Table:

Data Extraction Form

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 1. Alexander, L., & Dearsley, A. (2013). Using standardized patients in an undergraduate mental health simulation: A pilot study. *International Journal of Mental Health*, 42 (2-3), 149-164. | Qualitative | Explore the impact of an integrated simulation approach on 2nd year undergraduate nursing students’ preparedness for a mental health clinical placement | 33 | Ten-minute interview with SP to assess confidence, communication, and assessment skill development. | NA | Students found simulation with SP positive, increased confidence, encouraged professionalism, and enhanced understanding of mental illness, felt it was realistic. |
| 2. Alfes, C.M. (2015). Standardized patient versus role-play strategies: A comparative study measuring patient-centered care and safety in psychiatric mental health nursing. *Nursing Education Perspectives*, 36 (6), 403-405. | Quantitative  Two group, randomized crossover | To determine if the sequence of role play and SP experience, impact students’ knowledge, attitude, or self-efficacy in psych mental health experience. | 77 | Ten-minute SP encounter to measure self efficacy (SE), knowledge, and attitude. | NA | All MN and BSN students experienced increase in SE over time. The order of experience does not impact knowledge, attitude or SE. Save SP for end of semester and high stakes testing. |
| 3. Bagnasco, A., Tolotti, A., Pagnucci, N., Torre, G., Timmins, F., Aleo, G., & Sasso, L. (2016). How to maintain equity and objectivity in assessing the communication skills in a large group of student nurses during a long examination session, using the objective structured clinical examination (OSCE). *Nurse Education Today,* 38, 54-60. | Quantitative  One Group, posttest | To evaluate equity and objectiveness of OSCE in assessing clinical learning of communication skills | 421 | Video-recorded interactions and role play with real-life mock patient focused on mobility, communication, hygiene, and elimination. | NA. | The method ensured assessment equity and objectivity for the certification of clinical learning. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 4. Bays, A.M., Engelberg, R.A., Back, A.L., Ford, D.W., Downey, L., Shannon, S E., …Curtis, J.R. (2014). Interprofessional communication skills training for serious illness: Evaluation of a small-group, simulated patient intervention. *Journal of Palliative Medicine*, 17 (2), 159-166. | Quantitative  Randomized controlled trial | To investigate the effect of experiential communication skills workshop, Codetalk, and its effect on improving skills communicating bad news and expressing empathy. | 145 | Audiotape of SP training encounters to provide valid assessment of clinical skills. | Randomized to one of two scenarios. | Positive change in communication scores from pre to post in 8 of the 11 coded behaviors. |
| 5. Bornais, J.A., Raiger, J.E., & El-Masri, M.M. (2012). Evaluating undergraduate nursing students’ learning using standardized patients. *Journal of the American Association of Colleges of Nursing,* 28 (5), 291-296. | Quantitative    Randomized controlled trial | To examine the effectiveness of using SP in improving assessment skills among fist year nursing students when compared to traditional way. | 108 | One half of the sample received SP training, the other half traditional assessment training. | Control group received traditional Physical Assessment teaching. | The intervention group had a higher OSCE mean scores than the control group. Groups were not different in their theory scores. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 6. Ching-Lan Lin, E., Chen, Shiah-Lian, Chao, Shu-Yuan, & Che, Yueh-Chih. (2013). Using standardized patient with immediate feedback and group discussion to teach interpersonal and communication skills to advanced practice nursing students. *Nurse Education Today, 33,* 677-683. doi: 10.1016/j.nedt.2012.07.002 | Mixed  Quantitative-Randomized controlled trial | Examine the effectiveness of using SP and SP feedback and group discussion to interpersonal and communication skills (IPCS). | 26 | Two-hour instructional class on IPCS, followed by SP assessment in 15-minute interviews before and after the class. | No SP contact for control group | 1) No significant differences between groups for baseline IPCS scores.  All showed significant improvements on total IPCS scores and on *interviewing and collecting information and counseling and delivering information.* Interviewing and collecting information had significant difference between pre and post test scores for the experimental group. Significant difference in control group for pre and post scores for all dimensions except for interviewing and collecting information. Equal IPCS improvements did not support benefits of SP feedback and group discussion in the experimental group.  2) All had high SLS scores, difference was not significant. Qualitative feedback had some negative comments of frustration and anxiety with positive reports of valuable learning experience. |
| 7. Choi, Y.J.(2012). Exploring experiences in psychiatric nursing simulations using SP for undergraduate students. *Asian Nursing Research* 6 (3), 91-95. | Qualitative | To evaluate the value of SP experiences for psychiatric simulations. | 11 | SP scenario with schizophrenia and major depressive disorder. Participants interviewed 50–90 minutes, individually regarding experiences. | NA | Themes:  Learning to practice without fear.  Gaining confidence in clinical practicum. Embarrassed by gap between SPs and real patients. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 8. Corcoran, A.M., Lysaght, S., Lamarra, D., & Ersek, M. (2013). Pilot test of a three-station palliative care observed structured clinical examination for multidisciplinary trainees. *Journal of Nursing Education*, 52 (5), 294-298. | Mixed  Quantitative- One group posttest | Pilot test a three-station palliative care “OSCE for APN students and MD fellows. | 12 | Three hour OSCE session with three stations: discussing goals of care, breaking bad news, assessing delirium. | NA | Learners evaluated the exercise as appropriate and SPs were convincing and provided helpful feedback. |
| 9. Cowperthwait, A.L., Campagnola, N., Doll, E.J., Downs, R.G., Hott, N.E., Kelly, S.C.,…Buckley, J.M. (2015). Tracheostomy overlay system: An effective learning device using standardized patients. *Clinical Simulation in Nursing*, 11 (5), 253-258. | Quantitative  Randomized controlled trial | To improve education of health professions students while learning assessment and care of a patient with a tracheostomy. | 57 | All students first received a traditional skills practice session in the lab. | Randomly assigned to either control group using manikin, or experimental used SP with trach overlay. | Significantly more positive clinical interaction p<.05 and self-correction p<.05 with SPs. |
