influences have a significant influence on nursing beliefs and values. Dialogue within a small group can encourage interaction with thought leaders who can influence a change towards EBP. Nursing staff's needs and goals must be considered. The scope of practice for nurses in Indonesia is vastly different from that of a nurse practicing in Western countries. Contextual factors and influences can be considered through the use of both the transformation theory and the Promoting Action on Research Implementation in Health Services (PARIHS) concept (Matthew-Maich et al., 2010). To address the barrier of poor sustained change, an emphasis on transformational learning theory can be used (Grant, Colello, Riehle, & Dende, 2010). This theory encourages participation from the nurses in managing the change, and a sense of ownership may help sustain practice changes. Social structure is very important in Indonesian society; support for change from thought leaders and peers can have a significant impact on a nurse's willingness to change (Lewis, 2006). Cultural norms are

entrenched and difficult, if not impossible, to change (Lewis, 2006). Nurses, however, can be empowered to be accountable for their decisions and care (Hyrkäs & Harvey, 2010).

## **Outcomes Evaluation Theories and Models**

Outcomes evaluation should be considered at the design and planning stages of an EBP project. The PRISM model (practical, robust, implementation, and sustainability) is particularly relevant to this project and clinical site. The PRISM model integrates components of the RE-AIM model, the PARIHS framework, and Rogers' diffusion of innovation model (White & Dudley-Brown, 2012). The interactions between the EBP project (guideline development for ASC nurses) and the intended recipients (nurses) can be evaluated using the PRISM model. Program reach, effectiveness, adoption, implementation, and maintenance (sustainability) can be assessed through these interactions (Planas, 2008; Woodbridge et al., 2014). The perspectives of the individual (nurse, physician, patient) and the organization (hospital) are considered, along with the external environment (regulatory policies and procedures of the Ministry of Health of Indonesia). The infrastructure of the organization plays an important role in the implementation and sustainability of the EBP project. The infrastructure consists of the support and feedback from the nursing staff regarding the proposed guideline. Characteristics of the organization and participants need to be carefully conceptualized. Indonesia's cultural nuances may present barriers to the development of guidelines, particularly if they are seen to infringe on norms that have been acculturated into the health care practice of nurses and physicians (Lewis, 2006). Readiness perceptions are questioned using the PRISM model, as well as any burdens (perceived or actual) that may be placed on nursing practice. The needs of the nursing staff and patients, the degree of choice and feedback, and the adaptability of the guideline to maximize outcomes can

be addressed using this model (Woodbridge et al., 2014). Based on these outcomes, the guideline can be expanded to incorporate other specialty units at the hospital.

## **Relevance to Nursing Practice**

Scholarship exists on the topic of study, and a brief history of the broader problem in nursing practice in which this specific doctoral project is embedded will follow. The significance of improved patient outcomes, through the implementation of guidelines for neurovascular nursing care, is supported by the literature (Gocan & Fisher, 2008; Hafsteinsdottir et al., 2013; Hill, Middleton, O'Brien, & Lalor, 2009; Middleton et al., 2013; Singh et al., 2015; Theofanidis, Fitsioris, & Iakovos, 2015). Singh et al. (2015) conducted an evaluation of the implementation of the Stroke Assessment Across the Continuum Best Practice Guidelines in a stroke unit in Canada. The authors used a KTT to implement the guidelines, with positive clinical outcomes. Other studies support the use of nurses in leadership roles in the implementation of clinical guidelines (Gocan & Fisher, 2008; Hill et al., 2009). Theofanidis, Fitsioris, and Iakovos (2015) argued that despite barriers that may prevent the routine use of stroke scales by nursing staff, they should be used to indicate patient progress and to evaluate outcomes as a result of clinical guidelines. Using a strategy known as the KTT approach was shown to be an effective method to implement stroke guidelines (Singh et al., 2015). KTTs are comprised of interdisciplinary team members who act as models of best practice champions. Networking in the form of sharing of expertise and supporting collaborative relationships between academic and clinical staff were shown to be effective interventions. The use of champions and experts was also used to gain staff acceptance and ensure adoption of the guidelines.

Relying on existing scholarship and research, the current state of nursing practice in this area, along with recommendations to improve practice, will be discussed. Strategies and standard practices that have been used previously to address the gap in practice will be described. The implementation of clinical guidelines has been shown to effectively improve patient care; however, there have been reported challenges to implementation (Singh et al., 2015). Staff ambivalence has been identified as a barrier, and nurses have questioned how to best implement these guidelines in their particular area of practice. Another challenge included the perceived difficulty in locating relevant evidence and a lack of resources to support any recommended changes. Nursing staff has reported barriers to the routine use of stroke scales, such as the Scandinavian Stroke Scale, the Barthel Index, and the Modified Rankin Scale, despite evidence that reveals usefulness for the recording of patient progress (Theofanidis, Fitsioris, & Iakovos, 2015). A study conducted in the Netherlands involving rehabilitation guidelines for stroke patients and nursing implementation revealed that despite favorable attitudes by the nursing staff, several challenges were noted (Hafsteinsdottir et al., 2013). These challenges included organizational concerns, perceived lack of knowledge and skills, lack of resources, and interprofessional challenges in coordinating guideline implementation (Hafsteinsdottir et al., 2013). Hill et al. (2009) determined that nurses should have a leading role in multidisciplinary stroke teams and should guide the implementation of protocols based on evidence, despite evidence that revealed a paucity of information related to role differentiation regarding the implementation of clinical practice guidelines. Another problem identified with the implementation of clinical guidelines was the fact that these guidelines often do not identify the health care provider or clinician, or who should be the primary person responsible. Gocan and

Fisher (2008) identified gaps in actual nursing practice and EBP recommendations. Based on these gaps, they introduced the National Institutes of Health Stroke Scale for implementation by nurses at The Ottawa Hospital in Canada. In addition, Bradshaw (2010) discussed the importance of nursing leadership support in order to develop and implement EBP. Nurse leaders must first recognize the need and importance of EBP in order to champion its dissemination into clinical practice.

