

**TITLE: USE OF SIMULATED PATIENTS TO DEVELOP COMMUNICATION SKILLS IN NURSING EDUCATION: AN INTEGRATIVE REVIEW**

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## Use of simulated patients to develop communication skills in nursing education: An integrative review

### Abstract

**Background:** Registered nurses are expected to communicate effectively with patients. To improve on this skill education programmes in both hospital and tertiary settings are increasingly turning to simulation modalities when training undergraduate and registered nurses. The roles simulated patients (SPs) assume can vary according to training purposes and approach.

**Aims:** The first aim is to analyse how SPs are used in nursing education to develop communication skills. The second aim is to evaluate the evidence that is available to support the efficacy of using SPs for training nurses in communication skills and finally to review the SP recruitment and training procedure.

**Design:** An Integrative review.

**Data Sources:** A search was conducted on CINAHL, Psych-info, PubMed, Google Scholar, Scopus, Ovid, Medline, and ProQuest databases. Keywords and inclusion/exclusion criteria were determined and applied to the search strategy.

**Review Methods:** The integrative review included Nineteen studies from 2006-2016. Critical Appraisal Skills Program (CASP) method of evaluation was utilised. Emergent themes were extracted with similar and divergent perspectives.

**Results:** Analysis identified seven clinical contexts for communication skills training (CST) and two SP roles from the eighteen studies. SPs were either directly involved in the teaching of communication (active role) or used in the evaluation of the effectiveness of a communication skills program (passive role). A majority of studies utilised faculty-designed measurement instruments.

**Conclusion:** The evidence presented in the 19 articles indicates that the use of SPs to teach nurse-patient communication skills targets more challenging clinical interactions. Engaging SPs in both CST program facilitation and course evaluation provides nurse educators with a strong foundation to develop further pedagogical and research capacity. Expanding the utilisation of SPs to augment nurses' communication skills and ability to engage with patients in a broader range of clinical contexts with increased methodological rigor is recommended.

**Keywords:** Simulated patient, standardized patient, communication skills, nursing education, simulation, undergraduate nursing students, registered nurses.

## Background

One of the primary goals of therapeutic communication in healthcare is to develop a rapport with patients and their families and to foster an environment of compassion, understanding, and empathy (Peplau, 1997). Therapeutic communication between patients and members of the healthcare team in community and hospital settings is, therefore, essential in ensuring clarity in the provision of care, to mitigate medical errors and enhance patient safety (Rosen & Pronovost, 2014). The World Health Organisation recognizes the need for patients to be included in health care decision making and planning (Rimal & Lapinski, 2009). With a global agenda of improving quality and safety in healthcare, nurse educators need to find engaging and impactful ways to integrate communication skills training into undergraduate and graduate nursing education (Mullan & Kothe, 2010).

Dealing with patients and families during difficult conversations can be challenging particularly about explaining complex treatments, working through mental health issues, and discussions about end of life care. Such conversations are often a source of anxiety and fear for many healthcare professions' students as well as practicing clinicians (Martin & Chanda, 2015; Nestel, et al., 2010; Eid, Petty, Hutchins & Thompson, 2009). Simulation provides an innovative approach to emphasise the critical role of communication skills and for students to develop a repertoire of effective techniques (Kelly et al., 2014). Simulation can be described as a teaching **strategy** to replicate real life experiences (Brown, 2015) and offers an alternative learning experience given some of the limitations of clinical rotations (Howley et al., 2008). Several studies attest to the reliability, validity and feasibility of the simulated patient (SP) approach for communication skills training (CST) in nursing education (Bolstad, et al., 2011; Ebbert & Connors, 2004; Vu & Barrows, 1994). A recent meta-analysis highlighted the efficacy of simulation training in nursing across diverse clinical domains (Shin, Park & Kim, 2015). The meta-analysis examined 20 studies and provided evidence that using SPs in education across different areas in nursing was a useful technique over traditional learning methods. The results presented evidence, with a medium to large effect sizes, to advocate for the use of SPs to improve learner outcomes (Shin, Park & Kim, 2015).

For students, rehearsing clinical conversations with peers offers a level of exposure to 'real life' situations (Schlegel et al., 2011). However, the interactions may not be authentic because individuals may 'hold back' in the type and level of responses. Role-plays with simulated patients (SPs) offer opportunities for students to immerse themselves in a more authentic experience within a protected and controlled environment (Bearman & Nestel, 2015). SPs are primarily *well* people trained to act as a patient in a clinical scenario (Bearman & Nestel, 2015). The terms simulated patient and standardized patient are often used interchangeably. From the 1960's SPs have been utilized for teaching and evaluating medical students in clinical assessment techniques (Barrows, 1993), More recently, SPs have been used to train clinicians to assess the effectiveness of communication training

programs (Trickey, et al., 2016) and to teach students' culturally sensitive communication skills (Swoboda & Bahreman, 2016). A variety of health professional schools are now using SPs for teaching and students feedback, with the use of SPs in nursing programs gaining increasing momentum. In this educational context, the authenticity of role-play and quality of feedback provided by SPs is of utmost importance (Swoboda & Bahreman, 2016).

Regardless of the educational context - whether clinical or communication skills training - SPs are in a position of being able to provide valuable feedback to students from the *patient's* perspective (Bearman & Nestel, 2015). In this teaching role, they can be viewed as active facilitators of the specific training objective. Alternatively, SPs can also be engaged in scenarios to determine the impact of simulation interventions for research purposes, quality assurance, and program evaluation (Weaver & Erby, 2012). In such instances, SPs may take on a more passive role within the evaluative protocol. However, the extent to which the various positions of SPs are utilised, supported, evaluated, and reported is under reported in the extant literature (Weaver & Erby, 2012).

Measuring learner performance in simulations with SPs, nursing researchers should seek advice on tool selection and use to build rigor into emerging research (Kardong-Edgren, Adamson & Fitzgerald, 2010). However, the range and use of validated instruments in the literature remains weak, and an area where more sound approaches in research methods are warranted. While there are many approaches to the recruitment and training of SPs, Bearman & Nestel (2015) concede that few procedures are evidenced based. Some of the methods described in the literature include demonstrations, video-clips, observation of real patients, coaching by experienced SPs or professional actors, and feedback by students and teaching faculty regarding SP performance (Meirer, 1982). In a review of 121 SP articles Howley, et al. (2008) identified that few authors provided sufficient detail about SP recruitment and training for reproducibility of research studies.

A recent text by Bearman and Nestel (2015) provides the most detailed instructions on the recruitment and training of SPs currently available. These authors developed a four-stage model that draws on evidence in the field of dramatic arts as an exemplar on which to standardize SP training. The model allows SPs to be recruited and trained for multiple roles, for different scenarios, and in a range of health care contexts (Bearman & Nestel, 2015). In sum, SPs can offer valuable feedback and perspective to learners, and provide health educators with the opportunity to improve or expand on their program. As the use of SPs rises it is now opportune to review the literature and report on current aspects of SP training and use including the preparation and support of these partners in learning. Of particular interest is an investigation of the scope and efficacy of using SPs in the training and evaluation of nurses' communication skills.