| 10. Dearmon, V., Graves, R.J., Hayden, S., Mulekar, M.S., Lawrence, S.M., Jones, L.,…Farmer, J. E. (2013). Effectiveness of simulation-based orientation of baccalaureate nursing students preparing for first clinical experience. *Journal of Nursing Education,* 52 (1), 29-38. | Mixed  Quantitative  One group, descriptive correlational | To evaluate the effectiveness of a two-day simulation based orientation for BSN preparing for first clinical experience. | 50 | Two clinical instructors, and one SP, included lecture, lab, and SP interactions with debriefing. | NA | Statistically significant increase in knowledge and confidence, decrease in anxiety following orientation. Positive attitude about SPs. Improved self-confidence and satisfaction. |
| 11. Defenbaugh, N., & Chikotas, N.E. (2016). The outcome of interprofessional education: Integrating communication studies into a standardized patient experience for advanced practice nursing students. *Nurse Education in Practice*, 16 (1), 176-181. | Qualitative | To evaluate the impact of SP experiences on the education of APNs to promote competency in communication and clinical decision making. | 29 | Students participated in SP experiences over two semesters. Thematic coding utilized and analyzed for themes. | NA | Having an expert in the field of communication studies increased awareness of communication skills and how to improve nurse-patient encounters in the clinical setting. Theoretical saturation reached at a sample size of 15. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 12. Doolen, J., Giddings,M., Johnson, M., Guizado de Nathan, G., & O Badia, L. (2014). An evaluation of mental health simulation with standardized patients. *International Journal of Nursing Education Scholarship*, 11 (1)1-8. | Mixed  Quantitative  One group,  descriptive | Does interviewing SPs trained to model psychiatric disorders promote student confidence, interviewing, and communication skills, while decreasing anxiety? | 94 | Pairs of BSN students had the opportunity to interact for 20 minutes with SPs with bipolor disorder, anxiety, and schizophrenia. | NA | Students found experience helpful, were able to practice in a safe educational environment before encountering these patients in clinical. |
| 13. Eid, A., Petty, M., Hutchins,L., & Thompson, R. (2016). “Breaking bad news”: Standardized patient intervention improves communication skills for hematology-oncology fellows and advanced practice nurses. *Journal of Cancer Educatio*n, 24 (2), 154-159. | Quantitative  One group, pre-posttest | To utilize SPs to improve the communication skills of hemocology oncology fellows and APNs in breaking bad news to cancer patients. | 15 | 15 min Communication skills intervention with SPs designed for fellows and APN specializing in cancer care followed by 45 minute interactive lecture. | NA | Average test score improved from 56.6 % in pre-intervention test to 68.8 %. Pre-intervention perception showed 33% expected the intervention to improve their communication, compared to 83% in the post intervention survey. |
| 14. Fink, M., Linnard-Palmer, L., Ganley, B., Catolico, O., & Phillips, W. (2014). Evaluating the use of standardized patients in teaching spiritual care at the end of life. *Clinical Simulation in Nursing*, 10 (11), 559-566. | Quantitative    Two groups, non-randomized  pre-posttest | To evaluate the knowledge and confidence gained from an end of life care simulation experience involving SPs representing 3 known religious groups. | 54 | SPs were trained to represent older woman dying of cancer from Catholics, Judaism, and Islam faiths in 3 interactions | Experimental group received 45-minute SP simulation. | Experimental group had higher scores for knowledge and confidence than control. Perception of knowledge and skill changed significantly for treatment group, more likely to perceive they had knowledge and skill to care for diverse faiths. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 15. Goh, Y.S., Selvarajan, S., Chng, M.L., Tan, C.S., & Yobas, P. (2016). Using standardized patients in enhancing undergraduate students’ learning experience in mental health nursing. *Nursing Education Today,* 45, 167-172. | Mixed  Quantitative- One group, pre-posttest | To explore the learning experience of undergraduate nursing students using SPs practicing mental status exams and suicide risk assessment in mental health. | 95 | Measured self- confidence and satisfaction following a SP session. | NA | The use of SPs had significant increase in student satisfaction and confidence before clinical experience. Significant difference on satisfaction and self-confidence for those with mental illness experiences. |
| 16. Guvenc, G., Unver, V., Basak, T., Yuksel, C., Ayhan, H., Kok, G., …Iyigun, E. (2016). Turkish senior nursing student’s communication experience with English-speaking patients. *Journal of Nursing Education*, 55 (2), 73-81. | Mixed  Quantitative-one group, posttest. | To evaluate nursing students communication experience with an English speaking SP in the context of the “Rational Administration of Medicines Course.” | 104 | Course on rational use of meds with SPs used who only spoke English to improve their communication experience. | NA | SP practice emphasized the significance of cultural differences, knowing and using a foreign language, communication, and of patient safety. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 17. Ignacio, J., Dolmans, D., Scherpbier, A., Rethans, J.J., Chan, S., & Liaw, S.Y. (2015) Comparison of standardized patients with high-fidelity simulators for managing stress and improving performance in clinical deterioration: A mixed methods study*. Nurse Education Today,* 35(12), 1161-1168. | Mixed  Quantitative:Randomized Control Trial | To determine the presence of increased stress with the SP modality compared to the use of SP with use of high fidelity simulations during deteriorating patient simulations. | 57 | SP group and HFS group performance was assessed and compared using a deteriorating patient scenario. | Experimental group used SPs, control used HFS. | Stress in simulation, awareness of patient interactions, and realism were themes. |
| 18. Jacobs, A.C., & van Jaarsveldt, D.E. (2016). The character rests heavily within me’: drama students as standardized patients in mental health nursing education. *Journal of Psychiatric and Mental Health Nursing*, 23 (3-4), 198-206 | Qualitative | To describe the experiences of 11 drama students engaged in mental health simulations for nursing students | 104 | Groups of nursing students participated in a briefing session facilitated by nurse educator, followed by debriefing and constructive feedback. | NA | Content analysis revealed that SPs negotiated 3 roles/themes during IPE: facilitator, drama student, and the person within. |