The term critical thinking is relevant to EBP. Clinical reasoning most commonly refers to patterns of thinking that refer to patient care problems (Alfaro-LeFevre, 2013). Knowledge of EBP can strengthen critical thinking and clinical reasoning skills. To be an effective facilitator of EBP, strategies to foster the development of clinical reasoning skills is imperative. Conferences can be used to allow nurses to verbalize their feelings and share their experiences. During these activities, participants are allowed to "think aloud" regarding why they made certain clinical decisions. Nurses may also choose to write reflective journals, which may further enhance the ability to analyze thought processes.

Clear, unambiguous communication and regular conferences/meetings were essential for this project (Kenny, Richard, Ceniceros, & Blaize, 2010). This strategy was particularly important due to the language and cultural barriers that existed between the author and the clinical staff (primary language is English for the author and primary language of Indonesia is Bahasa). Support from leadership was also necessary for access to the staff for observation and interviews. Consultation with leadership throughout the development of the EBP project, with ample opportunity for feedback and comments, were instituted as a tactic for the successful practice change (Douglas & Berry, 2011). The inclusion of concepts such as collegiality, interprofessional teamwork and collaboration, role clarification, and delineation of patient care responsibilities were also important to address (Kelly & Penney, 2011).

Economically, clinical guidelines should be able to support cost-effective care. The goal of clinical guideline development should be the improvement of consistent, quality patient care in an efficient, effective, cost-effective manner, without sacrificing patient or provider safety. Bakke (2010) developed guidelines that dramatically decreased the rate of catheter-related infections and projected significant annual savings as a result.

Without guidelines, nurses lack a means of measurement to assess outcomes. Professional nursing societies have developed guidelines based on evidence, and are a rich resource of information when considering strategies (Mallory, 2010). In addition, a comparison of published guidelines may present questions and challenges if inconsistencies and conflicting evidence is presented (Conway, Page, Rolley, & Worrall-Carter, 2011). In such cases, an opportunity exists for further study and refinement of guidelines for practice. An identified practice problem or need can guide the development of guidelines. For example, Kelly and Penney (2011) developed guidelines to delineate the roles and responsibilities of nurse case managers and home health liaisons for discharge planning when gaps were identified in care. Douglas and Berry (2011) proposed clinical guidelines for ophthalmic care when inconsistencies were noted in the nursing care provided to pediatric patients in the pediatric intensive care unit. An analysis of the literature for relevant and strong evidence can produce the foundation for the development of clinical guidelines.

A multidisciplinary team approach was considered during the revision of guidelines to ensure feasibility, applicability, and ease of use (Songwathana, Promlek, & Naka, 2011). Nurse

satisfaction of the guidelines was an objective. Professional nursing societies are providing resources for members to evaluate change projects (Mallory, 2010). These resources were referenced while planning the evaluation of this EBP project.

The introduction of EBP to nurses not previously familiar with the concept may provide further questions for study. Current strategies identified in the literature were also analyzed for replicability in this target population. Thus, this doctoral project may advance nursing practice and fill the gap in practice as revealed in the literature.

## Local Background and Context

Local evidence exists on the relevance of the problem under study, which justifies the practice-focused question. The evidence used to answer the practice-focused question will be addressed in Section 3. A description of the institutional context as applicable to the problem being addressed in this doctoral project follows. The project site in Indonesia is progressive and eager for a change in practice. A need for an ASC nursing guideline was identified as a barrier to the implementation of EBP. Both the medical and nursing leadership expressed support for the development of an EBP guideline to inform nursing practice. These clinical practice leaders acted as champions and mentors as the project progressed (White & Dudley-Brown, 2012). The support from nursing management also helped foster an environment or culture for the translation of evidence into practice. As a deferential, hierarchical society, Indonesians place much weight on the actions and words of "experts," especially if the authority figure is male or a Western foreigner (Lewis, 2006). Unfortunately, one of the barriers to address was the history of poor sustained change. Cultural and language barriers were also a considerable challenge. A surprising barrier that was considered was the enthusiasm for change. Although this could also

be considered a facilitator, planning may be rushed due to excitement. The fragmentation of nursing education also posed a challenge. The large number of new entry level nurses also needed to be considered.

The project site is a private community hospital located in Jakarta, Indonesia. There are approximately 270 nurses practicing at the site, but only 8 nurses have received the necessary training and approval to care for patients in the ASC. The ASC contains 6 private beds. A central room is located in the middle of the unit for the nurses and physicians to document and discuss patient care. Each patient room offers telemetry, but more invasive hemodynamic monitoring is not the domain of this unit. The ASC is led by a neurologist, with a total of 4 neurologists practicing at this hospital. The use of general practitioners for the majority of patient care is normal hospital protocol. New protocols or change initiatives follow a strictly defined chain of command: nursing leadership/administration, chief of neurology, chief medical officer, then corporate leadership/administration. The hospital's vision is to be the leading healthcare provider network in the Pacific Asia region (Eka Hospital, n.d.). The mission of the hospital is to: prioritize human life and safety; adopt medical standards that exhibit best practice; provide integrated healthcare services; provide passionate and compassionate care; and promote a healthy lifestyle.

Indonesian nurses do not enjoy the prestige and respect that their colleagues in most Western countries are afforded. They are not provided with authority to implement change and are frequently disrespected by medical colleagues (Brown & Hamlin, 2011). As a result, nurses lack confidence in their skills and abilities. As a developing country, change is slow to

17

implement and is frequently not sustained. There are no consequences for poor or inadequate care, and thus complacency is common (Brown, Rickard, Mustriwati, & Seiler, 2013).

Nursing is considered a technical vocation in Indonesia and does not enjoy the respect and prestige that Western nurses are accustomed to. Nurses are not expected to exhibit critical thinking skills, and do not perform the interventions and assessments that most foreign nurses are comfortable and competent in (Hamlin & Brown, 2011). For example, nurses at this site do not perform head-to-toe physical assessments, and are not expected to. Time spent in therapeutic or caring relationship-building with patients has not been observed. A spaghetti diagram developed by a member of the corporate health care team revealed that in one 4-hour period of observation, a nurse spent a total of 6 minutes in one patient's room (in 2 separate visits).

