

## THE EFFECT OF PROBLEM- BASED LEARNING STRATEGY ON NURSING STUDENT'S PROBLEM- SOLVING ABILITIES

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### ABSTRACT

**Background:** Problem-Based Learning (PBL) empowers students to be more accountable in their learning process. **Aim of the study:** to assess the effect of PBL strategies on nursing student's problem solving (PS) abilities at the technical institute of nursing. **Subjects and methods:** A one group pre-test - post-test quasi-experimental design was carried out at Al-zahra Technical Institute of Nursing affiliated to Al Azhar University. The sample included all 83 nursing students enrolled in the fifth year during the academic year (2017/2018). Two tools were used in data collection, namely, a self-administered questionnaire to assess basic and applied knowledge of PBL and PS, also skills of problem-solving and an observation checklist for group performance in PBL. The researcher designed a PBL program and implemented it in 12 small group sessions. The effectiveness of the intervention was measured by an immediate post-test, and a 3-month follow-up assessment. **Results:** Students' age ranged between 19 and 20 years. Satisfactory total knowledge increased from 2.4% before the intervention to 100.0% after, and 94.0% at follow-up ( $p < 0.001$ ). None of the students had an adequate practice of PS before the intervention compared with 100.0% at the post- and follow-up phases ( $p < 0.001$ ). None of the students was able of PS by tutor evaluation before the intervention, compared with 49.4% at the post- and 100% at follow-up ( $p < 0.001$ ). Group performance scores had significant positive correlations with the knowledge and practice scores. In multivariate analysis, the study intervention was the main positive predictor of the knowledge, practice, and tutor evaluation scores. **Conclusion:** Implementing a PBL strategy for nursing students is effective in improving their PS abilities as well as their performance in BPL as evidenced by tutor evaluation. Hence, nurse educators must increasingly introduce this approach for their students. **Recommendations:** The study recommends more use of the PS education approach and PBL strategy in all nursing curricula; course planners need training in developing educational problems and identify the barriers to PBL implementation.

**KEYWORDS:** Problem-Based Learning, Strategy, Problem-Solving Abilities, Nursing Student