## Aim

This integrative review aims to identify, critically appraise, and synthesise the existing evidence on the use of simulated patients in educational programs related to developing or enhancing therapeutic communication skills for undergraduate and graduate nurses to answer the following research questions:

## Method

- (1) How are SPs used in nursing education to develop communication skills?
- (2) What evidence is available to support the efficacy of using SPs for training nurses in communication skills?
- (3) How are SPs recruited and trained for their role in communication skills training?

## Design

An integrative review enables appraisal, analysis, and integration of literature on a phenomenon so that new insights can inform further research and evaluation. The Whitmore and Knafelz (2005) strategy for conducting an integrative review was employed, as this strategy allows for inclusion of studies with diverse data collection methods.

## Literature search strategies

Eight electronic databases including PubMed, Scopus, MEDLINE, CINAHL, Psych-INFO, ProQuest, Google Scholar and Ovid were searched for peer-reviewed articles published between January 2006 and April 2016. The decision to only include literature from the past 10 ten years was made on the following basis. The importance of RN education focused on nurse-patient communication has been recognized at a national and international level. However, nursing education's use of simulation in communication scenarios involving patient discharge has been very recent and is evolving currently. These databases were selected to capture publications that pertained to simulation as a teaching and learning methodology in nursing education. An initial search using the term *standardized patient* was too broad; therefore, a Boolean search was conducted including the term \*AND\*. Keywords used were: simulation, \*standardized patient or simulated patient\*, and patient simulation, communication skills, communication skills training\*, nursing communication\* and health care communication.

## Inclusion and Exclusion Criteria

Inclusion criteria for the search included: peer-reviewed research articles using standardized patients; nurse-patient communication skills with health care simulation as the teaching strategy. Articles included baccalaureate, associate, and diploma nursing programs. Peer reviewed articles relevant to

nursing staff development in hospitals and medical centres focusing on the above criteria were also included. Only articles in the English language were reviewed. Exclusion criteria included: virtual patients such as computerized cases and simulators such as mannequins; articles pertaining to allied health, nurse practitioners, paediatric nursing, community settings, and only medical education. Other exclusion criteria were conference proceedings and editorials.

## Search Outcomes

The search combining the specified terms and keywords yielded a total of 727 articles including: 136 articles from Medline/ProQuest, 73 from CINAHL, 92 in Psych info, 267 in Scopus, and 159 in PubMed. After removal of duplicates, abstracts were reviewed to apply the inclusion and exclusion criteria, and full copies of relevant articles obtained and examined. Ultimately, 19 articles were evaluated using the Critical Appraisal Skills Programme (CASP, 2002). Qualitative studies were synthesised using thematic analysis. Figure 1 details the search process and resultant study selections.

## Results

The 19 studies included in the review were drawn from five countries: the USA (9), United Kingdom (2), Asia (1), Europe (5) and the Middle East (2). Table 1 presents a summary of specific elements of interest from these 19 articles. Seven clinical communication contexts were identified: mental health (7), oncology and palliative care (5), patient admission, discharge and general communication skills (5) and communicating with hearing impaired patients (2). Two purposes for SPs emerged: SPs as active facilitators in the teaching and learning strategy (12); and SPs as passive facilitators of course evaluation (6). One article used SPs for both communication skills training evaluation and learner feedback. Of the 19 studies, three articles reported a systematic approach to SP training and development. The recruitment process was reported in 10 studies.

The study designs included quantitative (14), mixed methods (4) and qualitative (1) approaches. Questionnaires and semi-structured interviews were the primary data collection methods. Of the quantitative designs, the majority (9) used faculty-designed tools to address research questions. Only nine studies reported the psychometric properties of validated instruments. Insufficient or no psychometric information was provided in the methods of the remaining studies. Four comparative studies encompassed teaching with SPs as a **strategy** versus the didactic teaching of recorded lectures; lecture slides; case-based learning of peer role-play. One study compared case base learning and simulated communication training (Hsu, et al., 2015). Schlegel, et al., (2011) compared the effectiveness of CST with a peer role-play module versus CST with an SP. Zaveritnik et al., (2010) compared traditional classroom (two 1-hour lectures) learning communication skills versus using a communication framework with an SP portraying a family member. The final study compared an SP

against a recorded lecture in suicide prevention communication skills (Leubbert & Popkess, 2015). Only one study reported a medium effect size (0.5) (Hsu, et al., 2015).

#### *Purpose 1: Simulated patients for facilitation and learner feedback*

Twelve studies used SPs to facilitate learning and provide feedback to nurses. Seven studies in the review used SPs to help nursing students identify barriers and knowledge deficits in interviewing and assessing mental health patients (Becker, et al., 2006; Bradley, & Meacham, 2009; Doolan, et al., 2013; Kameg et al., 2014; Luebbert & Popkess, 2015; Martin & Chanda, 2016; Robinson-Smith, Webster, 2013). Two studies (Adib-Hajbaghery & Rezaei-shahsavarlo, 2015; Yuksal & Unver, 2016) focused on the use of SPs to prepare nurses for specific communication skills required when interacting with hearing-impaired patients. One study focused on general communication skills and gathering patient information, imparting information and clarifying patient goals (Ryan et al., 2010). Another study focused on end of life care (Bloomfield & O'Neill, 2015), using SPs to help prepare students for communicating with dying patients. In contrast, the final paper focused on general communication skills such as communicating with families in the intensive care unit (Zavertnik et al., 2010).

#### *Purpose 2: Using simulated patients for program evaluation*

Six studies employed SPs to aid in the assessment of a communication skills programs. Three studies (Bernard, et al., 2012; Canviet, et.al, 2014; Langewitz, et al., 2010) used SPs in oncology scenarios to evaluate the effectiveness of CST training. A further two studies used SPs in scenarios which evaluated nurses' communication skills in working with patients with depression (Brown, et. al., 2009) or chronic pain (Schlegel et al., 2011). The final article (Paan, et. al., 2013) used SPs to test a patient admission resource (Pre-structured admission form based on Gordon's Functional Health Patterns (GFHP)).

#### *Dual purposes*

One study used SPs for both of the purposes mentioned above - to aid in the evaluation of a discharge communication course designed for nurses and to provide learners with feedback in the discharge process (Hsu et al., 2015).

#### Discussion

The use and application of SP's in the evaluation process or teaching clinical communication skills in the simulation were clearly identifiable in the research methodologies of the 19 articles. While less established in nursing, the use of SPs as a means to evaluate clinical competencies has a long

history in medical literature (Bolstad, et al., 2011). This review recognises that the utilisation of SPs and associated research in nursing has increased over the last decade.

