Uncomposed, edited manuscript published online ahead of print.

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Title: The Role of Equity, Diversity, and Inclusivity in Standardized Patient Programs: A Narrative Review

DOI: 10.1097/ACM.0000000000004447
The Role of Equity, Diversity, and Inclusivity in Standardized Patient Programs: A Narrative Review

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 Supplemental digital content for this article is available at http://links.lww.com/ACADMED/B195.

Funding/Support: None reported.

Other disclosures: None reported.
Ethical approval: Reported as not applicable.

Abstract

Purpose
Integrating equity, diversity, and inclusivity (EDI) in curricula for training health professionals is a frequent institutional goal. The use of standardized (or simulated) patient programs (SPPs) to support EDI in health sciences training is not well described. Here the authors present a theoretical model based on a synthesis of the literature for using SPPs in EDI training, along with a narrative review of the available literature.

Method
The authors searched PubMed, Scopus, Science Direct, and Google Scholar databases for studies published between January 2000 and October 2019 describing the use of SPPs to support EDI in health sciences education. Studies were included if they described standardized patient (SP) education involving EDI and reported empiric data about its design, delivery, or effectiveness. The authors conducted a narrative review and provide a synthesis of the available literature, identifying key themes.

Results
Out of 117 studies identified, 17 met the inclusion criteria. Most studies (53%; n = 9) focused on cultural competence; many focused on communication with diverse patients (29%; n = 5) or health inequity (18%; n = 3). Studies employed portrayal of diversity (71%; n = 12) or learning objectives supported by diversity (29%; n = 5) as approaches to EDI relevant to SP training. Three primary themes emerged: improving cultural competence, effective communication with diverse patients, and highlighting health inequalities.
Conclusions

This review outlines approaches to EDI-based SPPs, with the perspectives and priorities of institutional approaches in mind. SP education around specific EDI issues is reported; however, programmatic approaches to EDI by SPPs are lacking. More research is needed to provide further evidence for the challenges, effectiveness, and outcomes of developing and implementing EDI-based SPPs in health sciences education.
To achieve effective care for a highly diverse patient population, integrating principles of equity, diversity, and inclusion (EDI) into the training of health professional students is a stated requirement for health care institutions.1–6 Both the Sullivan Commission report1 “Missing Persons: Minorities in the Health Professions” and the Institute of Medicine report2 “Unequal Treatment” advocate for cultural diversity and cross-cultural training throughout the education of health care providers. Similarly, the U.S. Surgeon General has released 2 reports3,4 urging the development of curricula to improve the ability of health care providers to understand and respond to the health care needs of patients with disabilities. Health professions training programs have also acknowledged the need to address EDI in their curricula; for example, the American Association of Colleges of Nursing5 and the National League for Nursing6 have called on nursing programs to integrate EDI-based curricula to improve the quality of nursing education and to prepare nurses to care for a diverse patient population. Likewise, the Accreditation Council for Graduate Medical Education7 has emphasized the need for training in cultural competence for diverse populations both in medical school and postgraduate programs.

**Background**

Emotional and psychological qualities are core elements of being human and are thus the components that give each patient their unique and, at the same time, universal characteristics. Previous studies have systematically shown that the use of standardized patients (SPs)—individuals who are specially trained to act as patients—is an effective teaching strategy to improve students’ clinical and communication skills, thus highlighting the value of the human element in health sciences education.8–12
Standardized patient programs (SPPs) are the organizational elements responsible for training and supplying SPs to assist in instructing and assessing health professions learners throughout their education. SPPs are increasingly approached specifically to support the integration of EDI principles in learning and assessment as part of the curricular mandates of undergraduate and postgraduate health sciences education programs. Given this responsibility, SPPs aim to incorporate the human element into patient care and deepen providers’ awareness of patients’ needs and expectations. The number of studies using SPs to improve and evaluate health professions students’ approaches to diverse patient groups is on the rise. Despite this, the integration of EDI into SPPs is unclear and undefined. Our purpose with this review was to identify and document the literature on the role of EDI in SPPs in a critical manner. Further, we propose a conceptual framework based on a synthesis of the literature describing how EDI principles can be integrated into SPPs, and we outline alternative approaches to EDI-based SPPs with perspectives and priorities of institutional approaches.