Locally used terms, concepts, and operational processes relevant to understanding this doctoral project, such as guidelines and evidence-based practice, are similar in definition between Indonesia and the United States of America. The operational definition of evidence-based practice involves the integration of clinical expertise, relevant research findings, and patient preference (Grove et al., 2013; McEwen & Wills, 2014; Nash, Fabius, Skoufalos, Clarke, & Horowitz, 2016). Clinical guidelines are recommendations based on the synthesis of research-generated evidence that is supported by a consensus of professional organizations and recognized experts (Grove et al., 2013; Nash et al., 2016). The organization relies on published data from Western countries as the foundation for its documents and protocols. State and/or federal contexts are not applicable to the problem in this doctoral project and will not be discussed.

## **Role of the DNP Student**

My professional context and relationship to this doctoral project will be described. My role in this doctoral project, including relationships to the topic of study, participants, evidence, and institution, will also be discussed. I served as the primary program planner for this project. In collaboration with the project team, I developed a guideline to incorporate current EBP. The nurses of the ASC will be introduced to EBP through the implementation of the guideline, to be completed by the organization following the completion of this project. As the primary planner, my strategies included on-unit mentoring, small discussions, and didactic lectures (recommended by my preceptor). Interprofessional collaboration was encouraged through multidisciplinary meetings to discuss and review the guideline development process.

As a nurse educator, EBP is a concept that is incorporated into every course that I teach. The project location was also my practicum site. The practice-focused question was distilled from a wide array of possible topics, which were identified in collaboration with my preceptor. The need for staff development and quality improvement was vast; it was difficult to focus my project to its current state, as the organization had requested revision of all areas of nursing, including a request to develop a nurse education/staff development program for such specialties as intensive care unit (ICU) nursing, cardiovascular nursing, and neurovascular nursing.

My motivations for this doctoral project included the desire to enhance the practice of nursing and the improvement of the status and perception of the profession in Indonesia. Perspectives that may have affected the choices about the project included ethnocentrism and my background as an American-born and -educated advanced practice nurse. I hoped to provide the nurses at this project site with a tool that may enhance their confidence through the improvement of skills and competencies. The first step was to accept and become familiar with EBP.

Potential biases I may have possessed include the perception that Western health care is the gold standard and the expectation that the culture will behave in a similar fashion to that of Americans or other Westerners. I took steps to address them. As the spouse of a United States Army officer, assigned to the U.S. embassy in Indonesia, I have been immersed in the Indonesian culture since 2014. I have not studied the language, but have become quite familiar with the nuances and norms of this culture. In particular, the people tend to avoid confrontation and are not assertive. If, during discussion, something is not clear, Indonesians will not ask for clarification (Lewis, 2006). This has led to misunderstandings between my Indonesian project team and myself. As the most populous Muslim country in the world, certain behaviors and customs were also observed at the project site. Items are always passed with the right hand, and pork products are not consumed. Personal space is quite limited, and affection within gender is common. For example, after a lunch meeting that I hosted for the nursing leadership in December 2015, the Director of Nursing grabbed my hand and held it while we were waiting for our vehicle. I was quite uncomfortable, but realized that this was her offer of acceptance and friendship.

#### **Role of the Project Team**

A project team was used to advise the project regarding cultural and organizational norms. The team also provided invaluable feedback for the project and the guideline development process. Translation services were also provided by the project team. The team consisted of my preceptor, who is an Indonesian nurse-midwife, and the nursing leadership. In addition, the corporate medical team, of which my preceptor was a member, were vital participants of the project team. The corporate medical team consisted of two nurses, a pharmacist, a neuroscientist, three general practitioners, a healthcare administrator, and an American physician (the team's leader). Other invited project team members consisted of physicians (general practitioners and neurologists), ASC nursing staff, nurse leaders, and organizational leaders. The doctoral project team members were presented with background information, evidence, and other forms of information through the process of weekly meetings and communication via electronic media (email, WhatsApp, text messages, phone calls). Team members had opportunities to share their expertise and contextual insight relative to this doctoral project. The team had the opportunity to provide feedback during weekly meetings. Evidence from the literature that may have been applicable to the role of ASC nurses were presented for discussion, as well as strategies for the introduction of EBP. Translated guidelines were reviewed with my preceptor for accuracy and contextual understanding. Responsibilities of team members to review and provide feedback on doctoral project results, along with a timeline, were clarified. On-unit meetings occurred twice per week, on average. I was accompanied by my preceptor and another member of the nurse leadership team. These nurses provided translation services and organizational culture background. During these meetings, which occurred in 1-hour time slots, the EBP guideline was reviewed and discussed. The nursing staff were offered opportunities to provide suggestions and feedback. In addition, bedside teaching and role modeling were offered. As a foreign nurse, I am prohibited from Indonesian and Walden University regulations from providing direct patient care; thus, my role was to augment their understanding of the guideline and to provide support and reassurance.

Each quarter, I treated the nursing leadership team to a working lunch. As a social society, this is an acceptable method of gaining trust and cooperation (Lewis, 2006). At these

lunch meetings, the status of the project and the practicum goals and objectives were reviewed. As a result, a positive relationship was developed between the nursing project team members and myself.

As a Western nurse with advanced practice education and training, I was viewed as a subject matter "expert." I emphasized that I was a nurse and not to be treated as a member of the corporate team. I realized that my background and status as a foreign advanced practice registered nurse (APRN) was intimidating to some of the nursing staff; as a result, I diligently modeled the leadership behaviors of accessibility and approachability. I encouraged open communication with the nursing staff. The nursing staff also perceived me as their gateway to the physicians and other leaders, as my relationship with these team members was quite different. I was able to enjoy a more equitable, linear collaboration with the physicians due to my background as an American APRN. I parlayed this advantage to encourage a more collaborative relationship between the physicians and nurses at this clinic site.

Contextual insight was invaluable. For example, I was warm one day and removed my cardigan. My dress happened to be sleeveless, and I was unaware that this is a cultural faux pas. A member of my preceptor's team suggested that I might want to put my cardigan back on. Other cultural insights provided by my preceptor and her team included advice on who to pay my respects to, although this person may not be involved in the DNP project. Protocol is very important in this country and organization. During a recent visit by my parents, I was encouraged to bring my family to the hospital to meet the team. My husband, children, and parents were treated to a tour of the hospital and were warmly greeted by the nurses and physicians. Family and socialization is central to most professional relationships in Indonesia (Lewis, 2006). Doctoral project feedback was provided on a weekly basis during team meetings. Nursing leadership maintained final approval of the EBP guideline and provided opportunities to introduce EBP to ASC nursing staff.