Two SP purposes within a range of clinical contexts were identified in the analysis. SP use in teaching and learning is not a new concept, however the findings from this review confirm that SPs are frequently used in CST for specialised areas. Fields of nursing such as oncology, mental health, and palliative care, that are considered outside of the scope of practice for a novice practitioner, were the areas studied. For example, studies included providing nurses with the opportunity to learn appropriate strategies for dealing with sensitive psychological issues such as the end of life care situations (Bloomfield, O'Neill & Gillett, 2015) and care of the patient in the intensive care unit (ICU) (Zavertnik et al., 2010). Further applications included rehearsing communication approaches with patients who have mental health issues such as depression (Brown et al., 2009), bipolar disorders, anxiety and schizophrenia (Doolen et al., 2014).

The benefit for students learning with SPs is the reality of the experience, with the ability of SPs to portray a patient authentically without placing actual patients at risk (Weaver & Erby, 2012). Hospitals and nursing schools providing communication skills training also implemented the use of SPs to support program evaluations. In the current review, communication skills programs focused on patient consultation skills (Ryan, et al., 2010), admission interviews (Paans, Muller-Staub & Nieweg, 2013), transitions of care (Hsu et al., 2015) and communicating oncology treatment (Bernard, et al., 2012; Brown, et al., 2009; Canivet, et al., 2014; Langewitz, et al., 2010). SPs were welcomed in these contexts as they provided the researchers with the ability to standardize client characteristics, and audio-visually record scenarios, thus allowing the capture of quality data. Investigators were then able to measure research outcomes with a variety of appraisers including faculty, SPs, and learners (Weaver & Erby, 2012; Brown, et al., 2015).

While comparative studies between SP and traditional teaching modalities indicate the utility of this approach, there is considerable scope to expand the evidence base for the efficacy of using SP methodology in nursing communication skills education. The comparison of control groups (traditional lectures, case-based learning, role play, and video recorded lectures) and intervention groups implementing SPs, were shown to improve communication skills and learner satisfaction significantly following the intervention (Hsu et al., 2015; Schlegel, 2011). In the study by Hsu et al., (2015) learners had the opportunity to be directly involved in SP care, build on their current level of communication skills and benefit from having structured SP feedback about the effectiveness of their communication skills. Schlegel, et al. (2015) found that providing more opportunities for students to practice communication skills in high risk a conversation enhanced students' confidence and reduced anxiety in real-world clinical settings.



Of significance in the review was the limited utilisation of SPs as actual evaluators of either the participant's performance or for program assessment. The process of providing individual feedback during or after simulation sessions warrants consideration and input from the SP of the student's strengths and areas for improvement in performance. However, there is little evidence in the nursing literature of SPs contributing to the summative evaluation of students. Becker et al., (2006) rated the SP feedback as invaluable to student learning. While formative in nature, learners felt the timing (at the completion of scenario) and the source (SP) were unique to their learning opportunities (Becker et al., 2006). Students reported that the feedback from SPs gave a different perspective to compare and improve on their self- evaluation. There is minimal evidence in this review on the potential relationship between students' self-evaluation, SP, peer, and faculty rankings.

Student performance in nursing must be evaluated with valid and reliable instruments. The validation protocols and psychometric properties reported in research methodology (Kardong-Edgren, Adamson & Fitzgerald, 2010). Of the articles reviewed only 11 of the studies provided information on the validity and reliability of the tool (Adib-Hajbaghery & Rezaei-shahsavarloo, 2015; Hsu et al., 2015; Kameg et al., 2014; Langewitz, et al., 2010; Luebbert & Popkess, 2015; Paans, Muller-Staub & Nieweg, 2013; Robinson-Smith et al., 2009; Ryan et al., 2010; Schlegel et al., 2011; Yuksel & Unver, 2016; Zavertrnik et al., 2010). Comprehensive training procedures are required if SPs are to be used to collect data, contribute to the assessment of learners, and provide feedback. To assess or replicate the research findings of published reports, authors must provide adequate and clear descriptions of the SP's recruitment and training methods. This methodology should include descriptions of how the SP encounter was developed and implemented (Nestel & Bearman, 2015; Howley, et al., 2013; Wallace, 2006). In accord with Howley et al.'s (2008) early findings, this review found that few authors provided sufficient detail for reproducibility of research. Of the 19 studies examined only three reported using a framework to train and recruit SPs (Doolen et al 2014; Schlegel et al., 2012; Robinson-Smith et al., 2009). While the remaining studies acknowledged using trained actors, SPs with previous experience and some validation of scenarios, the reporting of the recruitment or training protocols was inadequate.

#### Implications for practice and further research

Simulation is recognised as an effective teaching **strategy** for the enhancement of therapeutic communication skills (Schlegel et al., 2011). However, this review found that a limited amount of research in general communication skills for nursing students. **Of the reviewed articles there was a bias towards a quantitative approach, with questionable measurement tools. Perhaps more studies with a mixed methods approach with larger samples, applying a more rigorous quantitative and qualitative protocol to support triangulation are required to improve the generalizability of the research results.** Communication skills for patient discharge or transitions of care, a priority in patient safety and quality reports (Rubin, et al., 2014) needs further exploration. Hospital readmission rates within

30 days of discharge is now a high priority in healthcare quality measures (Rubin, et al., 2014) with many interventions to improve patient outcomes being targeted at improving health professional communication practices at transitions of patient care (Rubin, et al., 2014). Despite the significant costs associated with hospital readmission, discharge communication skills with trained SPs are yet to be fully explored. Communication of discharge instructions can be improved with nurses delivering information at an appropriate health literacy level. SPs may be an effective means of preparing learners to communicate with patients and their families, at an appropriate health literacy level before discharge.

### Limitations

This synthesis of the literature presents important factors to be considered when using SPs in teaching and learning, however this review has limitations. First, only publications from 2006-2016 in English were included which may not take account of initiatives emerging in other countries. Nurse practitioner studies were not included limiting the generalizability of findings to this employment category.

### Conclusion

This integrative review provides a critique of the current use of SPs in communication skills training for nurses. The range of clinical contexts incorporating SPs included: end of life care, oncology care, mental health treatment, hearing impaired, patient admission, and patient discharge. There was variability in the use and reporting of SP recruitment and training and a lack of rigour in instruments used to determine learner or program outcomes. Researchers are increasingly using SPs to measure learner and program evaluation outcomes. To obtain valid and reliable results from the SPs, comprehensive training and recruitment protocols, using evidence-based approaches, should be employed. The findings of this review suggest a need for further research to grow the areas of SP training, validation of instruments and attention to transparency to support further investigation in this field of healthcare simulation. There are numerous other clinical contexts where SPs can partner with educators to enhance learners' communication skills. Areas noted by patient safety and quality groups where communication plays a key role in influencing positive patient outcomes includes patient discharge and during transitions of care.

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## Use of simulated patients to develop communication skills in nursing education: An integrative review

### Abstract

**Background:** Registered nurses are expected to communicate effectively with patients. To improve on this skill education programmes in both hospital and tertiary settings are increasingly turning to simulation modalities when training undergraduate and registered nurses. The roles simulated patients (SPs) assume can vary according to training purposes and approach.