**Definitions**

The principles of EDI are used to achieve multiple goals. In practice, equity means treating all people fairly and with respect and working with them to help overcome any disadvantage.\(^{13}\) Diversity has been categorized by Narayanasamy et al\(^ {14}\) into visible and hidden dimensions: visible diversity refers to “race, gender, and physical attributes,” whereas hidden diversity includes “political opinion, sexual orientation, ethnicity, teaching and learning styles, regionalism, class, family history, and religion.” Diversity requires recognizing the uniqueness of each individual for their differences. Inclusivity is a deliberate approach to allow full and active participation for individuals regardless of their differences.\(^ {15}\) Inclusivity is defined by Shore et al\(^ {16}\) as a “series of institutional practices and cultural norms which promote a high sense of
belongingness of individuals within organizations or institutions, while simultaneously recognizing and valuing individuals’ uniqueness.” Hockings\textsuperscript{17} described inclusivity as “the ways in which pedagogy, curricula and assessment are designed and delivered to engage students in learning that is meaningful, relevant and accessible to all.” An approach that welcomes and encourages cultural and social diversity provides a rich educational experience for all those involved. Therefore, pedagogical and organizational approaches that embed equity and diversity into curricular and classroom practices naturally foster inclusivity at all levels, thus improving the educational experience of all learners.

**Relevance of EDIs to use of SPs**

Health care professionals must be able to provide quality care to patients with diverse cultural and individual characteristics.\textsuperscript{2} Therefore, developing cultural competence during health professions education is crucial for learners. Cultural competence is the ability to respect and adapt the delivery of health care for persons with diverse cultural perspectives and values around health and health care.\textsuperscript{18} Respected authorities such as the Sullivan Commission\textsuperscript{1} and Institute of Medicine\textsuperscript{2} have underlined the necessity of early and continuous integration of cultural competence into health care curricula. An early start to cultural competence education can be an opportunity for health professions students to engage with principles of providing care to diverse populations when building foundational skills such as patient communication.

The use of SPs is one of several teaching methods that can be used to improve trainees’ cultural competence.\textsuperscript{19} SPs can represent diverse traits including gender, age, race, educational level, psychological state, emotional condition, and physical ability. They can also be trained to believably reproduce any abnormal physical findings that are part of the case, therefore allowing health professions students to practice and develop their clinical skills with diverse populations
in a psychologically safe setting. Too, SP encounters can be adapted for different cultural characteristics. In developing trainees’ cultural competence, an SP can be used to embody different elements of diversity, to produce learning outcomes supported by diversity, to demonstrate the sharing of life experiences. To understand these potential approaches, we have developed a theoretical model, presented in Table 1, to help clarify why EDI is relevant to SPP training.

To understand how pre-existing work in the area maps onto this theoretical model, we conducted a narrative review focused on 2 research questions: How do SPPs support EDI principles in training of health professionals? What potential approaches are being used to integrate EDI in SPPs?

**Method**

Our narrative review involved a critical survey of journal articles from health professions literature on the role of EDI in SPPs. We then synthesized and interpreted our findings using a qualitative approach.

**Search strategy and selection criteria**

We searched the current literature in October 2019, using PubMed, SCOPUS, ScienceDirect, and Google Scholar databases. In addition, reference lists of all studies identified were hand searched to find additional articles meeting the inclusion criteria. For all searches, we confined results from January 2000 through October 2019. Keywords used in the search strategies were “standardized patient OR standardized patient program OR simulated patient OR simulation AND equity OR diversity OR inclusivity OR cultural competence.” The complete database search strategy is presented in Supplemental Digital Appendix 1, at http://links.lww.com/ACADMED/B195.
Inclusion and exclusion strategy

Studies that described SP education (either session, curriculum, or program) involving EDI and reported empiric data about its design, delivery, or effectiveness were included. We excluded studies that did not document any description of EDI characteristic(s) in SP education. Studies were screened using a 2-phase process. In the first phase, one author (D.U.Y.) reviewed the titles and abstracts of all identified studies for inclusion. In the second phase, 2 authors (D.U.Y., M.S.) independently assessed the full-text articles using our inclusion and exclusion criteria. Discrepancies were resolved via consensus discussion with other researchers in our author group. The synthesis of the studies was designed to address the role of EDI in SPPs; therefore, the translation of EDI ideas into SPPs over time and the effectiveness of SPPs in implementing EDI-based approaches into their programs were included. Figure 1 shows a flow diagram of our process, adapted from the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines.