## Summary

EBP, as a concept, is new to most nurses in Indonesia. Development of a guideline to inform nursing practice in the ASC at the project site will be an initial step to introduce EBP. In Section 3, methods to connect the gap in practice, such as sources of evidence for the project, will be discussed. Evidence sources to be discussed include published outcomes and research, and archival/operational data. Analysis and synthesis procedures will also be reviewed.

## Section 3: Collection and Analysis of Evidence

#### Introduction

To introduce EBP- a concept that is relatively new to Indonesian nursing and thus has not been actively incorporated into practice - to the nurses of the ASC at the project site, an evidence-based guideline was developed to promote a standard of care that will ensure consistent practice. In order to enhance the quality of health care, nurses must promote evidence-based practice (White & Dudley-Brown, 2012).

The project team – chief neurologist, corporate medical officers, nursing administration, and the ASC nurses - helped translate documents and communication with the nursing staff (the majority of whom do not speak English). Contextual understanding of the culture and organization was important to consider; it was advised by the preceptor and her team. Nursing in Indonesia does not enjoy the respect and prestige as nurses in other countries; thus, the role of this DNP student was to communicate with team members, such as physicians and corporate leadership, to implement the EBP project. The members of the organization's nursing administration were the primary advisors for this project, and their approval (explicit and implicit) was necessary to gain acceptance from the ASC nursing staff.

After being translated, I reviewed the current operational guideline to ascertain its relevance and adherence to current standards of care. The stroke guideline was translated from Bahasa Indonesia to English by a bilingual member of the project team. Interventions that deviated from current international standards of care for poststroke patients were highlighted and discussed with the project team. I recommended nursing interventions, identified from current data, and reviewed them with the project team to determine applicability to the scope of nursing practice in Indonesia, as well as the ability for implementation at this organization. The nursing staff would be responsible for implementing the guideline into clinical practice. The corporate medical officers (including general practitioners) needed to be aware of the guideline as their patient care responsibilities could be impacted. The guideline encouraged greater nurse autonomy by recommending interventions not currently considered "standard operating practice," such as the administration of the National Institutes of Health Stroke Scale (NIHSS). Nurses were also guided to interact with physicians in an interprofessional collaborative relationship, which could be a change for some, because the current power dynamic is patriarchal and dominated by the medical structure. The chief neurologist and the director of nursing were the project team members who formally approved the EBP guideline for distribution and implementation. Both participants were consulted regularly for critique and feedback. Quarterly meetings were held to review and discuss the current status of the guideline with all team members. This process, including quarterly meetings, occurred over a period of approximately 3 months.

In the following sections, the practice-focused question will be reviewed, along with sources of evidence. Analysis and synthesis of this evidence are provided.

## **Practice-Focused Question**

The lack of evidence-based clinical guidelines to inform nursing practice can be detrimental to patient outcomes, quality of care, and cost containment. Clinical guidelines are important to guide nursing knowledge based on evidence and to change current practice. Clinical practice guidelines merge the tasks of patient outcomes management and the use of EBP in order to improve the quality of health care. The current operational guideline for nursing care in the ASC was developed without the input or feedback of nurses. The local problem was identified as a

lack of evidence-based guidelines for nursing practice in the unit. The gap in practice was the translation of evidence into nursing practice. The practice-focused question for this DNP project was how to incorporate EBP into ASC nursing practice. The purpose of this project was to introduce stroke unit nurses to EBP via the introduction and integration of a guideline based on evidence. This approach aligns to the practice-focused question. Unit nurses were provided with dedicated time for review of the new documents and their feedback was analyzed. A copy of the guideline was provided for review and critique at each on-unit meeting with the nursing staff. A meeting room was established for discussion. A translator was available for each on-unit site meeting. On unit meetings conducted twice a week were used to offer training and role modeling opportunities. As the current staffing of the ASC included eight nurses, each nurse was provided an opportunity to attend these meetings. The nursing leadership provided the nurses with paid duty hours in support of the project. Staff development education as related to the guideline was a requirement supported and enforced by the nursing leadership. Nurses attended a seminar in November 2016 that I developed and presented. The seminar was prepared at the request of the project team nurses as an introduction to international standards of care for poststroke patients. Knowledge of these standards was intended to encourage the adoption of the EBP guideline. The 3-day seminar consisted of basic stroke pathophysiology and classifications, nursing care responsibilities in a variety of settings (pre-hospital, emergency department, intensive care unit, ASC, and outpatient), risk factors, complications and nursing interventions, and discharge care. During the seminar, nurses were provided with the opportunity to provide feedback and suggestions during "question and answer" sessions, as well as an anonymous evaluation at the

conclusion of the seminar. Operational definitions of key aspects of this doctoral project did not require clarification as they were understood by the project team and author to be similar.

## **Sources of Evidence**

Sources of evidence that were used to address the practice-focused question included project team members, organizational documents, and an analysis of published international guidelines for the nursing care of acute stroke patients. The purpose of this project was to develop an EBP guideline. The evidence collected included organizational data and documents, along with published literature, which addressed this purpose. Collection and analysis of this evidence provided the most appropriate way to address the practice-focused question. The organizational data was necessary to ensure that the EBP guideline was appropriate and applicable to the context and nursing scope of practice. Evidence from the literature provided the current EBP to incorporate into the guideline. Thus, the relationship of this evidence to the project's purpose was clarified.

### **Published Outcomes and Research**

The published guidelines that were used to support and guide the project included: American Association of Neuroscience Nurses (AANN), American Heart Association (AHA), National Stroke Foundation (NSF), Registered Nurses' Association of Ontario (RNAO), Royal College of Physicians (Royal College), and Scottish Intercollegiate Guidelines Network (SIGN).

The databases and search engines that were used to find outcomes, research, and evidence related to the practice problem included: National Guideline Clearinghouse, CINAHL Plus, ProQuest, and MEDLINE. Key search terms and combinations of search terms that were used included: *stroke, nursing care, nurse, guidelines, implementation*, and *evidence-based*  *practice*. The scope of this review in terms of years searched was originally limited to the previous 5 years, but it was expanded to encompass guidelines published earlier. The science was relatively current, ranging in date from 2008 to 2015. A search of the CINAHL database using the terms *nurse, guidelines*, and *stroke* resulted in 143 sources. The science of how to implement, or translate, clinical guidelines into practice appeared to be robust. The types of literature that were examined and assessed were current EBP guidelines, seminal articles, and studies published in peer-reviewed journals. In addition to this search of databases, other sources searched included textbooks and articles required by Walden University for DNP course work that were analyzed for relevance to the practice question. If deemed applicable, these sources of evidence were included for further analysis. This search was intended to be exhaustive and comprehensive.

