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PROJECTED ACTION PLAN AND TIMELINE IN PILOT TESTING OF SIMULATON-BASED LEARNING IN THE COLLEGE OF NURSING AT PHINMA-UNIVERSITY OF PANGASINAN

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Abstract

Background: In rapidly changing society with changing demands of need, nursing education is grand changing furthermore. The student nurses identify their learning needs in terms of cognitive, affective, and psychomotor domains. Clinical instructors meet the student nurses learning needs by giving the appropriate methodologies and teaching strategies in enhancing the student nurses knowledge, skills and attitude.

Methods: This study utilized a systematic review as a design to review the simulation-based learning versus traditional learning. The Science Direct database was used to search the studies comprehensively.

Result: An action plan was made to introduce the result of this research and the importance of evidence-based nursing practice. This is recommended to the PHINMA-University of Pangasinan to have clinical simulation-based learning like the use of simulation mannequins in performing return demonstrations or for the laboratory lectures of the student nurses.

Conclusion: Many students under MDL find the learning experience in such modality as non-helpful when it comes to developing their macro skills.

Keywords: Learning Modality, Macro Skills, Online Distance Learning, Modular Distance Learning.

Background

In rapidly changing society with changing demands of need, nursing education is grand changing furthermore. The student nurses identify their learning needs in terms of cognitive, affective, and psychomotor domains. Clinical instructors meet the student nurses learning needs by giving the appropriate methodologies and teaching strategies in enhancing the student nurses knowledge, skills and attitude. Most of the students agreed that there is a need for change in their learning needs. Powerpoint presentation, film viewing, and video presentation of the topic discussion rank the highest among the learning needs of nursing students. Generally, their advantages include better visual effects, high efficiency in information transfer, precise and systemic knowledge structure (Cantos, et al., 2015).

Simulation has been used and found effective for teaching clinical skills. However, there is very little in the literature on whether or not simulation is as effective a strategy for teaching leadership and management skills.

The Far Eastern University Institute of Nursing (FEU-IN) has pioneered an innovative simulation program for teaching non-clinical skills. The first and only one of its kind in the Philippines, the FEU-IN Virtual Integrated Nursing Education Simulation (VINES) Laboratory became the setting of the first simulation program for the clinical experience component of the course Nursing Leadership and Management.

The Leadership and Management Simulation Course includes the use of simulations, case studies, and patient care scenarios to approximate management situations in a safe and no-harm manner. The interactive nature of simulation also serves to ensure that students are able to go over difficult-to-master skills again and again, each time enhancing and reinforcing the skills.

High fidelity patient simulation is increasingly used in nursing education to support students' development of clinical knowledge, skills, and judgment in a safe environment. This simulation

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gives students an opportunity to respond to patient situations, which they may not experience during their assignment to clinical agencies. While educators believe that such learning opportunities have a positive influence on students' actual and perceived clinical competence at the time of graduation, there is a dearth of evidence to support these beliefs. As a result, many educators are fearful of substituting simulation activities for placement in clinical agencies, despite limitations in many of these sites.

Methods

Research Design

This study utilized a systematic review as a design to review the simulation-based learning versus traditional learning. The Science Direct database was used to search the studies comprehensively. The terms "traditional learning in nursing practice", resulted in 24,201 articles. Adding the terms "versus traditional learning in nursing practice", resulted in 7,418 articles. After specifying the term to "Simulation Based Learning vs Traditional Learning", procured 1,202 articles. Limiting the search to full text and English language sorting from 2016-2020 and then manually reading the titles of each article led to 517 files, **but only one passed the inclusion criteria set.**

A second search was performed using Cochrane using the term "Simulation Based Learning in Nursing Practice" resulted in 95 articles. Adding the terms "vs Traditional Learning" resulted in 15 articles. After using the term "Simulation Based Learning vs Traditional Learning", resulted in 7 articles. **Basing on the titles of the studies there was 1 article which passed the criteria.**