**Aims:** The first aim is to analyse how SPs are used in nursing education to develop communication skills. The second aim is to evaluate the evidence that is available to support the efficacy of using SPs for training nurses in communication skills and finally to review the SP recruitment and training procedure.

**Design:** An Integrative review.

**Data Sources:** A search was conducted on CINAHL, Psych-info, PubMed, Google Scholar, Scopus, Ovid, Medline, and ProQuest databases. Keywords and inclusion/exclusion criteria were determined and applied to the search strategy.

**Review Methods:** The integrative review included Nineteen studies from 2006-2016. Critical Appraisal Skills Program (CASP) method of evaluation was utilised. Emergent themes were extracted with similar and divergent perspectives.

**Results:** Analysis identified seven clinical contexts for communication skills training (CST) and two SP roles from the eighteen studies. SPs were either directly involved in the teaching of communication (active role) or used in the evaluation of the effectiveness of a communication skills program (passive role). A majority of studies utilised faculty-designed measurement instruments.

**Conclusion:** The evidence presented in the 19 articles indicates that the use of SPs to teach nurse-patient communication skills targets more challenging clinical interactions. Engaging SPs in both CST program facilitation and course evaluation provides nurse educators with a strong foundation to develop further pedagogical and research capacity. Expanding the utilisation of SPs to augment nurses' communication skills and ability to engage with patients in a broader range of clinical contexts with increased methodological rigor is recommended.

**Keywords:** Simulated patient, standardized patient, communication skills, nursing education, simulation, undergraduate nursing students, registered nurses.

## Background

One of the primary goals of therapeutic communication in healthcare is to develop a rapport with patients and their families and to foster an environment of compassion, understanding, and empathy (Peplau, 1997). Therapeutic communication between patients and members of the healthcare team in community and hospital settings is, therefore, essential in ensuring clarity in the provision of care, to mitigate medical errors and enhance patient safety (Rosen & Pronovost, 2014). The World Health Organisation recognizes the need for patients to be included in health care decision making and planning (Rimal & Lapinski, 2009). With a global agenda of improving quality and safety in healthcare, nurse educators need to find engaging and impactful ways to integrate communication skills training into undergraduate and graduate nursing education (Mullan & Kothe, 2010).

Dealing with patients and families during difficult conversations can be challenging particularly about explaining complex treatments, working through mental health issues, and discussions about end of life care. Such conversations are often a source of anxiety and fear for many healthcare professions' students as well as practicing clinicians (Martin & Chanda, 2015; Nestel, et al., 2010; Eid, Petty, Hutchins & Thompson, 2009). Simulation provides an innovative approach to emphasise the critical role of communication skills and for students to develop a repertoire of effective techniques (Kelly et al., 2014). Simulation can be described as a teaching strategy to replicate real life experiences (Brown, 2015) and offers an alternative learning experience given some of the limitations of clinical rotations (Howley et al., 2008). Several studies attest to the reliability, validity and feasibility of the simulated patient (SP) approach for communication skills training (CST) in nursing education (Bolstad, et al., 2011; Ebbert & Connors, 2004; Vu & Barrows, 1994). A recent meta-analysis highlighted the efficacy of simulation training in nursing across diverse clinical domains (Shin, Park & Kim, 2015). The meta-analysis examined 20 studies and provided evidence that using SPs in education across different areas in nursing was a useful technique over traditional learning methods. The results presented evidence, with a medium to large effect sizes, to advocate for the use of SPs to improve learner outcomes (Shin, Park & Kim, 2015).

For students, rehearsing clinical conversations with peers offers a level of exposure to 'real life' situations (Schlegel et al., 2011). However, the interactions may not be authentic because individuals may 'hold back' in the type and level of responses. Role-plays with simulated patients (SPs) offer opportunities for students to immerse themselves in a more authentic experience within a protected and controlled environment (Bearman & Nestel, 2015). SPs are primarily *well* people trained to act as a patient in a clinical scenario (Bearman & Nestel, 2015). The terms simulated patient and standardized patient are often used interchangeably. From the 1960's SPs have been utilized for teaching and evaluating medical students in clinical assessment techniques (Barrows, 1993), More recently, SPs have been used to train clinicians to assess the effectiveness of communication training



programs (Trickey, et al., 2016) and to teach students' culturally sensitive communication skills (Swoboda & Bahreman, 2016). A variety of health professional schools are now using SPs for teaching and students feedback, with the use of SPs in nursing programs gaining increasing momentum. In this educational context, the authenticity of role-play and quality of feedback provided by SPs is of utmost importance (Swoboda & Bahreman, 2016).

Regardless of the educational context - whether clinical or communication skills training - SPs are in a position of being able to provide valuable feedback to students from the *patient's* perspective (Bearman & Nestel, 2015). In this teaching role, they can be viewed as active facilitators of the specific training objective. Alternatively, SPs can also be engaged in scenarios to determine the impact of simulation interventions for research purposes, quality assurance, and program evaluation (Weaver & Erby, 2012). In such instances, SPs may take on a more passive role within the evaluative protocol. However, the extent to which the various positions of SPs are utilised, supported, evaluated, and reported is under reported in the extant literature (Weaver & Erby, 2012).

Measuring learner performance in simulations with SPs, nursing researchers should seek advice on tool selection and use to build rigor into emerging research (Kardong-Edgren, Adamson & Fitzgerald, 2010). However, the range and use of validated instruments in the literature remains weak, and an area where more sound approaches in research methods are warranted. While there are many approaches to the recruitment and training of SPs, Bearman & Nestel (2015) concede that few procedures are evidenced based. Some of the methods described in the literature include demonstrations, video-clips, observation of real patients, coaching by experienced SPs or professional actors, and feedback by students and teaching faculty regarding SP performance (Meirer, 1982). In a review of 121 SP articles Howley, et al. (2008) identified that few authors provided sufficient detail about SP recruitment and training for reproducibility of research studies.

A recent text by Bearman and Nestel (2015) provides the most detailed instructions on the recruitment and training of SPs currently available. These authors developed a four-stage model that draws on evidence in the field of dramatic arts as an exemplar on which to standardize SP training. The model allows SPs to be recruited and trained for multiple roles, for different scenarios, and in a range of health care contexts (Bearman & Nestel, 2015). In sum, SPs can offer valuable feedback and perspective to learners, and provide health educators with the opportunity to improve or expand on their program. As the use of SPs rises it is now opportune to review the literature and report on current aspects of SP training and use including the preparation and support of these partners in learning. Of particular interest is an investigation of the scope and efficacy of using SPs in the training and evaluation of nurses' communication skills.

## Aim

This integrative review aims to identify, critically appraise, and synthesise the existing evidence on the use of simulated patients in educational programs related to developing or enhancing therapeutic communication skills for undergraduate and graduate nurses to answer the following research questions:

## Method

- (1) How are SPs used in nursing education to develop communication skills?
- (2) What evidence is available to support the efficacy of using SPs for training nurses in communication skills?
- (3) How are SPs recruited and trained for their role in communication skills training?