Analysis

The authors conducted a simple conventional content analysis of each study in scope of key goals and outcomes and then thematically categorized each study by scope of focus. Each author independently reviewed the full text of each study using conventional content analysis. One author (D.U.Y.) extracted key variables and outcomes of each study using a predefined table. Two authors (A.A., M.S.) verified the tables for accuracy. All researchers independently identified themes, which were clarified through iterative discussion until consensus emerged. Studies were categorized based on themes and EDI model. Resulting themes were reviewed by two authors (A.A., M.S.) and discussed within the research team to ensure coding accuracy.
Results

Out of 117 articles identified, 17 studies met the inclusion criteria (64 were duplicates, 30 did not address EDI directly, 6 did not report data).\textsuperscript{18,23–38} Table 2 presents details about the studies included in the narrative review.

Classifying articles based on themes

Our analysis identified 3 themes: improving cultural competence, effective communication with diverse patients, and highlighting health inequity. Each theme was narratively synthesized based on the following study characteristics: study population, type of articles, educational context or purpose, and educational outcomes.

Improving cultural competence. In reviewing the literature regarding EDI principles in SPPs, we found that the most common theme was related to teaching or improving cultural competence. Nine articles (53\%) were identified that focused on improving cultural competence through SPPs and diverse SP simulations or encounters.\textsuperscript{18,23–30}

The population of studies included first-year,\textsuperscript{18,23} second-year,\textsuperscript{24} and senior nursing students,\textsuperscript{25} as well as medical residents,\textsuperscript{26–28} medical students,\textsuperscript{29} and trainees in various other health sciences disciplines.\textsuperscript{30} Study types included observation,\textsuperscript{25,26,29} innovation,\textsuperscript{24,28,30} and intervention.\textsuperscript{18,23,27} SPPs design included encounters with diverse SPs,\textsuperscript{23–25,30} diversified SP cases,\textsuperscript{26,28} examination using SPs,\textsuperscript{27} and diverse SPs encounters as part of an objective structured clinical examination.\textsuperscript{18,29}

The educational context of some studies examined differences in increased levels of transcultural self-efficacy among students\textsuperscript{23} or improvement in provision of culturally sensitive care.\textsuperscript{18,24,27,28} Other studies evaluated the learning, training, and teaching experience\textsuperscript{30} and examined learners’ cultural sensitivity or awareness.\textsuperscript{25–27,29} Studies that aimed to improve cultural competence
included diversity characteristics such as religion, ethnicity, and gender. Educational outcomes of diverse SPs simulations included positive impact on students’ transcultural self-efficacy perceptions, ability to provide culturally sensitive care, and cultural competence in clinical practice. One study (6%) used diverse SPs cases to assess students’ deficiencies or differences in cultural competence.

Effective communication with diverse patients. Five articles (29%) were identified that focused on effective communication with diverse patients. The population of studies included fourth-year and unspecified level medical students as well as medical residents and senior nursing students. The types of studies were trials, qualitative, intervention, and innovation.

Educational contexts included communicating with linguistically diverse patients, patients who were deaf, and evaluation of students’ competencies of communication with patients who have mild or severe intellectual disabilities. One of the innovation studies was critically examined to evaluate the training and teaching experience of the SPs with intellectual disabilities.

Two studies (12%) used SP encounters to assess communication competence with linguistically diverse patients. Another study documented improved student communication skills with patients who were deaf after repeated SPs sessions. Two studies (12%) reported that using SPs with intellectual disabilities improved students’ communication and clinical approach to patients with intellectual disabilities.

Highlighting health inequity. Three articles (18%) focused on health inequity for LGBTQ patients in medical education. Two were trials and one was a qualitative study. Two studies (12%) reported that using gender-diverse SP encounters improved students’ comfort with
their ability to take sexual history.\textsuperscript{36,37} One study (6\%) concluded that students agreed that the SPs encounters had developed their approach with transgender health.\textsuperscript{38}

**Classifying articles based on EDI model**

To document approaches to EDI relevant to SPs training, studies were categorized based on the EDI model used. Domains of the EDI model consisted of portrayal of diversity, learning objectives supported by diversity, and sharing life experiences (Table 1). These domains are explained below through the characteristics, recruitment, and training of SPs.