Another search was conducted using Scholarly Works the term "Simulation Based Learning" last December 8, 2020. The Scholarly Works website yielded 10400 articles. Adding descriptors like "vs traditional learning" resulted in 2,610. After sorting through articles that were published from 2016-2020 and utilizing articles that contained full text in the English language 15900 articles remain. **Considering the inclusion criteria, only 3 articles were read and qualified based on the inclusion criteria set.**

The last search was made in Semantic Scholar same day as the previous search which was on December 8, 2020. There were 290,000 articles that contained the term "Simulation Based Learning". After adding the term "vs Simulation Based Learning, the articles were reduced to 18,600 articles. An additional term which was "Simulation Based Learning vs Traditional Learning", resulted into 3,560 articles. **After scanning the articles titles only 1 article was used for the study.**

Search History

The search process needed to be documented in sufficient detail throughout the process to ensure that it can be reported correctly in the research and to allow others to assess the thoroughness of the search. Hence, the researchers needed to keep track of:

(1) Each database searched, together with the platform searched.
(2) The date each search was conducted.
(3) Subject headings and keywords used.
(4) Search history, which included the combination of terms.
(5) Number of results retrieved for each search.

In addition, all searches conducted via hand searching must identify the source (name of journal, date of publication, etc). The inclusion and exclusion criteria were formulated to select and assess studies properly; furthermore, the criteria limit the studies included in this research.

Quality Appraisal Tool

This study used an Audit Guide that will reveal various strengths and limitations of the studies that will be reviewed. The researchers will review three to five studies that are related to simulation, traditional method, and academic performance. It will be assessed using the PEDro scale (see Appendix).

PEDro scale contains 11 items. Points are only awarded when a criterion is clearly satisfied. A point should not be awarded if on a literal reading of the trial report was not satisfied. However, criterion 1 which relates to applicability or generalizability is not being calculated in the PEDro scale as reported on the PEDro website. Criterion 2-9 determines the internal validity of the Randomized Controlled Trial (RCT) while criterion 10-11 examines the sufficiency of statistical information, thus, making the results interpretable. Hence, the highest potential score is 10.

Nonetheless, PEDro scale should not be used as a measure of the "validity" of a study's conclusions. Those studies that show significant treatment effects and scores highly on the PEDro scale do not necessarily provide evidence that the treatment is clinically useful. Also, another consideration is if the treatment effect was big enough to be clinically worthwhile, whether the positive effects of the treatment outweigh its adverse effects, and the cost-effectiveness of the treatment.

Data Gathering Procedure

The PEDro scale will be used to measure or examine the validity and relevance of studies if it fits the inclusion or exclusion criteria. Once approved, the

researchers will proceed to collect past research studies.

Synthesis of Studies Reviewed

Table 1 and Figure 3 presents the selection of studies. Among the following studies identified in the flowchart, 3 of them were qualified in the inclusion. Among the studies included were 3 RCTs (Tamaki et al., 2018; Reinhardt, Mullins, De Blieck, & Schultz, 2011; Padilha et al., 2019). These 3 studies concerned undergraduate nursing students. All of these studies measured the learners' performance outcome. Two of the studies assessed the learners' knowledge, skill performance and self-confidence (Tamaki et al., 2018; Reinhardt, Mullins, De Blieck, & Schultz, 2010) and 1 study assessed the clinical reasoning, self-efficacy and satisfaction of the learners (Padilha et al., 2019).

Results

Table 1: Synthesis Table

Study Citation

The effectiveness of end-of-life care simulation in undergraduate nursing education: A randomized controlled trial

Purpose

The three studies have similar objectives. The objective of this particular study was to evaluate the effectiveness of end-of-life care simulations with standardized patients in improving the knowledge, skill performance and self-confidence of undergraduate nursing students.

Population

A total of 94 students in a university baccalaureate nursing program.