## Design

An integrative review enables appraisal, analysis, and integration of literature on a phenomenon so that new insights can inform further research and evaluation. The Whitmore and Knafelz (2005) strategy for conducting an integrative review was employed, as this strategy allows for inclusion of studies with diverse data collection methods.

## Literature search strategies

Eight electronic databases including PubMed, Scopus, MEDLINE, CINAHL, Psych-INFO, ProQuest, Google Scholar and Ovid were searched for peer-reviewed articles published between January 2006 and April 2016. The decision to only include literature from the past 10 ten years was made on the following basis. The importance of RN education focused on nurse-patient communication has been recognized at a national and international level. However, nursing education's use of simulation in communication scenarios involving patient discharge has been very recent and is evolving currently. These databases were selected to capture publications that pertained to simulation as a teaching and learning methodology in nursing education. An initial search using the term *standardized patient* was too broad; therefore, a Boolean search was conducted including the term \*AND\*. Keywords used were: simulation, \*standardized patient or simulated patient\*, and patient simulation, communication skills, communication skills training\*, nursing communication\* and health care communication.

## Inclusion and Exclusion Criteria

Inclusion criteria for the search included: peer-reviewed research articles using standardized patients; nurse-patient communication skills with health care simulation as the teaching strategy. Articles included baccalaureate, associate, and diploma nursing programs. Peer reviewed articles relevant to

nursing staff development in hospitals and medical centres focusing on the above criteria were also included. Only articles in the English language were reviewed. Exclusion criteria included: virtual patients such as computerized cases and simulators such as mannequins; articles pertaining to allied health, nurse practitioners, paediatric nursing, community settings, and only medical education. Other exclusion criteria were conference proceedings and editorials.

## Search Outcomes

The search combining the specified terms and keywords yielded a total of 727 articles including: 136 articles from Medline/ProQuest, 73 from CINAHL, 92 in Psych info, 267 in Scopus, and 159 in PubMed. After removal of duplicates, abstracts were reviewed to apply the inclusion and exclusion criteria, and full copies of relevant articles obtained and examined. Ultimately, 19 articles were evaluated using the Critical Appraisal Skills Programme (CASP, 2002). Qualitative studies were synthesised using thematic analysis. Figure 1 details the search process and resultant study selections.

## Results

The 19 studies included in the review were drawn from five countries: the USA (9), United Kingdom (2), Asia (1), Europe (5) and the Middle East (2). Table 1 presents a summary of specific elements of interest from these 19 articles. Seven clinical communication contexts were identified: mental health (7), oncology and palliative care (5), patient admission, discharge and general communication skills (5) and communicating with hearing impaired patients (2). Two purposes for SPs emerged: SPs as active facilitators in the teaching and learning strategy (12); and SPs as passive facilitators of course evaluation (6). One article used SPs for both communication skills training evaluation and learner feedback. Of the 19 studies, three articles reported a systematic approach to SP training and development. The recruitment process was reported in 10 studies.

The study designs included quantitative (14), mixed methods (4) and qualitative (1) approaches. Questionnaires and semi-structured interviews were the primary data collection methods. Of the quantitative designs, the majority (9) used faculty-designed tools to address research questions. Only nine studies reported the psychometric properties of validated instruments. Insufficient or no psychometric information was provided in the methods of the remaining studies. Four comparative studies encompassed teaching with SPs as a strategy versus the didactic teaching of recorded lectures; lecture slides; case-based learning of peer role-play. One study compared case base learning and simulated communication training (Hsu, et al., 2015). Schlegel, et al., (2011) compared the effectiveness of CST with a peer role-play module versus CST with an SP. Zaveritnik et al., (2010) compared traditional classroom (two 1-hour lectures) learning communication skills versus using a communication framework with an SP portraying a family member. The final study compared an SP

against a recorded lecture in suicide prevention communication skills (Leubbert & Popkess, 2015). Only one study reported a medium effect size (0.5) (Hsu, et al., 2015).

#### *Purpose 1: Simulated patients for facilitation and learner feedback*

Twelve studies used SPs to facilitate learning and provide feedback to nurses. Seven studies in the review used SPs to help nursing students identify barriers and knowledge deficits in interviewing and assessing mental health patients (Becker, et al., 2006; Bradley, & Meacham, 2009; Doolan, et al., 2013; Kameg et al., 2014; Luebbert & Popkess, 2015; Martin & Chanda, 2016; Robinson-Smith, Webster, 2013). Two studies (Adib-Hajbaghery & Rezaei-shahsavarlo, 2015; Yuksal & Unver, 2016) focused on the use of SPs to prepare nurses for specific communication skills required when interacting with hearing-impaired patients. One study focused on general communication skills and gathering patient information, imparting information and clarifying patient goals (Ryan et al., 2010). Another study focused on end of life care (Bloomfield & O'Neill, 2015), using SPs to help prepare students for communicating with dying patients. In contrast, the final paper focused on general communication skills such as communicating with families in the intensive care unit (Zavertnik et al., 2010).

#### *Purpose 2: Using simulated patients for program evaluation*

Six studies employed SPs to aid in the assessment of a communication skills programs. Three studies (Bernard, et al., 2012; Canviet, et.al, 2014; Langewitz, et al., 2010) used SPs in oncology scenarios to evaluate the effectiveness of CST training. A further two studies used SPs in scenarios which evaluated nurses' communication skills in working with patients with depression (Brown, et. al., 2009) or chronic pain (Schlegel et al., 2011). The final article (Paan, et. al., 2013) used SPs to test a patient admission resource (Pre-structured admission form based on Gordon's Functional Health Patterns (GFHP)).

#### *Dual purposes*

One study used SPs for both of the purposes mentioned above - to aid in the evaluation of a discharge communication course designed for nurses and to provide learners with feedback in the discharge process (Hsu et al., 2015).

#### Discussion

The use and application of SP's in the evaluation process or teaching clinical communication skills in the simulation were clearly identifiable in the research methodologies of the 19 articles. While less established in nursing, the use of SPs as a means to evaluate clinical competencies has a long

history in medical literature (Bolstad, et al., 2011). This review recognises that the utilisation of SPs and associated research in nursing has increased over the last decade.

Two SP purposes within a range of clinical contexts were identified in the analysis. SP use in teaching and learning is not a new concept, however the findings from this review confirm that SPs are frequently used in CST for specialised areas. Fields of nursing such as oncology, mental health, and palliative care, that are considered outside of the scope of practice for a novice practitioner, were the areas studied. For example, studies included providing nurses with the opportunity to learn appropriate strategies for dealing with sensitive psychological issues such as the end of life care situations (Bloomfield, O'Neill & Gillett, 2015) and care of the patient in the intensive care unit (ICU) (Zavertnik et al., 2010). Further applications included rehearsing communication approaches with patients who have mental health issues such as depression (Brown et al., 2009), bipolar disorders, anxiety and schizophrenia (Doolen et al., 2014).