| 19. Jo, K.H., & An, G.J. (2013). Qualitative content analysis experiences with objective structured clinical examination among Korean nursing students. *Japan Journal of Nursing Science*, 11 (2), 79-86. | Qualitative | To explore the experiences of Korean nursing students with OSCE assessment regarding the 12 cranial nerves. | 64 | OSCE consisted of examinations in three different stations for 2 days. | NA | 178 statements and Collected materials classified into two themes and seven categories.  Awareness of inner capabilities: inner motivation, inner confidence, and creativity were mentioned |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 20. Kameg ,K.M., Szpak, J.L, Cline, T.W., & McDermott, D.S. (2014). Utilization of standardized patients to decrease nursing student anxiety. *Clinical Simulation in Nursing*, 10 (11), 567-573. | Quantitative  One Group,  pre-posttest | To assess if SPs can reduce student anxiety as measured by an anxiety visual analog scale and the State Trait Anxiety Inventory | 69 | 3-5 minute individual videotaped SP experience to practice communication skills to prep for their first mental health clinical experience. | NA | Statistically significant reduction in student anxiety after the interaction with the SP. |
| 21. Karadag, M., Caliskan, N., & Iseri, O. (2015). Effects of case studies and simulated patients on students’ nursing care plan. *International Journal of Nursing Knowledge, 27*92), 87-94. | Quantitative  Two group, randomized posttest | Determine the effects of simulated patients (SPs) and case studies (CS) in teaching students to plan their nursing care. | 70 | SP groups observed SP actor and instructor nurse care occurring.  CS groups were read the case study information.  Both groups followed with group study session for an hour discussing their nursing diagnoses and nursing interventions for the case. | NA | Significant difference in learning rate, SP > CS.  Difference between care and nursing intervention planning was sig different between the two groups.  Identification of nursing diagnoses and nursing interventions were statistically different, SP> CS. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 22. Kenny, G., Cargil, J., Hamilton, C., & Sales, R. (2014). Improving and validating children’s nurses communication skills with standardized patients in end of life care. *Journal of Child Health Care, 20*(2), 145-152. doi: 10.1177/1367493514555588 | Qualitative | If students at the end of their course were able to use communication skills acquired in their three years of training and adapt to specific palliative care context even if they had never worked that area. | 50  Four drama students self-selected to participate, experienced no recent family/friend deaths. | 3rd year nursing students participated in a simulation with SP end-of-life. Students were to speak and create rapport with the SPs. | NA | Four themes:  Anxiety and fear  Need for professional props,  Experience of it being real.  Feeling empowered. |
| 23. Kiersma, M. E., Plake, K. S., & Darbishire, P. L. (2011). Patient safety instruction in US health professions education. *American Journal of Pharmaceutical Education, 75*(8), 1-11. | Systematic Review | Describe patient safety instruction in health profession curriculum. | 23 articles | NA | NA | Recognizes lecture as most common teaching strategy, followed by simulation, including use of SPs. One described a self-directed curriculum. |
| 24. Kim, J., Park, J., & Sujin, S. (2016). Effectiveness of simulation-based nursing education depending on fidelity: A meta-analysis. *BMC Medical Education, 16*(152), 1-8. doi: 10.1186/s12909-016-0672-7 | Meta-analysis | Determine effect size of simulation-based education in nursing and compare effect size according to fidelity level: high fidelity; medium-fidelity; SPs; low-fidelity; and, hybrid. | 40 | NA | NA | HFS (0.86), MFS (1.03) and SPs (0.86) had highest effect size r/t level of fidelity. LFS (0.35) and hybrid (0.34). Effect size over 0.7 suggests simbased education was effective.  Reaction (satisfaction and learning attitudes) HFS had a larger effect size than LFS. Satisfaction levels high with SPs. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 25. Kim-Godwin, Y. S., Livsey, K. R., Ezzell, D., & Highsmith, C. (2013). Home visit simulation using a standardized patient. *Clinical Simulation in Nursing, 9,* e55-e61. | Mixed  Quantitative- Descriptive | Analyze student perceptions of a home health visit using SPs. | 76 | 30 home health visit with SP as patient in simulated home environment.  All students reconvened at the end of the day for a large debriefing with the SP, the SP provided personal feedback in the large group setting.  Ended with students completing an online survey (Educational Practice simulation scale, EPSS and Self-confidence in learning scale, SCL). | NA | Quantitative - Students strongly perceived sim as highly effective (EPSS).  Students were generally satisfied with the sim experience.  Students were generally confident in their ability during the sim.  All perceived sim to resemble real-life and the SP was realistic.  Qualitative- experience described as positive, realistic and meaningful. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 26. Koo, L., Layson-Wolf, C., Brandt, N., Hammersla, M., Idzik, S., Rocafort, P. T., Tran, D., Wilkerson, R. G., & Windemuth, B. (2014). Qualitative evaluation of a standardized patient clinical simulation for nurse practitioner and pharmacy students. *Nurse Education in Practice, 14,* 740-746. | Qualitative | Evaluate an interprofessional educational experience for nurse practitioner and pharmacy students using standardized patients and physicians role-playing physicians in clinical scenarios. | 46 | Rotated through two IPE scenarios. | NA | Improved understanding of roles, increased confidence, better sense of support. New found appreciation for each disciplines role. |