Study Citation Country	Tamaki, Tomoko & Inumaru, Anri & Yokoi, Yumie & Fujii, Makoto & Tomita, Mayu & Inoue, Yuta & Kido, Michiko &Ohno, Yuko & Tsujikawa, Mayumi. (2019). The effectiveness of end-of-life care simulation in undergraduate nursing education: A randomized controlled trial. Nurse Education Today. 76. 10.1016/j.nedt.2019.01.005. Japan
Purpose Objective	The aim of this study was to evaluate the effectiveness of end-of-life care simulations with standardized patients in improving the knowledge, skill performance and self-confidence of undergraduate nursing students.
Design	RCT
Subjects Inclusion Exclusion Criteria	Thirty-eight students in the third year of the Bachelor's degree in nursing (simulation group = 20, control group = 18).
Methods; Design Tool	This randomized controlled trial evaluated the efficacy of an EOL care simulation program for undergraduate nursing students using pre and post-tests. Randomization was conducted by three researchers. Students interested in participating in this study were assigned to a simulation or control group using the permuted block method of randomization for a block size of two. The group allocations were not revealed to the participants to prevent bias. The control group followed the usual nursing curriculum (one class on palliative care and four classes involving case study discussion of patients at the EOL stage). The simulation group completed the EOL care simulation as an additional course. This study conformed with the CONSORT guidelines (Schulz et al., 2010). After randomization to a simulation or control group, participants in the simulation group participated in an end-of-life care simulation with standardized patients. The primary outcome of a change in the knowledge score was assessed using a knowledge questionnaire, skill performance by completing Objective Structured Clinical Evaluations, and self-confidence related to end-of-life care by self-reported questionnaires.
Findings	The simulation group improved significantly in knowledge, skill performance in physical assessment and psychological care, and self-confidence related to end-of-life care. The results of the two-way analysis of variance showed a significant interaction between groups and time ($p = 0.000$). Analysis of the simple main effect showed a significant difference ($p = 0.000$) between groups after the end-of-life care simulation and a significant difference ($p = 0.000$) over time in the simulation group. There were large effects on knowledge improvement ($\eta^2 = 0.372$), physical assessment ($\eta^2 = 0.619$), psychological care skill performance ($\eta^2 = 0.588$), and self-confidence in both physical assessment ($\eta^2 = 0.410$) and psychological care ($\eta^2 = 0.722$).
Level of Evidence	Level 1b
Strenghts	Homogeneity of respondents: No significant differences between the simulation and control groups in baseline statistics such as age, sex, and prior exposure to caring for patients at the EOL

	or taking opioid analgesics.
Funding Agency	No funding was provided for this work.
Variables	Independent: Simulation-based learning (SBL) Dependent: teaching effectiveness
Setting	Japanese University Nursing School
Size Sampling Technique	Thirty-eight students in the third year of the Bachelor's degree in nursing Random sampling
Quality Tool Score	PEDro Scale – 8/10. The 2-item (6 & 7) regarding blinding were not mentioned in the study.
Limitations	This study had several limitations. The participants were recruited from just one university. Including other universities with different student populations would help to generalize the results. Second, all participants chose to register for this program, suggesting that they were highly motivated or interested in EOL care. Caution should therefore be exercised when generalizing the results to other nursing students. Using a self-reported instrument to measure self-confidence may also have affected the results. A previous study indicated that young, inexperienced nurses were over-confident about their clinical judgment (Miragilia and Asselin, 2015). A future study is needed to evaluate self-confidence more objectively. And the reliability and validity of the self-confidence measurement tool had not been established. Establishing its reliability and validity in the further study would be helpful. The use of a similar knowledge test and the OSCE to collect pre-test and post-test data could have created testing effects that would threaten internal validity of the pre–post comparison part of this study. However, students were not given any information about what was scored in the OSCE, and both the simulation group and the control group were tested in the same way, so it should be possible to compare the two groups. Additionally, the Hawthorne effect (that having faculty members observe the performance of students may influence behavior) may also have affected the results. Finally, as previously noted, the outcomes were measured 1 week after completion of the EOL care simulation program because of time limitations. It is hoped that using the simulation contributes to the significant changes, but longer and repeated follow-ups might have resulted in different findings, and future studies may wish to consider this option. However, the long-term effects of nursing education have seldom been evaluated, which is a challenge for future nursing education across all areas.

Table 2: Synthesis Table

Study Citation

IV Insertion Simulation: Confidence, Skill, and Performance. Clinical *Simulation* in Nursing.