**Portrayal of diversity.** Twelve studies (71\%) identified the portrayal of diversity through SPs, inclusive of gender,\textsuperscript{23,24,36,38} religious,\textsuperscript{23,25} cultural,\textsuperscript{18,25,27,29,33} and disability.\textsuperscript{31,32,34} Studies frequently focused on single diversity characteristics, summarizing lessons learned without providing overarching principles to help guide SPPs in translating these lessons to other EDI domains.

Seven of these 12 described the recruitment of SPs,\textsuperscript{23,29,31–34,38} though 5 (29\%) did not include any information about SP recruitment.\textsuperscript{18,23,25,27,36} Recruitment processes were not often described in detail. The general approach involved recruiting SPs who possessed specific diversity characteristics relevant to the learning objectives of the SP scenario.\textsuperscript{29,31–33} Several different recruitment methods were highlighted including advertising within the hospital, working with ethnic and cultural associations, distributing brochures,\textsuperscript{30} recruiting ethnic health care workers as SPs,\textsuperscript{26} and recruiting volunteer students as SPs.\textsuperscript{33} One of the studies stated that SPs were recruited through the existing pool of SPs at the institution,\textsuperscript{23} and another recruited actors with prior SP experience.\textsuperscript{38}
When we examined the studies included in this narrative review, we found little direction on the processes around including and training diverse SPs for these roles. Seven studies (41%) in this group described the content generation of the training involved for SPs,\textsuperscript{23,24,29,31–34} while 5 studies (29%) did not include any information about training SPs.\textsuperscript{18,25,27,36,38} The general approach involved informing SPs about the case followed by portrayal, feedback, and evaluation.\textsuperscript{23,24,29,31–33}

Training SPs required an understanding of the unique needs of specific SPs recruited. For example, Thomas et al\textsuperscript{31} put together a training team for adult SPs with intellectual disabilities consisting of a speech and language therapist, the education coordinator of a theatre company, a training adviser, and 2 psychiatrists specializing in intellectual disabilities.

In addition to recruiting and training SPs for diverse roles, it is also necessary to incorporate the culture, health beliefs, and experiences from the represented groups when developing appropriate scenarios. Rutledge et al\textsuperscript{39} noted that the training and financial resources needed to develop the scenarios, create evaluation tools, and coordinate the actual experiences can act as a barrier to incorporating EDI-based SP interactions into a curriculum. For example, Thacker et al\textsuperscript{32} stated that trainers spent considerable time training SPs with intellectual disabilities how to halt the interview when they had difficulty understanding. Additionally, Thomas et al\textsuperscript{31} noted that SPs with intellectual disabilities can experience anxiety and stress during encounters. They pointed out that programs working with SPs with intellectual disabilities must include training to help SPs manage these feelings.

**Learning objectives supported by diversity.** Five studies (29%) identified the use of learning objectives supported by diversity through SPs.\textsuperscript{26,28,30,35,37} These studies were constructed around one or more learning objectives that incorporated gender,\textsuperscript{37} cultural,\textsuperscript{26,28,30} and linguistic
characteristics.\textsuperscript{30,35} The general approach involved recruiting SPs who possessed specific diversity characteristics relevant to the learning objectives of the SP scenario. We found no systematic knowledge synthesis in place to guide educators, administrators, and curricular leads. When examining these studies for descriptions of recruitment of SPs, 3 studies (18\%) described the recruitment of SPs\textsuperscript{26,30,35} and 2 (12\%) did not.\textsuperscript{28,37} Four out of the 5 studies (24\%) included information about SP training (Table 2).\textsuperscript{26,28,30,35}

**Sharing life experiences.** We did not find descriptions of SPs providing lived experience as a source of EDI learning in any of the studies we identified.

**Discussion**

In this narrative review we have presented a framework that includes EDI principles for teaching cultural competence and care of diverse populations through SPPs, followed by a literature review and thematic analysis of the literature regarding EDI in SPPs.