| 27. Kowitlawakul, Y., Chow, Y. L., Salam, Z. H., & Ignacio, J. (2015). Exploring the use of standardized patients for simulation-based learning in preparing advanced practice nurses. *Nurse Education Today, 35,*894-899. | Qualitative | Explore MSN students’ perceptions of SPs in sims and identify student learning needs for future advanced practice. | 7 | MSN- Acute care track, no previous experience with SPs. All had opportunity to participate in role of APN for one sim session.  Semi-structured group interview, 60”, included open-ended questions. Recorded discussions. | NA | Three main categories emerged relative to use of SPs:  Usefulness, clinical limitation and realism.  Usefulness- very helpful with history taking and communication skills.  Clinical limitation- SPs could not provide related signs and symptoms, made diagnosing challenging. SP had a real sign (murmur) but was not related to simulated scenario. Students hesitant to expose female SPs for physical.  Realism- Moulage and experience was realistic, absence of actual signs and symptoms had a negative effect on the realism. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 28. Lu, C., Hsu, S., & Shu, I. (2016). Elements of scenario-based learning on suicidal patient care using real-time video. *Nursing Informatics, 225,* 257-261. doi: 10.3233/978-1-61499-658-3-257 | Quantitative  One group, descriptive | Understanding students learning experiences when receiving scenario-based learning combined with real-time video utilizing SPs. | 10 | Two sections of eight minute videos were observed in the classroom settings. Suicidal client portrayed by SP. | NA | 1) Emotional involvement was portrayed via the video performance of their peers (physical boundary broken by observing in the classroom, versus the actual simulation) Students more engaged.  2) Concretizing of the teaching material- using real time video allowed the teachers to focus on events or specific concepts.  3) Substitute learning by watching their classmates practice nursing care. |
| 29. Luctkar-Flude, M., Wilson-Keates, B., & Larocque, M. (2012). Evaluating high-fidelity human simulators and standardized patients in an undergraduate nursing health assessment course. *Nurse Education Today, 32,* 448-452. | Quantitative  Three group, randomized,posttest. | Investigate learner satisfaction, self-efficacy and performance behaviors between HFS, SPs and community volunteers (CV) as patients. | 44 | CVs – students performed focused respiratory assessments, CVs were not given a script to follow.  SPs – five hours of training.  HFS followed identical script of SPs.  All participants had a lecture prior to scenario participation. | NA | Self-efficacy- participants were somewhat confident performing assessment skills with each modality. Self-efficacy did not differ significantly between the 3 groups.  Satisfaction- CV significantly more satisfied than HFS group. Sig differences with CV more satisfied with enhancement of interviewing skills, documentation, level of comfort and perceived realism. No sig differences found between the SP and other two groups.  Performance behaviors-  Even though students were less satisfied with HFS, overall performance scores were significantly higher with HFS than SP. HFS sig higher on providing health teaching than CV. No sig differences between SPs and CVS. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 30. Luebbert, R., & Popkess, A. (2015). The influence of teaching method on performance of suicide assessment in baccalaureate nursing students. *Journal of American Psychiatric Nurses Association, 21*(2), 126-133. doi: 10.1177/1078390315580096 | Quantitative  Two-group, posttest design | Developed and tested an innovative active learning strategy using simulated standardized patients to determine effectiveness in teaching suicide assessments skills. | 34 | After reading about suicide assessment the experimental group was exposed to a simulated standardized patient portraying a suicidal patient.  Paired groups of students participated in a 10-minute simulation with a standardized patient. Followed by 20 minutes debriefing. Immediately following the sim experiences and debriefings, the students completed the Knowledge assessment, SSSCL scale, the EPQ and the SDS. | Received recorded lecture on suicide assessment. Permitted to ask questions, completed the students completed the Knowledge assessment, SSSCL scale, the EPQ and the SDS. | Intervention group had significantly higher scores on the Knowledge assessment, SSSCL scale, the EPQ than the control group. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 31. MacDonnell, C. P., Rege, S. V., Misto, K., Dollase, R., & George, P. (2012). An introductory inter-professional exercise for healthcare students. *American Journal of Pharmaceutical Education, 76*(8), 1-6. | Quantitative  One group,  pre-posttest | Evaluate healthcare students perceptions of an interprofessional exercise and team dynamics. | 232 | Interprofessional student workshop with focus on teamwork and collaboration. Worked as teams to care for three different cases: COPD, Asthma and Pneumonia SP. | NA | Pre/Post workshop survey= significant change related to students perceptions of their ability to describe the nature of the education being provided in the other disciplines. Also revealed improvement in level of comfort being a part of the team. Post workshop all significant (p<0.001).  SP survey= 77% SA understanding of their role; 85% worked cohesively; 75% satisfied with team member level of agreement; 52% SA patient would benefit from IP teamwork; 74% SA positive perception of teamwork and collaboration.  SP & faculty evaluation= 75% of students received a rating of good, excellent, or outstanding. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 32. MacDonnell, C., George, P., Nimmagadda, J., Brown, S., & Gremel, K. (2016). A team-based practicum bringing together students across educational institutions and health professions. *American Journal of Pharmaceutical Education, 80*(3), article 49. | Quantitative  One group,  pre-posttest | Assess student perception of teamwork during an interprofessional exercise and evaluate if students can recognize domestic violence. | 443 | Each student completed a workshop that consisted of rotating through three activities:  SP activity was focus of study. Performed a patient hx, perform a focused exam; diagnose; perform a procedure. | NA | 68% of participants responded to post-activity survey.  Gained new insight into how to assess domestic violence through their interaction as a team? 60% medical; 70% or greater pharmacy, physical therapy, & nursing agreed or strongly agreed, 27% social work agreed or strongly agreed.  Gained greater knowledge from others on the resources available for domestic violence: Medical, 48%; Pharmacy, 64%; PT 69%; Nursing 70% agreed/strongly agreed. |