Purpose

The three have similar objectives. The objective of this particular study is to determine whether instruction supported by high-fidelity computer-assisted simulation technology enables a student to access veins more confidently and efficaciously than does the use of current latex arm task-trainer technology.

Population

A total of 94 students in a university baccalaureate nursing program.

Study Citation Country	Reinhardt, A., Mullins, I., Blieck, C., & Schultz, P. (2011, March 09). IV Insertion Simulation: Confidence, skill, and performance. Clinical Simulation in Nursing. 8(5), e157-e1a7.doi:10.1016/ j.ecns.2010.09.001. United States of America
Purpose Objective	To determine whether instruction supported by high-fidelity computer-assisted simulation technology enables a student to access veins more confidently and efficaciously than does the use of current latex arm task-trainer technology.
Design	RCT

Subjects Inclusion Exclusion Criteria	94 students in a university baccalaureate nursing program. Inclusion - The students were enrolled in their second semester of their junior year, in which one of the skills taught prior to their clinical rotation was IV insertion. Exclusion - 8 students who had previous IV insertion experience or training with either the latex arm task trainer or the high-fidelity computer-assisted IV insertion device and were excluded from the study.
Methods; Design Tool	Our experimental randomized controlled design recruited 94 students in a university baccalaureate nursing program. The students were enrolled in their second semester of their junior year, in which one of the skills taught prior to their clinical rotation was IV insertion. Approval from the university institutional review board was obtained prior to initiating the study. All participants voluntarily consented to participate in the study and signed an informed consent that provided a description of risks and benefits of the study. All students were assured that participation was voluntary and that they could cancel their participation at any time. The evaluations of performance were not used as grading criteria in their course of study. A total of 102 students were in the initial sample, but 8 students had previous IV insertion experience or training with either the latex arm task trainer or the high-fidelity computer-assisted IV insertion device and were excluded from the study. Students not included in the study were given the same instruction with the latex arm task trainer and were able to use the high-fidelity computer-assisted device as they desired.
Findings	The skills assessment scores nor the confidence level scores varied significantly (p = .8 on both measures). There was no statistically significant relationship between the skills score and the confidence level score *(r*=.165; *p*=.18). By univariate analyses, the skill score did not differ by the simulation method used (p = .7). Similarly, no difference was seen for confidence score and simulation method, and sequencing of instruction method did not affect either score. Last, there was no correlation between high-fidelity computer-assisted simulation instruction and clinical practice success rate in either skill score or confidence score.
Level of Evidence	Level 1b
Strengths	The student participants randomly formed three groups by drawing a numbered piece of paper from a basket. The groups were identified by the simulation techniques used and the sequence of device practice.
Funding Agency	No funding was provided for this work.
Variables	Independent: IV insertion simulation Dependent: Confidence, skill and performance
Setting	School Second year students University baccalaureate nursing program New Mexico State University
Size Sampling Technique	Total Enumeration: (94 students in a university baccalaureate nursing program. The students were enrolled in their second semester of their junior year, in which one of the skills taught prior to their clinical rotation was IV insertion. Technique - The participants were voluntary
Quality Tool Score	PEDro Scale - 6/10 The 3-items (5, 6, 7) regarding blinding was not mentioned in the study and the number 9 item regarding data for at least one key outcome was analyzed by “intention to treat” was not mentioned in the study.
Limitations	No studies were found to extrapolate an effectsize between variables, an analysis of power was assumed based on a medium effect size. However, the effect size of the study resulted in a gross overestimation of effect. In retrospective, a much larger sample would have been needed to achieve a reasonable power. Because of the random access of IV insertion experiences in the clinical setting, students were encouraged to find IV insertion opportunities with their instructions. Even though the students were eager to practice the skill, not all had an opportunity during their clinical rotation.

Table 3: Synthesis Table

Study Citation

Clinical Virtual Simulation in Nursing Education

Purpose

The three studies have similar objectives. The objective of this particular study is to evaluate the effect of clinical virtual simulation with regard to knowledge retention, clinical reasoning, self-efficacy, and satisfaction with the learning experience among nursing students.