SPs encounters and case design can be constructed around a learning objective involving particular characteristics (e.g., obtaining a clinical history based on the sexual concerns of a transgendered person). The application of EDI-based SP encounters requires standardized descriptions and training for accurate portrayal of a targeted set of diversity characteristics; this is integral both to the authenticity of an SP scenario or interaction and to meeting learning objectives. Typically, diversity characteristics are carefully scripted with the express aim of reliably reproducing these characteristics in a standardized way. Just as the diversity of the portrayal determined may be different according to the curriculum of the educational program, the educational program may also vary according to the population needs in the local context. For example, Ewen et al\textsuperscript{40} examined 3 SPPs within medical faculties in Australia, the United States, and New Zealand. All 3 programs were developed with a common purpose; however, due
to the different geographic locations of the countries, the SPPs conducted SP education and scenarios with patient groups of different ethnic origins.

Whether SPs must themselves possess the diversity characteristic(s) addressed in the EDI learning objective is controversial. SPs with the characteristic relevant to a learning objective may have an outward appearance or lived experience that can contribute to fidelity of the portrayal, which may be challenging or socially unpalatable to achieve through training alone. However, recruitment for diversity characteristics runs the risk of selecting stereotypes, limiting inclusivity, and selecting SPs with personal agendas misaligned with the goals of standardization or particular learning objectives. Regardless of the recruitment strategy, SP simulations involving a particular diversity characteristic require standardized descriptions, training, and portrayal of a targeted set of characteristics. The selection of SPs should be an inclusive process and consistent with the goals of integrating EDI into SPPs. Determining the characteristics of the local population can make it easier to recruit SPs or volunteers and may require different and varied recruitment techniques for various groups. Reaching out to diverse communities may help in identifying individuals who would be appropriate to play SP roles. Clinicians with connections to the community may be able to help establish those contacts. Varied approaches could include written/visual and social media, brochures, or notice board announcements to assist with recruitment.

SP encounters can also be constructed around learning objectives that involve diversity more generally (e.g., conduct precordial examinations in a diverse patient population). These types of learning objectives seek diversity in an unscripted manner. To achieve this type of objective, recurrent practice opportunities with various SPs are required. These objectives allow an EDI approach to providing SPs portrayals where the role standardization is relaxed to allow
unscripted diversity characteristics to be a background component of the educational experience. These characteristics are not germane to the learning objectives of the scripted scenario but fit within a larger learning objective of acquiring and practicing clinical skills in diverse populations. As diversity characteristics are an unscripted component of the session, facilitators and SPs are encouraged to discuss, before the start of the session, how to optimize the inclusion of diversity to meet session objectives. Another important issue is that SPs must be able to generate the diversity characteristic(s) with sufficient fidelity to meet the learning objectives, which can exclude SPs who are uncomfortable or unable to provide characteristics (e.g., taking a clinical history based on the sexual concerns of a transgendered person). Training and feedback are important to this process.

One of the approaches used to analyze human diversity is intersectionality, which recognizes that characteristics such as age, gender, sexual orientation, and cultural identity are not autonomous but intersect to create a life experience and perspective. Some learning outcomes are best achieved by persons with specific lived experiences as a result of the intersectionality of their diversity characteristics, health, and life experiences. The application of sharing life experiences through SP portrayal typically seeks persons specifically for their relevant intersectionality. This often involves identifying persons with specific characteristics with the express intent of sharing their lived experience, perspective, or role portrayal for its educational value with health care trainees. The selection, training, and safeguards required are uniquely different for SPs who portray and those who share. For example, persons selected for these roles should have an intrinsic motivation aligned with curricular learning objectives and require the provision and maintenance of an umbrella of psychological safety that promotes sharing in an educational and safe way for all involved. Additionally, if certain SPs can offer a particular
learning experience, then sharing it universally with all students in a course or program is important. The content may need to be standardized with a checklist or scenario to assure a universal learner experience.

Many articles identified through our initial literature search did not address EDI directly, suggesting that there can be broad use of these terms without specific focus on them. We did not find any translational results obtained in a simulated setting that were then assessed in a clinical setting. Most research was descriptive, with SPs portraying scripted cases incorporating diversity-focused learning objectives. Relatively few studies involved integrating scripted SP diversity into clinical skills training, and none used SPs to directly share diversity-related life experiences in simulation. Although the current literature focuses on increasing students’ cultural awareness or competence, teaching and improving communication with diverse patient groups, and highlighting health inequity for LGBTQ patients, our narrative review revealed relatively little research focused on integrating EDI broadly into SPPs.