| 33. McNett, S. (2012). Teaching nursing psychomotor skills in a fundamentals laboratory: A literature review. *Nursing Education Perspectives, 33*(5), 328-333. | Literature review | Determine most effective methods of teaching psychomotor skills. | 13 studies | NA | NA | SP studies/groups outperformed on mouth care, back care, position change, in-and-out catheterization and glycerin enema skills (than traditional lecture and demonstration). |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 34. McWilliam, P. L., & Botwinski, C. A. (2012). Identifying strengths and weaknesses in the utilization of objective structured clinical examination (OSCE) in a nursing program. *Nursing Education Perspectives, 33*(1), 35-39. | Qualitative | Identify strengths and weaknesses in the utilization of OSCE | 60 | Faculty: why modified (from Arizona Clinical Interview Rating Scale) Nursing Interview Interaction Scale (NIIS) 10 item, three point Likert scale was used and if validated. Also asked about SPs training.  SPs: what training was received, were they given specific feedback on assessing student performance, were they given specific information on providing student feedback; and, where they provided feedback regarding performance. | NA | Q1: Student evals were lost video recorders did not work or were left unattended. Recommend one individual to collect student evals and ensure all items are completed on the tools.  Q2: Utilized healthcare providers for SPs. Recommend that unintentional behaviors of HCPs can weaken validity and reliability of scenarios. Need SP training program with formal evaluation process.  Q3: Faculty relied on face validity and did not conduct psychometric testing. Recommend interrater reliability testing, also use of modified tool needs interrater reliability needs to be established prior to use. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 35. Miles, L. W., Mabey, L., Leggett, S., & Stansfield, K. (2014). Teaching communication and therapeutic relationship skills to baccalaureate nursing students. *Journal of Psychosocial Nursing, 52*(10), 34-41. | Qualitative | Evaluate the use of senior nursing students as SP’s for second semester nursing students participating in a communication simulation. | 76 | Senior students acted as SP, second semester nursing students participated to enhance communication skills. Video-recorded sessions with senior and faculty feedback. | NA | Use of senior students who have a passion for psychiatric nursing was beneficial and authors found they give good feedback to the students. |
| 36. Murdoch, N. L., Bottorff, J. L., & McCullough, D. (2013). Simulation education approaches to enhance collaborative healthcare: A best practices review. *International Journal of Nursing Education Scholarship, 10*(1), 307-321. | Systematic review | Identify best practices recommendation to enhance collaborative healthcare using interprofessional simulation education innovations. | 17 studies | NA | NA | Recommended simulation techniques: High-fidelity simulators; role play; and didactic lecture and audience response didactic lecture followed by role play with a standardized patient. |
| 37. Murray, D. J. (2014). Progress in simulation education: Developing an anesthesia curriculum. *Curr Opin Anesthesiol, 27,* 610-615. | Systematic Review | Provide an overview of many recent studies that expand the simulation curriculum for anesthesia education. | 8 studies | NA | NA | Review recognizes that SPs are utilized in simulation, but gives no details. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 38. Ndiwane, A., Koul, O., Theroux, R. (2014). Implementing standardized patients to teach cultural competency to graduate nursing students. *Clinical Simulation in Nursing, 10,* e87-e94. | Quantitative  One-group,  pre-posttest | Evaluate OSCE cultural diversity experience. | 29 | Cultural assessment was used pre and post OSCE cultural experience. After pre-test students experienced didactic presentations (Latino, African American) Each student experienced an OSCE with each SP patient and then completed a clinic note. Experiences were video-taped. | NA | OSCE experience was enjoyable.  Low scores on teaching methods to prepare for the experience.  Increased self-confidence.  Significant change in knowledge about the health care skills needed and health needs of culturally diverse clients. |
| 39. Nikendel, C., Huhn, D., Pittius, G., Trost, Y., Bugaj, T. J., Koechel, A., & Schultz, J-H. (2016). Students’ perceptions on an interprofessional ward round training: A qualitative pilot study. *GMS Journal for Medical Education, 33*(2), 1-15. | Qualitative | Analyze final year medical, nursing and physiotherapist students views on a simulation-based interprofessional ward round training. | 29 | Groups of 3 students (each discipline), rounded on cardio patient and DM patient. | NA | Ward rounding benefits; ward rounding difficulties. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 40. Oh, P., Jeon, K. D., Koh, M. S. (2015). The effects of simulation-based learning using standardized patients in nursing students: A meta-analysis. *Nurse Education Today, 35,* e6-e15. http://dx.org/10.1016/j.nedt.2015.01.019 | Meta-analysis | Evaluate the effect of simulation=based learning using SPs on cognitive, affective and psychomotor domain outcomes of learning in nursing students. | 18 | NA | NA | Simulation-based learning using SPs had beneficial effects on the cognitive, affective and psychomotor domains of learning. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 41. Palumbo, M. V., Sandoval, M., Hart, V., & Drill, C. (June, 2016). Teaching electronic health record communication skills. *CIN: Computers, Informatics, Nursing, 34*(6), 254- 258. | Quantitative  One group, descriptive | Describe and quantify communication skills of NP students during history taking with a SP when a computer is used. | 16 | Students participated in two encounters: formative practice session and evaluative session. | NA | Practice session:  Hx taking= 11.4”  3.5 minutes engaged with the computer.  Evaluation session:  12.4 “ hix taking  2.95’ engaged with computer.  Time spent engaged with a computer decreases with practice and education. |
| 42. Phillips, S. J., Lie, D., Encinas, J., Ahearn, C. S., & Tiso, S. (2011). Effective use of interpreters by family nurse practitioner students: Is didactic curriculum enough? *Journal of the American Academy of Nurse Practitioners, 23,* 233-238. doi: 10.1111/j.1745-7599.2011.00612.x | Quantitative  One group, pre-posttest | Assess curriculum regarding NP students improvement with use of interpreters. | 31 | Assessed 10 students with pre/post scores evaluated by SPs; remaining students were post data only. | NA | FNP students showed no improvement in working with interpreters by the time they completed the curriculum. |