The benefit for students learning with SPs is the reality of the experience, with the ability of SPs to portray a patient authentically without placing actual patients at risk (Weaver & Erby, 2012). Hospitals and nursing schools providing communication skills training also implemented the use of SPs to support program evaluations. In the current review, communication skills programs focused on patient consultation skills (Ryan, et al., 2010), admission interviews (Paans, Muller-Staub & Nieweg, 2013), transitions of care (Hsu et al., 2015) and communicating oncology treatment (Bernard, et al., 2012; Brown, et al., 2009; Canivet, et al., 2014; Langewitz, et al., 2010). SPs were welcomed in these contexts as they provided the researchers with the ability to standardize client characteristics, and audio-visually record scenarios, thus allowing the capture of quality data. Investigators were then able to measure research outcomes with a variety of appraisers including faculty, SPs, and learners (Weaver & Erby, 2012; Brown, et al., 2015).

While comparative studies between SP and traditional teaching modalities indicate the utility of this approach, there is considerable scope to expand the evidence base for the efficacy of using SP methodology in nursing communication skills education. The comparison of control groups (traditional lectures, case-based learning, role play, and video recorded lectures) and intervention groups implementing SPs, were shown to improve communication skills and learner satisfaction significantly following the intervention (Hsu et al., 2015; Schlegel, 2011). In the study by Hsu et al., (2015) learners had the opportunity to be directly involved in SP care, build on their current level of communication skills and benefit from having structured SP feedback about the effectiveness of their communication skills. Schlegel, et al. (2015) found that providing more opportunities for students to practice communication skills in high risk a conversation enhanced students' confidence and reduced anxiety in real-world clinical settings.

Of significance in the review was the limited utilisation of SPs as actual evaluators of either the participant's performance or for program assessment. The process of providing individual feedback during or after simulation sessions warrants consideration and input from the SP of the student's strengths and areas for improvement in performance. However, there is little evidence in the nursing literature of SPs contributing to the summative evaluation of students. Becker et al., (2006) rated the SP feedback as invaluable to student learning. While formative in nature, learners felt the timing (at the completion of scenario) and the source (SP) were unique to their learning opportunities (Becker et al., 2006). Students reported that the feedback from SPs gave a different perspective to compare and improve on their self- evaluation. There is minimal evidence in this review on the potential relationship between students' self-evaluation, SP, peer, and faculty rankings.

Student performance in nursing must be evaluated with valid and reliable instruments. The validation protocols and psychometric properties reported in research methodology (Kardong-Edgren, Adamson & Fitzgerald, 2010). Of the articles reviewed only 11 of the studies provided information on the validity and reliability of the tool (Adib-Hajbaghery & Rezaei-shahsavarloo, 2015; Hsu et al., 2015; Kameg et al., 2014; Langewitz, et al., 2010; Luebbert & Popkess, 2015; Paans, Muller-Staub & Nieweg, 2013; Robinson-Smith et al., 2009; Ryan et al., 2010; Schlegel et al., 2011; Yuksel & Unver, 2016; Zavertrnik et al., 2010). Comprehensive training procedures are required if SPs are to be used to collect data, contribute to the assessment of learners, and provide feedback. To assess or replicate the research findings of published reports, authors must provide adequate and clear descriptions of the SP's recruitment and training methods. This methodology should include descriptions of how the SP encounter was developed and implemented (Nestel & Bearman, 2015; Howley, et al., 2013; Wallace, 2006). In accord with Howley et al.'s (2008) early findings, this review found that few authors provided sufficient detail for reproducibility of research. Of the 19 studies examined only three reported using a framework to train and recruit SPs (Doolen et al 2014; Schlegel et al., 2012; Robinson-Smith et al., 2009). While the remaining studies acknowledged using trained actors, SPs with previous experience and some validation of scenarios, the reporting of the recruitment or training protocols was inadequate.

#### Implications for practice and further research

Simulation is recognised as an effective teaching strategy for the enhancement of therapeutic communication skills (Schlegel et al., 2011). However, this review found that a limited amount of research in general communication skills for nursing students. Of the reviewed articles there was a bias towards a quantitative approach, with questionable measurement tools. Perhaps more studies with a mixed methods approach with larger samples, applying a more rigorous quantitative and qualitative protocol to support triangulation are required to improve the generalizability of the research results. Communication skills for patient discharge or transitions of care, a priority in patient safety and quality reports (Rubin, et al., 2014) needs further exploration. Hospital readmission rates within

30 days of discharge is now a high priority in healthcare quality measures (Rubin, et al., 2014) with many interventions to improve patient outcomes being targeted at improving health professional communication practices at transitions of patient care (Rubin, et al., 2014). Despite the significant costs associated with hospital readmission, discharge communication skills with trained SPs are yet to be fully explored. Communication of discharge instructions can be improved with nurses delivering information at an appropriate health literacy level. SPs may be an effective means of preparing learners to communicate with patients and their families, at an appropriate health literacy level before discharge.

### Limitations

This synthesis of the literature presents important factors to be considered when using SPs in teaching and learning, however this review has limitations. First, only publications from 2006-2016 in English were included which may not take account of initiatives emerging in other countries. Nurse practitioner studies were not included limiting the generalizability of findings to this employment category.

### Conclusion

This integrative review provides a critique of the current use of SPs in communication skills training for nurses. The range of clinical contexts incorporating SPs included: end of life care, oncology care, mental health treatment, hearing impaired, patient admission, and patient discharge. There was variability in the use and reporting of SP recruitment and training and a lack of rigour in instruments used to determine learner or program outcomes. Researchers are increasingly using SPs to measure learner and program evaluation outcomes. To obtain valid and reliable results from the SPs, comprehensive training and recruitment protocols, using evidence-based approaches, should be employed. The findings of this review suggest a need for further research to grow the areas of SP training, validation of instruments and attention to transparency to support further investigation in this field of healthcare simulation. There are numerous other clinical contexts where SPs can partner with educators to enhance learners' communication skills. Areas noted by patient safety and quality groups where communication plays a key role in influencing positive patient outcomes includes patient discharge and during transitions of care.