#### **Archival and Operational Data**

The current operational guideline for ASC nursing practice was reviewed in support of the author's clinical practicum, at the request of nursing administration. The aim was to assess the clinical applicability of the current guideline and adherence to published standards of care for stroke patients. This document was developed by a local general practitioner who is an employee of the hospital. This data was required for review in order to clarify the need for revision. This guideline, as currently in place, is not specific to nursing. The process of data collection for the current guideline was not able to be ascertained. References were not cited in the document. As a result, there were limitations inherent in the data. A procedure was established for gaining access to the evidence, including permissions to gain access to operational data. Operational data accessed included the current operational ASC nursing guideline and patient flow sheets.

Permission for access to these documents was obtained through appropriate organizational channels, with the support and approval of the author's clinical preceptor. The documents, as property of the organization, were kept in a locked drawer at the project site and were not removed from the premises. Walden University Institutional Review Board (IRB) approval was received for this project (approval number 10-17-16-0578978). The current guideline was reviewed to determine the applicability to nursing practice at the organization. It was compared to the flow sheets to consider whether it was incorporated into the care of poststroke patients.

Additional data included the current standard of care provided by ASC nursing staff. The nursing management team routinely collects information related to patient satisfaction and adherence to hospital protocols. Nursing documentation is used to provide this data; however, access to patient records was not requested for this doctoral project. Nursing care plans (part of the patient flow sheet) were analyzed for adherence to established protocols and compared to published international standards of care for stroke patients. The nursing leadership team provided the care plans to me in hard copy format. These documents were kept in a locked drawer at the organization and was only accessed during project clinical hours. Access to project documents was restricted to the author and her preceptor. Historical and legal documents were not used as a source of evidence, as they were not available for review.

The nature of this data, including information on the original contributors, provided a direct link to the practice problem and question. The relevance of this data to the practice problem in this project was clearly justified, based on how the data was originally collected by the organization. A focus on the overall validity as a source of evidence was not clearly defined, as evidenced by the ambiguity of the original stroke center's nursing guideline.

29

## **Analysis and Synthesis**

Analysis procedures were used in this doctoral project to address the practice-focused question and will be described. Current operational documents that are used by nursing staff, including flow sheets and the current guideline, were examined. Feedback provided during project team meetings were documented as notes. Notes taken by me during unit meetings were kept in a project notebook without identifying information of the nurse who provided the feedback or comments. Project team meetings were held weekly, with an open invitation to all members. ASC nursing staff on duty with patient coverage were invited to attend these meetings. The goal of weekly meetings was to identify any unanticipated barriers or challenges and strategies to address them. The meetings also provided an opportunity for continuous discussion with team members regarding the development of the project's EBP guideline. Subjective data obtained from weekly meetings with nursing staff were used to analyze the applicability of the EBP guideline. Feedback from physicians and nurses were used as data to determine the relevance and appropriateness of the guideline. Notes were taken during the meetings and then examined for identified challenges that needed to be addressed. Suggestions for content were considered for operational relevance and compared to published international standards related to stroke patient nursing care. Implementation of the EBP guideline was beyond the scope of this doctoral project and will be conducted by the site following completion of the project.

In order to ensure the integrity of evidence, only published guidelines endorsed by nationally and internationally recognized organizations and societies were used to inform the development of the ASC nursing guideline, using the AGREE II-GRS instrument to assess quality. Permission to use the AGREE II-GRS instrument in scientific documents was provided by the AGREE Research Trust (see Appendix A). All collected data were stored on a passwordprotected personal laptop computer, with a back-up retrieval system in place in the form of an external hard drive, which was also password protected. The only authorized persons with access to this data included my preceptor, project team members (including physicians and corporate management), and myself.

#### Summary

The introduction of EBP through the development of an ASC nursing guideline addressed the practice-focused question of this project. Evidence used to inform the project was identified as organizational data, consultation and collaboration with the project team, and an analysis of data. The evidence was analyzed and synthesized to assure integrity to the project. The AGREE II-GRS tool was used to assess the quality and applicability of published guidelines. Organizational data included current operational documents, including the current guideline and ASC patient flow sheets. Weekly meetings with team members were held at the project site, with the objective to review and discuss the status of the project and the EBP guideline development process. The meetings also allowed a discussion of challenges and strategies as related to the project. Team members included physicians, nursing staff, and the management/leadership team. Section 4 will outline the findings and recommendations of the project.

## Section 4: Findings and Recommendations

#### Introduction

The local problem was a need for development of an EBP guideline for the nursing care of poststroke patients. The identified gap in practice at the project site was a delay in the integration of EBP. This project was conducted to answer the practice-focused question of how to introduce and incorporate EBP into the daily nursing care of poststroke patients. The purpose of this doctoral project was to provide nurses with an introduction to EBP via a guideline for the ASC nursing staff at a community hospital in Indonesia.

Sources of evidence for this project included the project team, organizational documents, and data. Published guidelines from professional organizations were examined for relevance and applicability to the project site along with the parameters of Indonesia's nursing scope of practice. Guidelines published by the AHA, RNAO, SIGN, Royal College, NSF, and AANN were identified as relevant to Indonesian nursing practice. This evidence was used along with analytical strategies to assess its relevance to the practice-focused question. Operational data were analyzed, including the current nursing guideline for the ASC. Information was obtained from project team members via interviews and weekly meetings. This information included feedback regarding the current standards of care and interest in EBP. Nursing staff voiced interest in incorporating EBP into their patient care. Organizational leaders emphasized improving the current standard of care by integrating evidence from published international literature.

The chief neurologist admitted that there was a deficit of EBP knowledge within the nursing staff; he was a vocal supporter of the guideline development. Team members expressed

concern about implementing the EBP guideline; thus, specific strategies, such as the KTT approach, were discussed. The team members I consulted included the ASC nursing staff, physicians (neurologists and general practitioners), pharmacists, nursing leadership/management personnel, and organizational leaders. Analytical strategies involved synthesis of information collected from weekly meetings with the project team. Challenges and barriers were reviewed, as well as possible strategies to overcome them. The current guideline was compared to the literature to examine its concordance to EBP.