Population

A total of 42 Portuguese nursing students.

Study Citation Country	Padilha, Miguel & Machado, Paulo & Ribeiro, Ana & Ramos, José & Costa, Patrício. (2019). Original Paper Clinical Virtual Simulation in Nursing Education: Randomized Controlled Trial. Portugal
Purpose Objective	To evaluate the effect of clinical virtual simulation with regard to knowledge retention, clinical reasoning, self-efficacy, and satisfaction with the learning experience among nursing students.
Design	RCT
Subjects Inclusion Exclusion Criteria	The participants were volunteer graduation students in the second year at the Nursing School of Porto in Portugal, enrolled in the course "Corporal Body Responses 1" (respiratory, cardiac, and urinary systems).
Methods; Design Tool	A randomized controlled trial and a prospective and analytical study was conducted between March and May 2017 with a pretest and 2 posttests.
Findings	This paper indicates that clinical virtual simulation improves knowledge retention and initial clinical reasoning over time (2 months) and improves student satisfaction with learning, without influencing the perception of general efficiency. Clinical virtual simulation enabled a 20.4% improvement in students' knowledge retention and clinical reasoning in the context of the study. This study showed that clinical virtual simulation is a pedagogical strategy that, combined with other strategies such as briefing, simulation, and debriefing, improves both initial knowledge retention and knowledge retention over time. Clinical virtual simulation also raises the level of satisfaction with the learning experience among nursing students.
Level of Evidence	Level 1b
Strenghts	A randomized controlled trial with a pretest and 2 posttests was carried out with Portuguese nursing students (N=42). The participants, split into 2 groups, had a lesson with the same objectives and timing. The experimental group (n=21) used a case-based learning approach, with clinical virtual simulator as a resource, whereas the control group (n=21) used the same case-based learning approach, with recourse to a low-fidelity simulator and a realistic environment. The classes were conducted by the usual course lecturers. We assessed knowledge and clinical reasoning before the intervention, after the intervention, and 2 months later, with a true or false and multiple-choice knowledge test. The students' levels of learning satisfaction and self-efficacy were assessed with a Likert scale after the intervention.
Funding Agency	No funding agency was provided for this work.
Variables	Independent: Clinical virtual simulation Dependent: Nursing education
Setting	School 2nd year students Nursing school enrolled in the course "Corporal Body Responses 1" (respiratory, cardiac, and urinary systems) AY 2016-2017 - Nursing School of Porto in Portugal
Size Sampling Technique	The participants were volunteer graduation students in the 2nd year at the Nursing School of Porto in Portugal, enrolled in the course "Corporal Body Responses 1" (respiratory, cardiac, and urinary systems). 1-tailed unpaired, T-Test
Quality Tool Score	PEDro Scale – 7/10

	The 3-item (5, 6 & 7) regarding blinding was not mentioned in the study.
Limitations	The researchers identified the fact that it was only carried out in a single context, with second-year nursing students, and on a single course with content related only to the respiratory process. They also judge that the follow-up time was too short to fully evaluate the knowledge retention over time.

Action Plan

An action plan was made to introduce the result of this research and the importance of evidence-based nursing practice. This is recommended to the PHINMA-University of Pangasinan to have clinical simulation-based learning like the use of simulation mannequins in performing return demonstrations or for the laboratory lectures of the student nurses. This step will reinforce the learning and skills of the student nurses.

With these results and findings, simulation based learning is highly recommended to be utilized. A pilot test is proposed; thus, this will discuss the proposed setting, objective, projected activities and timeline, key persons and their expected responsibilities, training, evaluation plans and decision framework.

Proposed Setting

The PHINMA-University of Pangasinan (UPang) is an institution that offers education from secondary, tertiary and post-graduate program. It is located in Dagupan City and is one of the top performing universities in Philippines as evidenced by the myriad of topnotchers from different departments honed by UPang.

UPang has different college departments. Included is the College of Health Sciences (CHS) which consists of the following Departments: Nursing, Midwifery, Pharmacology, Medical Technology and Physical Therapy.