Almost all the studies we included addressed individual context areas, whereas descriptions of systematic approaches in EDI across the entire program were infrequent. Interestingly, there were no reported evaluations of systematic integration of EDI within SPPs. The role SPPs play in facilitating content generation versus the role in setting the agenda needs to be considered. Although SPPs have a responsibility to offer EDI-based SP encounters or cases to program users, faculty development programs should ensure faculty educators are prepared to develop and facilitate EDI-based learning using SPs. Identifying opportunities for EDI integration is a shared responsibility for curricular leads, faculty, and SPP administrators. All need to be engaged in prioritizing and conceptualizing what learners and learning experiences are most closely associated with curricular objectives. A contextual approach is dependent on various settings.
such as local (e.g., access to enthusiastic volunteers), institutional (e.g., funding and training models, commitment to simulation), discipline/profession, and national (e.g., assessments, scale) settings. As an institutional approach, faculty development programs should develop long-term partnerships with organizations and communities supportive of EDI, as well as curricular leads and SPPs.

Limitations
This narrative review was restricted to studies that reported experiences using SP for EDI exposure and training where some attempt was made to measure and report on the design, delivery, and/or effectiveness of the session, and may not reflect the totality of the descriptions of SPPs for EDI purposes available. The articles we included had different outcome measures, such as SP feedback or assessment, learner feedback, thematic analysis, and evaluation of innovative experience. Therefore, the effectiveness of the outcomes of the studies was not comparable. Additionally, we reviewed only English-language literature. Finally, our review did not include a survey of the literature on patient partner programs, an alternate mechanism for achieving learning outcomes related to EDI.

Conclusions
Here we have developed a conceptual framework of how EDI can be integrated into SPPs and provide a narrative review of the available literature relating to the role of EDI in SPPs. Most studies we identified reported improved learner cultural, communication, or clinical competency after sessions with SPs from diverse backgrounds; however, more research is needed in this regard to provide additional evidence for the effectiveness and outcomes of incorporating EDI-based SPPs into health professions education. Opportunities for future research include comprehensive assessment and evaluation of various conceptual approaches to integrating EDI
into SPPs, including describing the relative benefits in learner behaviors, skills, and attitudes, as well as the costs associated with implementing varying strategies. Patient outcomes and translational simulation research can be helpful in describing the importance of the role of EDI in SPPs. Finally, additional research is needed to identify and describe best practices for developing EDI-based programs and to develop a curriculum based on cultural competence.
References


Figure Legend

Figure 1

PRISMA (Preferred Reporting Items for Systematic Reviews and Meta Analyses)\textsuperscript{21} flow diagram, from a narrative review of the literature on equity, diversity, and inclusivity in standardized patient programs, 2000–2019. Abbreviation: EDI, equity, diversity and inclusivity; SPP, standardized patient program.
### Table 1
Model of Equity, Diversity, and Inclusivity in Standardized Patient Programs, Developed From a Narrative Review of the Literature, 2000–2019

<table>
<thead>
<tr>
<th>Element</th>
<th>Portrayal of diversity</th>
<th>Learning objectives supported by diversity</th>
<th>Sharing life experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td>Develop a specific cultural competence related to diversity characteristic(s) and health care task</td>
<td>Develop general cultural competence related to a broadly applicable health care task</td>
<td>Develop cultural competence through informed perspective of a group identifying with specific diversity characteristic(s)</td>
</tr>
<tr>
<td><strong>Selection</strong></td>
<td>Inclusive of all able to portray required diversity characteristic(s) with acceptable fidelity</td>
<td>Inclusive and representative of the broad population willing to facilitate the general learning objective</td>
<td>Specific intersectionality between diversity characteristics, health, and life experiences with the ability to communicate this experience for educational value</td>
</tr>
<tr>
<td><strong>Scripting</strong></td>
<td>Diversity characteristic</td>
<td>Health care task</td>
<td>Environment to promote psychological safety and reflection to achieve learning objective</td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td>Role portrayal</td>
<td>Learning objective</td>
<td>Learning objective</td>
</tr>
<tr>
<td></td>
<td>Comfort in integrating self-identified diversity characteristics</td>
<td>Communicating lived experience for educational benefit</td>
<td></td>
</tr>
<tr>
<td><strong>Requirements</strong></td>
<td>Portrayal oversight and quality control</td>
<td>Facilitator—standardized patient collaboration on optimizing disclosed diversity characteristics on learning objective</td>
<td>Alignment of intrinsic motivation of the patient partner and curricular objectives Psychological safety</td>
</tr>
</tbody>
</table>
Table 2