## **Findings and Implications**

As a result of analysis and synthesis of the collected evidence, the following findings were reported. The current nursing guideline for poststroke patients revealed that the guideline was difficult to follow; it included interventions that were not specific to nursing and contained diagrams and shaded sections that were complex and not clearly visible. Interventions included tasks for laboratory personnel, as well as physician-specific orders. In addition, the nurses were only able to view the guideline on the hospital's intranet. Thus, an EBP guideline was developed (Appendix B). The organization instructed me to avoid putting a copy of their previous guideline in this paper.

The AGREE II-GRS instrument was used to guide analysis of published international guidelines for nursing care of stroke patients (Appendix A). This tool directed the evaluation of the guidelines from the following organizations: AANN (2008), AHA (Jauch et al., 2013), NSF (2010), RNAO (2005), Royal College of Physicians (Intercollegiate Stroke Working Party, 2016), and SIGN (2010). AGREE II-GRS outlines five items to consider: (a) general quality of development methodology, (b) general quality of presentation, (c) comprehensiveness of

reporting, (d) general quality of recommendations, and (e) general quality of the guideline. The first item (general quality of development methodology) considered the appropriateness of involved stakeholders, whether the base of evidence was developed in a systematic fashion, and if the recommendations were consistent with the current literature. The second element of the AGREE II-GRS tool (quality of presentation) evaluated the organization of the guideline and whether it was user friendly. The third item (completeness of report) analyzed the transparency and reproducibility of the guideline development, as well as informational decision making. The general quality of guideline recommendations (Item 4) evaluated whether they were clinically relevant and applicable to the target audience. Item 5 evaluated the general quality of the guideline. These items were rated on a scale of 1 to 7, with one considered lowest quality and 7 as of highest quality. In addition, two questions completed the AGREE II-GRS instrument. These questions considered whether the evaluator would recommend the guideline for implementation into clinical practice, and if the evaluator would utilize a guideline of the assessed quality for clinical decision making. I analyzed the published guidelines using this tool. One hundred eighty-five guidelines were initially identified using the following search terms: stroke, nursing care, nurse, guidelines, implementation, and evidence-based practice. The databases that were searched included the National Guideline Clearinghouse, CINAHL Plus, ProQuest, and MEDLINE. Guidelines written in languages other than English were excluded. When the search was limited to a time frame from 2011-2016, the literature was further reduced to 80 articles. The data was then examined for applicability to Indonesian nursing and guidelines related specifically to rehabilitation and prevention of stroke were excluded. The focus of the EBP guideline, per project team request, was the acute care of poststroke patients. Guidelines

with a concentration on medication management were excluded, as nursing pharmacology knowledge is limited in Indonesia. Comprehensive guidelines for poststroke patients were included, and the following were analyzed: AHA, AANN, RNAO, Royal College of Physicians, SIGN, and NSF. These guidelines were selected for further analysis using the AGREE II-GRS instrument due to their broad content and the recognition of these organizations as international professional entities.

The National Stroke Foundation's guideline was determined to be of highest quality, earning a score of 7 for all items. The RNAO's guideline also earned scores of 7 for all items and was considered to be particularly relevant to the author's revision of the organization's current poststroke guideline. The Royal College of Physicians' stroke guideline received scores of 7 for all items. Although useful to inform the revision of the organization's stroke nursing guideline, the AHA guideline did not clearly describe its development in a transparent manner, nor was the decision making process defined. I ultimately decided to recommend this guideline for practice due to the cited evidence that supported its recommendations. The guideline developed by the AANN (2008) presented high quality recommendations; however, Item 2 on the AGREE II-GRS tool received a score of 5, as I did not find that the guideline was as well-organized or easy to follow as the other reviewed guidelines. The SIGN guideline received a score of 7 for all items and was deemed to be of high quality. See Appendix C for a summary table of these guidelines using the AGREE II–GRS tool.

There were unanticipated limitations and outcomes with potential impact on the findings. The newly developed guideline was reviewed with the project team. Due to differences in accepted standard of care, certain recommendations were excluded or adjusted to accommodate for these variances. For example, the use of antithrombotic devices is common practice in Western countries for immobile poststroke patients. The use of this equipment is not routinely used outside of the intensive care unit (ICU) in this hospital. Once patients are transferred to the ASC, pneumatic compression devices are rarely ordered by physicians. Seizure precautions are not considered standard practice for stroke patients in Indonesia, and despite the evidence presented, the project team did not agree with the inclusion of this particular intervention in the EBP guideline.

As a result of the findings from the analysis of data, there are implications in terms of individuals, the community, institution, and systems. The development of an EBP guideline for poststroke care may enhance patient care, improve outcomes, and advance the standard of care provided by nursing staff. The quality of patient care can be improved via the reduction of differences in clinical nursing practice. The nursing community, with the knowledge that their decisions and interventions are based on evidence, may further their confidence in their skill level. Nursing staff can utilize this guideline to further refine their knowledge and skills, using the document as an outline of shared goals. Nurses in Indonesia do not enjoy the prestige, respect, and autonomy that is common in Western nations. Utilizing EBP guidelines provides nurses in this organization with a foundation for advancing their practice. The organization may choose to utilize this guideline as a template to modify the documents on other patient care units. The AGREE II- GRS tool may assist the nursing leadership team with the analysis and evaluation of international guidelines that can be operationalized to the organization. A change in culture is always difficult; more so if deeply entrenched within social, cultural, and religious norms and mores. Important but small, incremental steps are essential to change systems. As a

health care organization with aspirations of providing world class health care, EBP guidelines can promote a culture of excellence.

Positive social change is a tenet of Walden University's educational mission (Walden University, 2016). This project provides potential implications to positive social change. The positive change in patient care can improve the status of nursing in Indonesia. The improved perception of nursing as a profession may further enhance confidence level and support the use of EBP. Indonesian health care will benefit from the structure that EBP guidelines can provide for its disease management programs, helping to improve the well-being of its citizens.