In relation to the mission of the institution which is "Making lives better through education," the institution never ceases to improve education by implementing educational strategies and approach tailored to enhance the learning experience of the students.

Currently, the nursing students of UPang are still under the traditional learning, which is a system that takes place in a classroom setting. There is a trainer who moderates and regulates the flow of information and knowledge. While, traditional learning has been in practice for many years now, the researchers hope to promulgate Simulation–based learning (SBL) to match the fast changing and incessant technological advancements and demands of skill acquisition in nursing.

SBL was known to enhance learning outcome and sharpen clinical skills; hence, SBL is being proposed to be pilot tested in the UPang. This method of teaching would be an opportunity to refine one of the fundamental concepts and practices in nursing which is the clinical skills.

The action plan will be based on Ace Star Model. After discovery research and evidence summary, the following actions follow:

Objectives

Overall goal: To introduce SBL as a learning approach in nursing to enhance and refine clinical skills of nursing students and subsequent implementation of SBL in the classroom setting once proven effective by the PHINMA-University of Pangasinan – CHS.

Part I Description: This section will cover the pilot testing of SBL

Present the results of the research to the panel

Describe criteria that determine recommendation implementation

Describe the components of an action plan and propose a pilot study regarding the effectiveness and advantage of SBL

Identify steps in implementing change

Objectives	Actions	Required Resources	Target Completion Date
Present the findings:			
Present the:	1. Review baseline data: current practices of the University and best practices of leading University	1. Time for evidence review on current methods, policies, protocols, and standard perating procedure	Month 1 and 2

Current educational practices and attitudes of the institution **EBP result** **2. Gain the support of the administration**	2. Assess the current practices and attitudes 3. Assess pre-implementation attitudes, organizational readiness and knowledge on SBL 4. Analyze data and gaps 5. Communicate gap analysis to the administration	2. Time for discussion of SBL with the members of the administration. 3. Time to analyze data 4. Time allocation for gap analysis. 5. Time to discuss gap analysis results the members of the administration	
Link the gap to the proposed plan **1. Ensue a plan for pilot testing of SBL** **2. Conduct Cost Analysis and develop a Budget Plan**	1. Team up with experts from the university who will also serve as SBL instructors and consultants 2. Develop a SBL educational program for nursing students 3. Review the SBL plan with the administration and different stakeholders 4. Identify resources needed 5. Secure funds from the budget department	1. Time for identifying and selecting SBL instructors and consultants 2. Time for developing a SBL educational program 3. Time for conducting cost analysis and preparing budget plan 4. Time for communicating and modifying the plan	Month 3 and 4
Design the pilot testing **1. Create a SBL program committee as needed** **2. Present the committee to the different stakeholders** **3. Liaise the overall program plan with the different stakeholders** **4. Establish mutual goals and compare them with the organization's strategic goals**	1. Identifying members and assigning them the roles, responsibilities and accountabilities 2. Review the literature and establish inclusion criteria for possible members of the program committee 3. Identification of roles and responsibilities of committee based from the trials and other institutions having SBL program 4. Allow the members	1. Time to review literature 2. Time for standardization from other organizations 3. Time for the appointed committee to get used to the new roles 4. Time to communicate overall plan, address resistance, and prepare the different stakeholders for the program implementation 5. Time to establish	Month 5-6

	of the committee to get used with the new roles 5. Meet the Stakeholders 6. Outcome measures and program success indicators to ensure compliance with the institution's strategic goals	mutual goals	
Implement the pilot testing of SBL educational program			
1. Implement SBL pilot testing	1. Prepare the needed materials and resources 2. Monitor how resources are utilized and supervise clinical performances throughout the program 3. Document all results. Have a separate outcome discussion with mentors and students	1. Time to prepare needed materials and resources 2. Time for monitoring utilization of resources and supervision of clinical performances 3. Time and materials and resources for the pilot testing	Month 7-10
Evaluation			
1. Evaluate outcomes of the pilot testing of SBL program implementation	1. Outcome identification measures related to SBL 2. Compare evaluation outcomes with the program goals	1. Time to review literature and results and findings of the pilot study 2. Time for outcome evaluation of the program 3. Time to disseminate outcomes of pilot testing 4. Time to communicate evaluation results and compare them against the program goals	Month 11-12
Decision			
A sound judgment will be formulated and recommended according to the result of the pilot testing	Use the decision framework: 1. Depending on the results and findings of the pilot study: IF: Effective: a. Strengthen the SBL committee	1. Sustainable, Attainable and Realistic budget plan for SBL 2. Time for SBL	Month 12-13