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Table(s)

Author/s Country	Study focus	Sample & Setting	SP Role, Recruitment & training	Research design	Instruments *	Major Findings
Adib-Hajbaghery and Rezaei-Shahsavarloo. (2015) Iran	Communicating with hearing impaired patients using SPs for intervention	71 nursing students University	Role = Part of the education intervention. Gives structured feedback. Recruitment = NR Training = NR	Cross-sectional quantitative study	N/S = Demographic questionnaire S/P = Nil F = Performance assessment checklist (Cronbach Alpha 0.75)	Nursing students lack the knowledge and skills required to effectively care for hearing impaired patients. The use of SPs allowed students to improve on this skill
Becker, Rose, Berg, Park & Shatzer. (2006) USA	Evaluating knowledge of depression and therapeutic communication skills with SPs	103 nursing students University	Role = Part of the education intervention, gives structured feedback. Recruitment = NR Training = NR	Pilot Study, pre-test/post-test design. RCT	N/S = Communication Knowledge Test (CKT) N/S = Student Self-evaluation of SP Encounter (SSPE) S/P = Post Encounter SP Checklist S/P = Standardized patient interpersonal ratings (SPIR) F = Nil (Faculty designed tools; no Cronbach's alphas reported)	Authors support the use of SP's in nursing education. The SP provided students with feedback and competence regarding verbal and non-verbal communication skills

Bernard, et al. (2012) Switzerland	Adherence to communication skills training with SPs	31 participants (18 Nurses and 13 medical)  Hospital	Role = aid in the evaluation of a communication skills programs Recruitment = NR Training = NR	Exploratory Study	N/S = Psychotherapy Process q-set (PQS), 105-item instrument. S/P = Nil F = Nil <i>(No Cronbach Alpha reported)</i>	Communication skills training equally benefits all clinicians. Affective load is a mediating factor that may help clinicians reflect on their personal way to relate to cancer patients when breaking bad news
Bloomfield et al. (2015) UK	Communication skills with dying patients and their families	180 nursing students and 450 medical students  University	Role = part of the education intervention, gives structured feedback Recruitment = R Training = NR	Mixed methods	N/S = Pre-test/post-test Questionnaire S/P= Nil F = Nil <i>(No Cronbach Alpha reported, faculty designed tool)</i>	Simulation was found to be an effective way to prepare students to communicate with dying patients and their families
Brown et al. (2009) USA	Evaluation of a communication skills training workshop	12 nurses  Cancer Centre	Role = aid in the evaluation of a communication skills programs Recruitment = NR Training = NR	Pilot Study Quantitative Observational	N/S = Likert scale questionnaire S/P = Nil F = Nil <i>(No Cronbach Alpha reported, faculty designed)</i>	Nurses reported more confidence to deal with patient depression after the communication intervention

Canvivet et al. (2014)  Belgium	Assessed the efficacy of a general communication skills program for cancer nurses with SPs	115 Nurses  Hospital	Role = aid in the evaluation of a communication skills programs Recruitment = R Training = NR	RCT Mixed Methods	N/S = Nil S/P = Nil F = PainComCode- <i>Faculty designed qualitative measure</i>	A general communication skills program only enabled oncology nurses to acquire some of the skills needed to provide therapeutic care to patients with cancer pain. Further communication skills training is required more specific to cancer pain management
Hsu et al. (2015)  Taiwan	Compare the effect of traditional course training versus scenario based simulation training in discharge planning	116 nurses  Hospital	Role = part of the education intervention, gives structured feedback SPs to aid in the evaluation of a communication skills programs Recruitment = NR Training = NR	RCT	N/S = Communication Competence Scale (CCS) ( <i>Cronbach Alpha 0.93</i> ) N/S = Communication self-efficacy scale (CSES) ( <i>Cronbach Alpha 0.97</i> ) N/S = Learning satisfaction scale (LSS) ( <i>Cronbach Alpha 0.97</i> ) S/P = OSCE feedback ( <i>Cronbach Alpha 0.54</i> ) S/P = Communication performance checklist (CPC) ( <i>Cronbach Alpha 0.60</i> ) F = Nil	Established both traditional classroom lectures and simulation improved on patient communication skills. However the latter performed better in learner satisfaction and communication performance
Doolen et al. (2014)  USA	SP as a learning strategy in Mental health communication	94 mental health nursing students  University	Role = part of the education intervention, gives structured	Mixed Methods design	N/S = Likert scale S/P = Nil F= Nil <i>(No Cronbach Alpha reported, faculty designed)</i>	Students improved on interviewing and communication skills in a safe and educational environment before

			feedback. Recruitment = Reported Training = Reported (Wallace, 2007)			encountering Mental health patients in a clinical experience
Kmaeg, Szpak, Cline & McDermott, (2014)  USA	Mental health simulations with the use of SP's may be one strategy to decrease student anxiety and improve patient outcomes	69 Nursing students  University	Role = part of the education intervention, gives structured feedback. Recruitment = Previous SP Training = Reported	Quasi experimental design	N/S = State Trait Anxiety Inventory (STAI) ( <i>Test-retest correlations 0.86</i> ) N/S = Visual Analogue Scale (VAS) ( <i>No Cronbach Alpha reported</i> ) N/S = Simulation Evaluation Survey ( <i>Cronbach Alpha 0.87</i> ) S/P = Nil F = Nil	A reduction in anxiety was reported by the students nurses after completing the interaction with the SP
Langewit et al. (2010)  Switzerland	Evaluation of communication skills training programme for oncology nurses	70 nurses  Hospital	Role = aid in the evaluation of a communication skills programs Recruitment = Actors Training = Not Reported	Non – RCT Quantitative	N/S = Nil S/P = Nil F+ = Roter Interaction Analysis System (RIAS) ( <i>Rotter, 1991</i> )	The communication skills programme could be used to achieve a substantial increase in patient- centred communication
Luebbert and Popkess (2015)	Developed and tested an innovative learning strategy	34 Nursing students  University	Role = part of the education intervention, gives	Experimental two group, post-test designs.	N/S = Student satisfaction and self-confidence in learning (SSSCL) ( <i>Cronbach Alpha 0.94 and</i>	Suicide prevention is a communication skill that can be effectively taught to nursing students using

USA	using SP's to determine the effectiveness of teaching suicide prevention		structured feedback. Recruitment = Reported (Student Actors) Training = Not Reported		0.87 respectively) N/S = Educational Practices Questionnaire (EPQ) (Cronbach Alpha 0 .88) N/S = Simulation Design Scale (SDS) (Cronbach Alpha 0 .80) N/S = Knowledge Assessment (Not Validated) S/P = Nil F = Nil	standardized patients
Martin and Chanda (2016) USA	Communication scenarios with emphasis on symptoms related to psychiatric disorders	27 Nursing students University	Role = part of the education intervention, gives structured feedback. Recruitment = Reported Training = Not Reported	Quasi-experimental	N/S = Pre-test and post-test (Faculty designed Tool) N/S = Visual Analogue Scale SP = Nil F = Nil	Gave students the opportunity to participate in therapeutic communication with mental health scenarios. Gave students confidence and a decrease in anxiety
Paans et al, (2013) Netherlands	How the use of diagnostic resources such as admission forms and nursing diagnoses hand books-influences nurses communication during admission interviews	60 nurses Hospital	Role = assess the effectiveness of diagnostic resources. Recruitment = Not Reported Training = Not Reported	RCT Quantitative	N/S = Nil S/P = Nil F = Roter Interaction Analysis System (RIAS) (Rotter, 1991)	Pre-structured forms may promote comprehensive communication skills, the needs to be aware that using certain diagnostic tools may hinder nurses from asking open-ended questions to further increase communication skills