| 43. Pilkenton, D., Collins, M. R., & Holley, S. (November, 2015). Teaching labor support: An interprofessional simulation. *Journal of Midwifery & Women’s Health, 60*(6), 699-705. | Qualitative | Design a simulation using SP to teach labor support | 36 | Utilize trained SPs (actors) for role of labor patient. Students worked in teams of 3 (2 midwife students and one nursing student). | NA | Positive outcomes/remarks from students, negative comments were relative to lack of preparation and uncomfortable with the role. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 44. Rutherford-Hemming, T. (2012). Learning in simulated environments: Effect on learning transfer and clinical skill acquisition in nurse practitioner students*. Journal of Nursing Education, 51*(7), 403-406. doi: 10.3928/01484834-20120427-04 | Mixed  Quantitative-  One group, pre-posttest | To examine whether NP students demonstrated an increase in clinical competency in the clinical practice setting, and investigate student responses regarding how the simulation experience affected their clinical competency | 14 | Simulation with standardized patients on history taking and physical examination skills | NA | Statistically significant (p=.01) growth overall in clinical comp from simulation lab to clinical practice. Statistically significant (p<.01) correlation between the overall comp scores of students in the simulation lab (Time 1) and the overall comp scores in the clinical setting (Time 2). Three themes: increased student confidence, feeling more prepared, and standardized patient feedback valuable |
| 45. Ryall, T., Judd, B. K., & Gordon, C. J. (2016). Simulation-based assessments in health professional education: A systematic review. *Journal of Multidisciplinary Healthcare, 9*, 69-82. | Systematic Review | To examine simulation as an assessment tool of technical skills across health professional education | 21 studies | NA | NA | Overall: Simulation was more robust when used as an assessment in combination with other assessment tools and when more than one simulation scenario was used. The effectiveness as a stand-alone assessment tool requires further research. |
| 46. Sarmasoglu, S., Dinc, L., & Elcin, M. (2016). Using standardized patients in nursing education: Effects on students’ psychomotor skill development. *Nurse Educator, 41*(2), E1-E15. doi: 10.1097/NNE.000000000000188 | Quantitative  Two group, randomized posttest only | To examine the impact of using SPs on skills relating to arterial blood pressure measurements and subcutaneious injection administration among beginning nursing students and 2) to highlight the evaluations of SPs regarding students’ interactions and comfort in performing these skills on real patients. | 87 | Lecture, practice in lab, measurement of arterial blood pressure and subcutaneous injections on SPs, (hybrid simulation), debriefing | Lecture, practice in lab, measurement of arterial blood pressure and subcutaneous injections on task trainers, no debriefing | There was a statistically significant difference in mean scores between control group and experimental group on arterial blood pressure (p<.001). There was no statistical difference in mean scores between groups for subcutaenous injections. SPs rated students higher on performance evaluations of arterial blood pressures than subcutaneous injections. Students were generally comfortable performing these skills on real patients. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 47. Schlegel, C., Bonvin, R., Rethans, J., & van der Vleuten, C. (2016). Standardized patients’ perspectives on workplace satisfaction and work-related relationships: A multicenter study. *Simulation in Healthcare, 11*(4), 278-285. | Qualitative | To investigate SPs’ current perspectives on workplace satisfaction, work-related relationships, and engagement | 15 | NA | NA | SPs feel motivated, engaged, and willing to invest effort in their task and do not mind demans increasing as long as the social environment in SP programs in supportive. The role of the SP trainer and the use of feedback are considered important. |
| 48. Schlegel, C., Woermann, U., Shaha, M., Rethans, J., & van der Vleuten, C., (2011). Effects of communication training on real practice performance: A role-play module versus a standardized patient module. *Journal of Nursing Education, 51*(1), 16-22. | Quantitative  Two group, randomizedposttest only | To compare the effectiveness of two communication skills training (CST) sessions as evaluated by students, patients, and supervising nurses. | 120 | CST training involving a simulated clinical encounter with a SP | Traditional CST training involving peer role-playing and mutual feedback | 1) No significant differences were found between control and intervention groups regarding students’ perception of self-efficacy before the practice rotation and 6 weeks into the clinical rotation (p=0.316 for knowledge, p=0.88 for practical ability).  2) There was no statistically significant difference between the student groups (p=0.70).  3) Compared with the control group, the item-level ratings of the students in the intervention group were significantly higher (p<0.0001). |
| 49. Schram, A. P., & Mudd, S. (2015). Implementing standardized patients within simulation in a nurse practitioner program. *Clinical Simulation in Nursing, 11*(4), 208-213. http://dx.doi.org/10.1016/j.ecns.2015.02.002. | Quantitative  One group, posttest only | To identify barrers and strengths to faciliate the use of SPs in a NP program | 13 | Ambulatory care simulation using a SP | NA | Students rated the overall effectiveness of the simulation debriefing experience as consistently effective with a mean of 6.71 (on 7 point scale). |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 50. Schwindt, R., & McNelis, A. (2015). Integrating simulation in a reflection-centered graduate psychiatric/mental health nursing curriculum. *Nursing Education Perspectives, 36*(5), 326-328. doi: 10.5480/15-1614 | Qualitative | To explore reflections of student learning following a simulation experience integrated into a psychiatric/  mental health nurse practitioner course. | 15 | Simulation with a 30 minute, video-taped encounter with an SP and a 45 minute debriefing session (one student observed, one student as provider) | NA | Three main themes emerged: imporatnce of feedback, insight gained, and improved confidence. |
| 51. Shin, H., Sok, S., Hyun, K. S., & Kim, M. J. (2015a). Competency and an active learning program in undergraduate nursing education, *Journal of Advanced Nursing, 71*(3), 591-598. doi: 10-1111/jan.12564 | Quantitative  Two group, descriptive, cross-sectional | 1) Assess the effect of an active learning program on nursing competency and 2) identify domains of nursing competency for improvements | 220 | Simulation and use of SPs in the classroom or laboratory environment | Lecture based classes and clinical nursing practicum | 1) The overall scores of nursing competency in the intervention group were signficantly higher than those in the control group (p<0.001).  2) Two subdomains were not signficant: professional attitude and self-confidence scores. |