	b. Come up with policies regarding the research study and SBL c. Provide ongoing educational opportunities that will be helpful to SBL d. Continuous monitoring and evaluation to ensure preservation of SBL in teaching e. Document all plans, actions, processes, outcomes and lessons learned Ineffective: a. Carefully review inconsistencies in the pilot testing's result and findings - If there were protocols not observed - What clinical skills were taught - What kind of materials were used - Who were the participants and implementers involved in the study IF there is NO evidence proving that there were inconsistencies and lapses during the pilot testing, then, SBL cannot be generally concluded effective in enhancing learning outcomes and clinical skills.

Table 4: Projected Action Plan and Timeline in Pilot Testing SBL in PHINMA-University of Pangasinan (CHS)

Table 5: Identification of Resources

Personnel Resources	
People who will be involved in the implementation:	Role:
COO, PHINMA-University of Pangasinan **Dean, College of Health Sciences**	Renders program approval and budget support

Coordinator, College of Nursing Program Head, College of Nursing	Renders administrative support Oversees the planning, implementation, supervision and evaluation of the program
Team Trainers	Train the instructors to be prepared in SBL Prepares sample SBL clinical skills teaching techniques
Clinical Instructors	Participate in the program implementation and evaluation
Admin/HR/Finance	Ensures that instructional & supplementary materials and resources needed for the program implementation are available, sufficient and ready for testing
Student Nurses	Participate in the actual skill performance using the SBL program
Facilities/Equipment Needed	Simulation Laboratory Simulation mannequins Clinical supplies LCD projector Speaker Laptop

Evidence of Success

Enhanced development of nursing skills, knowledge retention, self-confidence, self-efficacy, and clinical reasoning skill. Improvement of patient care through utilization of evidence-based practices (EBP).

Proposed Pilot Testing Program

A. Area Involved

Simulation lab is the closest student nurses will get to working on real patients. This is where they can put the equipment they have learned in skills lab into practice, using a simple task trainer, a high fidelity medical mannequin, a simulation patient or a classmate (depending on the severity of the activity). Tasks may include administering injections, checking vital signs, monitoring blood pressure, and more.

B. Mentors

PHINMA University of Pangasinan, College of Health Science is composed of dean, assistant dean, faculty members and staff. This team is equipped with knowledge regarding simulation lab, hospital protocols and policies. The simulators in simulation lab can be programmed to respond to errors in judgment, medication administration, or skill performance to allow students to witness the consequences of such an error to a real patient. The department will save more time with immediate and long lasting efficacy; also it is cost-effective and is very economical to the institution. Also, this can allow students to learn skills; develop clinical reasoning abilities; and to become competent in caring for patients/families in a safe environment that will help the institution to achieve their goal in promoting the students' performance and knowledge to top the board exam.

C. Learners

The learners are nursing students of UPang. These learners will be included in the pilot testing because all student nurses from Level I to Level IV are exposed to return demonstrations, laboratories and clinical duties. Although there are students who excel in clinical performances, their knowledge retention, self-efficacy, clinical reasoning, self-confidence and satisfaction may not be enough. Exposure to realistic clinical environment and events will be of great aid to enhance their clinical skills.

In implementing the proposed pilot test, the goal of this study must be considered. To achieve this, it is more important to know the faculty members. Faculty members have different teaching styles, with this; it may hinder the achievement of the goals set. Hence, it is important that we must ensure that the administration understand the goal that will help in proper and accurate evaluation of pilot testing.

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Conflicts of Interest

The authors declare there are no significant competing financial, professional, or personal interests that might have influenced the performance or presentation of the work described in this manuscript.

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