## Recommendations

As informed by the findings previously discussed, recommended solutions that will potentially address the gap in practice were proposed. The development of an EBP poststroke nursing guideline was informed by the analysis of published international literature. The AGREE II-GRS instrument was used to evaluate published guidelines. A guideline was developed for the nursing care of poststroke patients. Access to the guideline in hard copy format has been recommended, as nurses may not have access to a computer terminal at all times. See Appendix B for an example of the ASC nursing guideline for ischemic and hemorrhagic stroke.

A secondary product was proposed to guide the use of the primary product (EBP guideline) in practice. A neurology nursing seminar was developed and presented by the author in order to inform the use of the guideline. The topics covered included basic anatomy and physiology of the brain, stroke pathophysiology, nursing interventions, and pharmacology.

Implementation and evaluation procedures were provided to the project team at the conclusion of this project. These procedures were described in sufficient detail so that

administrative decision makers not involved in the development and planning can assign and supervise them without further planning. The implementation of the EBP guideline was reviewed and discussed with the nursing leadership team. Nurses may refer to the document throughout their shift in order to verify that interventions are consistent with the guideline. Evaluation may occur within 3-6 months of implementation. Nurses can be polled about the relevance and applicability of the EBP guideline. The actual use of the guideline can be verified by random chart reviews of patients (current and discharged).

The KTT model was introduced as a method of implementing the revised guideline (Singh et al., 2015). Interventions to be considered for successful and sustained change include the development of best practice champions, interprofessional collaboration, and educational strategies. Educational strategies were discussed that would be most appropriate and relevant to the organization, such as its e-learning platform, seminars/workshops, and on-unit mentoring/support.

## **Contribution of the Doctoral Project Team**

The process of working with the doctoral project team was a positive experience for all involved. The expertise and cooperation of the project team was essential to the successful completion of the document. The doctoral project team consisted of my preceptor, members of the corporate medical team, hospital administration, physicians, nursing staff, and myself.

Various responsibilities were undertaken by team members. The project team played a role in the development of the final recommendations and product (EBP guideline). My preceptor, administration, and corporate medical team allowed access to the organization's data, such as flowsheets and current nursing guidelines. Cultural and organizational nuances and

practices were reviewed with the preceptor and her team. The nursing leadership staff provided access to the ASC for tours and observation, as well as dedicated staff time for the neurology seminar. Physicians provided feedback on the previous and EBP guideline, as well as encouragement and support of the nursing staff. This reinforcement was essential to advance the acceptance of the EBP guideline, as health care in Indonesia is hierarchical and paternalistic (Brown & Hamlin, 2011).

There are plans to extend this project beyond the DNP doctoral project. The organization has expressed intent to continue the implementation of this DNP doctoral project. The momentum achieved by the neurology nursing seminar can be supported by the development of best practice champions. As the project has progressed, nursing leadership has shared in the development of the guideline. Through this process, an introduction to project development was an unintended but positive outcome for the organization's nurses. Project planning is not a part of the curriculum in Indonesian nursing education. Armed with this knowledge, the nursing staff can continue to improve patient care through the evaluation and revision of guidelines for the other units of the hospital.

## **Strengths and Limitations of the Project**

There are strengths and limitations of this doctoral project. A primary strength of this project is its applicability and relevance to the intended target audience: ASC nurses. Scope of practice and institutional norms were assessed during the guideline development. The completed product is evidence-based and operationalized to the current practice of nursing within the hospital.

Limitations include the possibility that the guideline may not be implemented as planned or recommended. Despite the feedback and input from the project team, nursing staff may find the guideline to be challenging and overly ambitious. Sustaining the enthusiasm for the project may be difficult to achieve without my consistent presence at the clinical site. Another limitation to consider is that the guideline, due to project team feedback, does not contain commonly accepted EBP interventions such as venous thromboembolism (VTE) prophylaxis. Although considered common practice in Western health care, VTE prophylaxis is still not accepted as standard of care due to cost, availability of equipment, and lack of knowledge.

Recommendations have been considered for future projects addressing similar topics and using similar methods. Future projects may benefit from continual reinforcement of best practices when developing guidelines for nursing care. Challenges that may prevent the organization from accepting and implementing these best practices should be considered and recommendations to address these barriers may be suggested. Particularly for those nurse leaders who may participate in the planning or implementation of projects in foreign countries, it is imperative to study and immerse oneself in the culture of the health care system. Cultural competency will be of utmost importance to communicate effectively with project teams and the target audience.

#### Section 5: Dissemination Plan

Plans were developed to disseminate this work to the institution experiencing the problem in practice. This project was presented at a meeting of the project team members on November 11, 2016. The developed guideline was reviewed, along with the evaluation criteria from the AGREE II-GRS tool. A discussion of the published guidelines that were used to inform the project was followed by feedback from those present. The final product of this project (an EBP guideline for the ASC nursing staff) was accepted by the nursing administration/leadership team.

Based on the nature of the product (EBP guideline), audiences and venues that would be appropriate for dissemination of the project to the broader nursing profession in Indonesia was clarified and presented. This project and its final product could be presented to the entire hospital nursing staff as an educational tool for its planned Nurse Training Center. As an example of positive interprofessional collaboration, the corporate medical team can utilize this project to guide future endeavors. The Indonesian National Nurses Association may benefit from presenting this project at a conference or seminar as an example of EBP.

## **Analysis of Self**

I have carefully considered an analysis of self in the role as practitioner, scholar, and project manager. I was able to draw connections between this project experience, its present state, and my long-term professional goals. As an American nurse practitioner, it was sometimes difficult to understand the hierarchical relationship that I observed between nurses and physicians in Indonesia. Critical thinking and reasoning are not expected nor encouraged within the nursing staff (Brown & Hamlin, 2011; Suba & Scruth, 2015). As a scholar, it was fascinating to examine the culture and consider strategies to make positive changes not only for the organization, but for the nursing profession in Indonesia. As a project manager, I was afforded privileges and opportunities solely based on my status as an American nurse and doctoral student. Westerners are viewed as subject experts and respected by many Indonesians (Lewis, 2006). I was consulted for advice by members of the corporate medical team and offered the opportunity to present to the Indonesian National Nurses Association in May 2016 on the subject of EBP, which I gladly accepted and was honored to do so. As a clinical practitioner with a recent background in nursing education, project planning was a new skill that was honed and practiced with the guidance of my professors at Walden University. The real world applicability of didactic information directed my growth as a scholar and nurse leader.