| 52. Shin, H., Ma, H., Park, J., Ji, E. S., & Kim, D. H. (2015b). The effect of simulation courseware on critical thinking in undergraduate nursing studnets: Multi-site pre-post study. *Nurse Education Today, 35*, 537-542. | Quantitative  One group,  pre-posttest | To evaluate the effect of an integrated pediatric nursing simulation used in a pediatric nursing practicum on students’ critical thinking (CT) and to identify the effects of differing numbers of simulation exposures, or “dosing” levels on CT in a multi-site environment | 237 | Pediatric simulations with high fidelity simulators and standardized patients | NA | The gains in students’ CT scores vaired according to their number of exposures to the simulation courseware. With a single exposure, there were not statistically significant gains in CT, whereas three exposures to the courseward produced signficant gains in CT. In seven subcatergories of CT, three exposures to the simulation courseware produced CT gains in the prudence and intellectual eagerness subcategories, and the overall simulation experience produced CT gains in the prudence, systematically, health skepticism, and intellectual eagerness subcategories. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 53. Shin, H., Park, C. G., & Shim, K. (2015c). The Korean version of the Lasater Clinical Judgment Rubric: A validation study. *Nurse Education Today, 35*, 68-72. | Quantitative  One group, descriptive | To validate the Lasater Clinical Judgment Rubric (LCJR) when used in Korean nursing studnets in their simulation practice | 152 | Simulation session using high-fidelity simulators and standardized patients | NA | Item analysis of K-LCJR results showed a Cronbach’s alpha coefficient of between .897 and .909 and the overall internal consistency reliability coefficient was .910. |
| 54. Shin, H., & Kim, M. J. (2014). Evaluation of an integrated simulation courseware in a pediatric nursing practicum. *Journal of Nursing Education, 53*(10), 589-594. | Quantitative  One group, pretest-posttest | To examine the effect of integrated pediatric nursing simulation courseware on students’ critical thinking and clinical judgment | 95 | Two simple simulation scenarios and one comprehensive scenario on the first day of the first, second, and third weeks of practicum | NA | Total scores of critical thinking before and after simulation using the courseware were 94.44 + 15.34 and 100.71 + 8.51, respectively The critical thinking score significantly increased by 6.27 points (t=4.032, p<0.001). Most students either agreed or strongly agreed that they were satisfied with the simulation learning and generally satisfied with the overall experience of the courseware. |
| 55. Slater, L. Z., Bryant, K. D., & Ng, V. (2016). Nursing student perceptions of standardized patient use in health assessment. *Clinical Simulation in Nursing, 12*(9), 368-376. | Mixed  Quantitative-  Two groups, descriptive | To describe the use of standardized patients as an evaluation strategy for the health assessment (HA) final head-to-toe assessment | 117 | Head to toe assessment using a SP | Head to toe assessment using a peer | Students who used SPs indicated their assessment required more critical thinking and less memorization compared with those who used peers for their HA final head-to-toe assessment evaluation (p<.05). |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 56. Smeltzer, S. C., Mariani, B., Ross, J. G., de Mange, E. P., Meakim, C. H., Bruderie, E., & Nthenge, S. (2015). Persons with Disability: Their experiences as standardized patients in an undergraduate nursing program. *Nursing Education Perspectives, 36*(6), 398-400. doi: 10.5480/15-1592 | Qualitative | To examine experiences of standardized patients with disabilities (SPWD) in an undergarduate nursing program | 8 | NA | NA | Five themes were identified: 1) desire to improve care for others, 2) opportunity to be productive again, 3) joy in seeing students learn, 4) desire for more feedback on performance, and 5) importance of having SPWDs assess accessibility of the facility |
| 57. Solomon, P., & Salfi, J. (2011). Evaluation of an interprofessional education communication skills initiative. *Education Health (Abingdon), 24*(2), 616. | Mixed  Quantitative-  One group,  pre-posttest | To evaluate an interprofessional education communication skills initiative | 96 | Communication skills sessions (three hours) and simulation with standardized patient (SP) | NA | Statistically significant difference between the over score following the communication skills session (p=.034), but only one of the subscales, Perception Actual Cooperation, reached statistical significance (p=.009)  Students perceived they had learned about each others' scope of practice and built confidence in their communication skills. |
| 58. Terzioglu, F., Yucel, C., Koc, G., Simsek, S., Yasar, B. N., Sahan, F. U., …Yildirim, S. (2016). A new strategy in nursing education: From hybrid simulation to clinical practice. *Nurse Education Today, 39*, 104-108. | Quantitative  One group;  pre-posttest | To examine the effect of three instructional environments- the nursing skills laboratroy, standardized patient laboratory and clinical practice environment- on the development of students’ psychomotor and communication skills as well as their levels of anxiety and satisfaction | 59 | Nursing Skills Lab: videos  Standardized Patient Lab: practice sessions  Clinical Practice Environment: practice sessions | NA | The median scores for psychomotor skills [NSL=73.1;SPL=81.5;CPE=88.6] and communication skills  [NSL=64.9;SPL=71.6;CPE=79.0] were found to increase as the students went on practicing in a more complicated environment (p < 0.05). Similarly, it was determined that the students' anxiety levels decreased as they  were practicing incrementally [NSL=33.0;SPL=32.0;CPE=31.0]. As the instructional environments were getting  more similar to the reality, the students' satisfaction levels were found to become higher. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 59. Turrentine, F. E., Rose, K. M., Hanks, J. B., Lorntz, B., Owen, J. A., Brashers, V. L., & Ramsdale, E. E. (2016). Interprofessional training enhances collaboration between nursing and medical students: A pilot study. *Nurse Education Today, 40*, 33-38. doi: 10.1016/j.nedt.2016.01.024 | Mixed  Quantitative-One group, pre-posttest | To determine if interprofessional training enhances collaboration between nursing and medical students | 15 | Two two-hour sessions with nursing and medical student pairs completed an interprofessional practice session on three SPS. Students then completed a patient assessment in the clinic and provided recommendations for patient care. | NA | Posttest scores on the knowledge test were significantly higher than pretest scores (p<0.001). Nursing students post-test scores improved a mean of 22.0 points and medical students a mean of 11.7 points over pre-test scores.  Analysis of observational notes provided evidence of interprofessional education skills in the themes of shared  problemsolving, conflict resolution, recognition of patient needs, shared decision making, knowledge and development  of one's professional role, communication, transfer of interprofessional learning, and identification of  learning needs |