Robinson – Smith & Bradley (2009) USA	Evaluating nursing students satisfaction with a SP mental health exam and suicide risk assessment	112 Nursing Students University	Role = part of the education intervention, gives structured feedback. Recruitment = Reported Training = Reported (Wallace, 2007)	Quantitative Study	N/S = Student Satisfaction and Self Confidence Survey (SSSCL) (Cronbach Alpha 0.94 and 0.87 respectively) SP = Nil F = Nil	Overall a perceived increase in satisfaction and self-confidence
Ryan et al. (2010) United Kingdom	To evaluate the acceptability of introducing an SP program to assess communication and consultation skills training	46 medical students and 64 nursing students University	Role = part of the education intervention, gives structured feedback. Recruitment = Reported Training = Not Reported	Quantitative study	N/S = Nil S/P = Nil F = Global Rating Scale for communication skills and attitudes (Wiskin et al, 2003)	Recommendations concluded students who are assessed in communication and consultation skills through SP's should be ideally learn those skills with a trained SP
Schlegel et al. (2011) Switzerland	Investigated the effectiveness of learning involving SP's and the use of role-play on training communication skills	55 nursing students University	Role= part of the education intervention, gives structured feedback Recruitment = Not Reported	Randomized post-test control group design	N/S = The European Donor Hospital Education Programme Self-Efficacy Questionnaire (Cronbach Alpha 0.93) (Cronbach Alpha 0.97) F = Supervisors Perspective on the quality of	Clinical supervisors rated the intervention group to be significantly superior in communication skills. The results indicated that the use of SPs is superior to communication training over the use of role-play

			Training = Reported (Wallace, 2007)		Communication (Cronbach Alpha 0.66) S/P = Nil F = Nil P = The art of Medicine Survey Scale (AMS)	only
Webster (2013) USA	Competency of student nurses in patient centred care in mental health	15 nursing students University	Role = part of the education intervention, gives structured feedback Recruitment = Actors Training = Not Reported	Pilot Study Quantitative	N/S = Self reflection (Faculty designed, no Cronbach Alpha) SP = Nil F = Nil	Desired learning outcomes were achieved using SPs, including the demonstration of therapeutic communication and assessment skills, empathy, caring and addressing patient values, preferences and beliefs
Yuksel & Unver (2016) Turkey	Senior nursing students communicating with deaf SPs for use in the emergency department	22 nursing students University	Role = part of the education intervention, gives structured feedback. Recruitment = Not Reported Training = NR	Descriptive Qualitative	N/S = Nil S/P = Nil F = Systematic text condensation (Malterud, 2012)	The findings showed allowing students to repeat the SP simulation 3 times improved students communication skills to provide serves to deaf patients
Zavertnik et al. (2010) USA	SP intervention designed to enhance the current curriculum	41 Nursing Students University	Role = part of the education intervention, gives structured feedback.	Quasi-Experimental	N/S = Standardized grading tool (Cohen's Kappa 0.086) SP = Nil F = Nil	The simulation between SPs as family members allows students to develop communication skills in a controlled, non-threatening environment

classroom based  
approach to  
teaching  
communication  
skills

Recruitment =  
R  
Training = NR

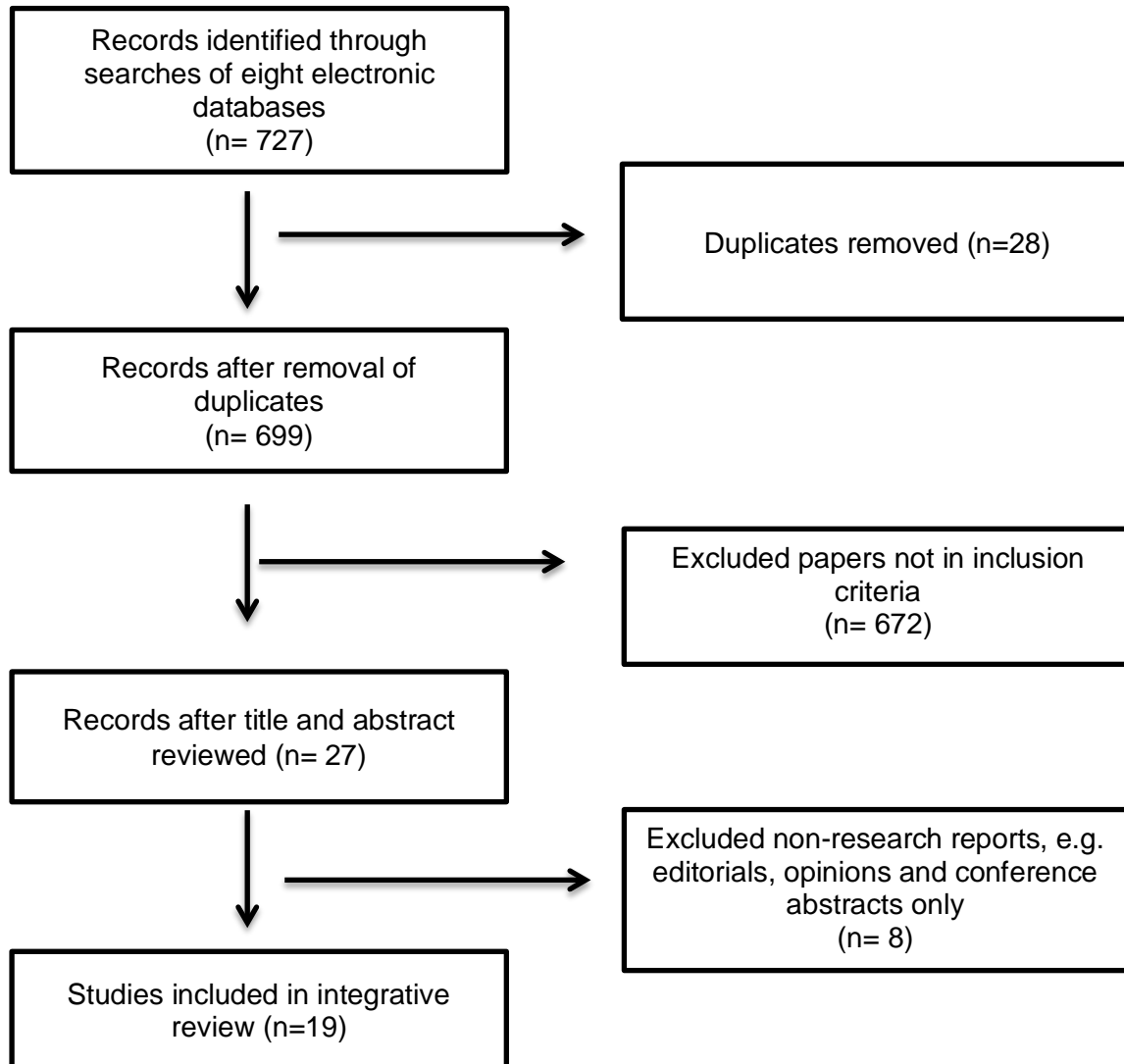


Fig. 1. Flow chart of the integrative review selection process.

### Highlights

1. SPs can partner with educators to enhance nurse's communication skills.
2. Comprehensive SP training and recruitment protocols should be employed and reported.
3. SPs can be effectively engaged in program facilitation and evaluation roles.