My future professional goals include continuing to collaborate with my Indonesian colleagues at the clinical site. I have been offered a position as consultant with the corporate medical team, following the completion of my DNP degree. I will be able to help implement the guideline, and support development of other projects to improve the standard of care within the organization. Enhancing the perception of nursing as a profession in Indonesia is an important goal, and I hope to encourage this by fostering attendance by local nurse leaders at international conferences and inspiring excellence and pride within the community.

The completion of this project contained challenges, solutions, and insights that I gained on this scholarly journey. This project has been the most challenging personal and professional endeavor that I have ever undertaken. At times frustrating, I was continually challenged by my professors to produce the best scholarly work possible. Completing a doctoral project in a thirdworld, developing country has been inspiring, stimulating, and, at times, aggravating. Oftentimes, I felt as if I were precepting my preceptor! Her support and encouragement made this project possible, but the practice of project planning was primarily independent. The corporate team leader became a powerful supporter and ally as this project progressed and was instrumental in pushing forward initiatives and recommendations that were not necessarily popular.

At the start of this project, I took time to develop social connections with project team members. Although also considered an aspect of professional relationships in the U.S., these connections are imperative for success in Indonesia. At the beginning of each new term, I took the nursing leadership team to lunch to discuss my clinical objectives and the status of the DNP project. I quickly learned that these were not to be working lunches; rather, it was an opportunity for the nurses to engage in social interaction at a restaurant that many of them could not afford to patronize.

Completing a project in a foreign country has opened a world of possibilities, such as international health care consulting. Nursing education has been a passion, and the possibility of supporting and enhancing the educational system of nurses in an international setting has become a tangible possibility.

#### Summary

EBP is now an accepted strategy for improving patient care and ensuring positive outcomes. However, many developing countries struggle with the concept of EBP and its implementation within the context of their health care system.

This doctoral project was conducted at a private hospital in Jakarta, Indonesia, with a mission to provide world class health care. The improvement of care standards has been supported by the hospital's leadership and administration. ASC nurses were practicing with a set

of guidelines that were difficult to follow and implement. Development of an EBP guideline was undertaken, informed by an analysis of published international data. The newly developed guideline is based on evidence and operationalized to the scope of practice and organizational culture.

The essential message of this doctoral project is that in order to improve standards of care in Indonesia, EBP must be introduced to the clinic setting. One strategy to achieve this goal is via the development or revision of guidelines for nursing practice and its subsequent implementation and evaluation.

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## Appendix A

## AGREE II-GRS Instrument

## AGREE II-Global Rating Scale (AGREE II-GRS) Instrument

#### Instructions

The AGREE II-GRS Instrument consists of 5 items assessing how well the guideline is reported. The AGREE II-GRS is a reasonable guideline assessment tool alternative to, AGREE II, especially when time and resources are limited.

Table 1: AGREE II-Global Rating Scale Item Descriptions provides information about the contents in each item category.

Element	Description				
Process of Development	Rate the quality of the development process. Consider:				
	Were the appropriate stakeholders involved in the development of the guideline?				
	Was the evidentiary base developed systematically?				
	Were recommendations consistent with the literature?				
	Was there consideration of alternatives, health benefits, harms, risks, and costs?				
Presentation Style	Rate the quality of the guideline presentation style. Consider:				
-	Was the guideline well organized?				
	Were the recommendations easy to find?				
Completeness of Reporting	Rate the quality of reporting. Consider:				
	1) The transparency and reproducibility of the guideline development				
	2) The completeness of information to inform decision making.				
Clinical Validity	Rate the quality of the guideline recommendations. Consider:				
	Are the recommendations clinically sound?				
	Are the recommendations appropriate for the intended patients?				
Overall Quality	Rate the overall quality of the guideline. Consider:				
	Your response to the above four items.				

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## Appendix B

# Nursing Care Guideline for the Ischemic/Hemorrhagic Stroke Patient

Assessment:

- Neuro checks (including NIHSS) and vital signs as ordered and per patient status
- Notify physician (GP or neurologist) for:
  - Any signs/symptoms of neurological deterioration, including:
    - Change in level of consciousness (lethargy, sedation, increased confusion, agitation)
    - Neurological deficits (new or increased)
    - Nausea and vomiting (new onset)
    - Headache (new onset or worsening)

Vital signs:

- $\circ$  SBP > 220 or <110; DBP > 120
- $\circ \quad \text{Heart rate} > 100 \text{ or} < 50$
- $\circ$  Temperature = > 38° C
- $\circ \quad O_2 \ sats < 90\% \ on \ room \ air \ or \ RR > 24$
- Telemetry is recommended to screen for a-fib and other cardiac dysrhythmias

Activity/Safety:

- Verify swallow screen/evaluation prior to first po intake, including medications
- OOB with assistance, unless contraindicated
- Turn and position at least every 2 hours while in bed if unable to move self

Patient/Caregiver Stroke Education:

- Provide and review Stroke Education Packet
- Document teaching
- Stroke Education Packet should include all of the following:
  - Personalized risk factor modification (smoking cessation, DM, HTN, cholesterol, obesity)
  - Warning signs and symptoms of stroke (FAST)
  - Medication instructions/compliance (to be completed by GP or pharmacist)
  - Follow-up appointment with physician (neurologist)

## Appendix C

	RNAO	Royal College	AHA	AANN	SIGN	NSF
Quality of development methods	7	7	6	6	7	7
Quality of presentation	7	7	6	5	7	7
Report completeness	7	7	4	7	7	7
Quality of recommendations	7	7	7	7	7	7
Overall quality	7	7	5	6	7	7
I would recommend use in practice	7	7	6	6	7	7
I would use guidelines of this quality in clinical decision-making	7	7	6	7	7	7

## AGREE II-GRS Summary Table of Analyzed Guidelines

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*Note.* Scoring of guidelines is based on a Likert scale, with 7 of highest quality and 1 of lowest quality. RNAO = Registered Nurses' Association of Ontario; Royal College = Royal College of Physicians; AHA = American Heart Association; AANN = American Association of Neuroscience Nurses; SIGN = Scottish Intercollegiate Guidelines Network; NSF = National Stroke Foundation.