| 60. Tuzer, H., Leyla, D., & Elcin, M. (2016). The effects of using high-fidelity simulators and standardized patients on the thorax, lung, and cardiac examination skills of undergraduate nursing students. *Nurse Education Today, 45*, 120-125. doi: 10.1016/j.nedt.2016.07.002 | Mixed  Quantitative-RCT | To compare the effects of the use of a high-fidelity simulator nad standardized patients on the knowledge and skills of students conducting thorax-lungs and cardiac exams  2) To explore students views and learning experiences | 52- quantitative  8- qualitative | Assessment training using standardized patients | Assessment training using high-fidelity simulator | Students in the intervnetion group (SP) achieved significantly higher knowledge scores than those that worked with the high-fidelity simulator (p=0.024); however, there was no signficiant difference in skills scores between groups. The mean performance scores of students on real patients were signficnatly higher compared to post-simulation assessment scores (p<0.001). |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 61. Unver, V., Basak, T., Iyigun, E., Tastan, S., Demiralp, M., Yildiz, D.,…Hatipoglu, S. (2013). An evaluation of a course on the rational use of medication in nursing from the perspectives of the students. *Nurse Education Today, 33*, 1362-1368. | Quantitative  One group, pre-posttest | 1) To investigate the effects of using simulated patients as a teaching method on the performance of students in medication administration  2) To explore the students’ views about the simulated patients as a teaching method in relation to the skills acquired in administering medication | 85 | 5 simulations with SPs regarding the rational use of a medication | NA | The mean pre-test score on the evaluation form was 24.02+16.06, whereas the mean post-test score was 54.28+14.54. Therefore, there was a statistically significant difference between the mean pre- and post-test scores (p<0.01; t=14.35). |
| 62. Wamsley, M. Staves, J., Kroon, L., Topp, K., Hossaini, M., Newlin, B.,… O’Brien, B. (2012). The impact of an interprofessional standardized patient exercise on attitudes toward working in interprofessional teams. *Journal of Interprofessional Care, 26*, 18-35. doi:10.3109/13561820.2011.628425. | Quantitative  Two group, pre-posttest | Examine students’ attitudes toward inter-professional team based care, perceived achievement of ISPE objectives and student satisfaction | 253 | Inter-professional standardized patient exercise | Non-participation in the inter-professional standardized patient exercise | ISPE Participants  1) Significant increase pre-post test in team value for all professions (p<0.001) 2) For team efficiency: significant interaction (p=0.014) with notable differences in outcome for medical students. 3) For shared role: no significant difference pre-post test (NP students had significantly (p=0.001) more favorable attitudes than medical students)  Comparison  1) No difference in pretest 2) Team value: significant difference in scores due to participation (p<0.001) and across professions (p<0.001). 3) Team efficiency: significant interaction between participation and profession (p=0.003). 4) Shared role: significant difference among professions (p<0.001) with medical students having significantly less favorable attitudes than students in other professions (p<0.001). |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 63. Webster, D. (2014). Using standardized patients to teach therapeutic communication in psychiatric nursing. *Clinical Simulation in Nursing, 10*(2), e81-e86. http://dx.doi.org/10.1016/j.ecns.2013.08.005 | Quantitative  One group, pre-posttest | To examine the effectiveness of the use of SPs to teach therapeutic communication skills in psychiatric nursing | 89 | SP encounter of an individual with a mental health diagnosis at the beginning and end of the semester | NA | There were significant differences between pre-posttest scores in all 14 criteria except “approaching client with a nonthreatening body stance” and “introducing self”. |
| 64. Zheng, J., Jing, Y., Wang, S., Jin, R., & Gao, Y. (2014). Constructing the training curriculum of standardized patients for OSCE examination for undergraduate nursing students in Shanxi Medical University. *Open Journal of Nursing, 4*, 132-138. http://dx.doi.org/10.4236/ojn.2014.43017 | Quantitative  One group,  descriptive | To evaluate the comparatively of the training programs for the teach standardized patient (TSA) and the student standardized patient (SSP) | 30 | Questionnaire based on the current designed training program | NA | The degree and importance of the two training curricular were comparable. |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Citation** | **Design** | **Purpose** | **Sample Size** | **Intervention** | **Control** | **Outcome(s)** |
| 65. Zhu, Z., Yang, L., Lin, P., Lu, G., Xiao, N., Yang, S., & Sui, S. (2016). Assessing nursing students’ clinical  competencies using a problem-focused objective structured  clinical examination. *Western Journal of Nursing Research*, 1-12. doi: 10.1177/0193945916667727 | Quantitative  One group,  posttest only | To develop, implement, and evaluate an innovative modified Objective Structured Clinical Examination (OSCE) model and to compare students’ performance of different clinical skills as assessed by standardized patients and OCSE examiners. | 77 | Two case scenarios | NA | Standardized patients scored students higher than examiners in history taking (9.14+0.92 vs 8.42+0.85), response to emergency event (8.88+1.12 vs 7.62+1.54), executive medical orders (8.77+0.96 vs 8.25+1.43), technical operation (18.21+1.26 vs 16.91+1.35), nursing evaluation (4.53+0.28 vs 4.29+0.52), and health education stations (13.79+1.31 vs 11.93+2.25; p<.01). The results indicated that the difference between standardized patient and examiner scores for physical examination skills was nonsignificant (8.70+1.18 vs 8.80+1.27; p>.05). |