Description of 17 Included Studies of Standardized Patient Programs, Ordered by Themes and Model of Equity, Diversity, and Inclusivity, From a Narrative Review of the Literature, 2000–2019

<table>
<thead>
<tr>
<th>Theme and study</th>
<th>EDI model for SPPs</th>
<th>EDI characteristic of SPs</th>
<th>Recruitment and training of SPs</th>
<th>Study population (no.)</th>
<th>Type of article</th>
<th>Educational context or purpose</th>
<th>Educational outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving cultural competence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Ozkara San, 2019\(^{23}\) | Portrayal of diversity | Religiously and gender diverse | ● Recruitment: not described  
● Training: 2 SPs were trained on 5 separate sessions of 8 hours about the case, portrayal, feedback, and evaluation | First-year nursing students (53) | Intervention | To explore transcultural self-efficacy perceptions on the use of diverse SPs simulation in nursing students | Diverse SPs simulation had positive effect on transcultural self-efficacy perceptions |
| Ozkara San et al, 2019\(^{24}\) | Portrayal of diversity | Gender diverse | ● Recruitment: 2 SPs were recruited through the SPs pool of the institution  
● Training: SPs were trained about the case, portrayal, feedback, and evaluation | Second-year nursing students (32) | Innovation | To explore students’ ability in providing culturally sensitive care on the use of transgender SPs simulation in nursing students | Transgender SPs simulation had positive effect on ability to provide culturally sensitive care |
| Livesay et al, 2017\(^{30}\) | Learning objectives supported by diversity | Age, gender, ethnicity, language, and religiously diverse | ● Recruitment: 30 SPs were recruited through the information systems of the networks of 2 nursing, medicine, paramedic, physiotherapy, and social work | Authors presented important issues to develop diverse SPs program. They pointed that the rehearsal | Innovation | To evaluate the culturally and linguistically diverse SPs project experience | |

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27
<table>
<thead>
<tr>
<th>Year</th>
<th>Authors</th>
<th>Setting</th>
<th>Participants</th>
<th>Learning objectives supported by diversity</th>
<th>Portrayal of diversity</th>
<th>Recruitment</th>
<th>Training</th>
<th>Innovation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Paroz et al</td>
<td>Hospitals, ethnic and cultural associations, and advertising and brochures</td>
<td>Medical residents (unspecified)</td>
<td>Training: SPs were trained about the case, portrayal, feedback, and evaluation</td>
<td>Ethnically diverse with a risky sexual behavior; ethnically diverse with a somatoform disorder</td>
<td>Recruitment: not described</td>
<td>Training: SPs were trained by interdisciplinary team; SPs’ own socio-cultural backgrounds and differences were considered in 2 hours training</td>
<td>Innovation</td>
<td>To evaluate the applicability of cultural competence training on the use of diverse SPs. Satisfaction levels of residents were also measured. Residents stated that diverse SPs simulation could positive effect on their cultural competence in clinical practice.</td>
</tr>
<tr>
<td>2014</td>
<td>Ndiwane et al</td>
<td>Ethnically diverse</td>
<td>First-year nursing students (29)</td>
<td>Recruitment: not described</td>
<td>Ethnically diverse</td>
<td>Recruitment: not described</td>
<td>Training: not described</td>
<td>Intervention</td>
<td>To explore teaching cultural competence with using ethnically diverse SPs encounter</td>
</tr>
<tr>
<td>2012</td>
<td>Grossman et al</td>
<td>Ethnically and religiously diverse</td>
<td>Senior nursing students (U.S. 48, Norwegian 25)</td>
<td>Recruitment: not described</td>
<td>Ethnically and religiously diverse</td>
<td>Recruitment: not described</td>
<td>Training: not described</td>
<td>Descriptive</td>
<td>To explore U.S. and Norwegian nursing students’ cultural awareness on the use of SPs simulation; satisfaction levels of students were also measured</td>
</tr>
<tr>
<td>Study</td>
<td>Portrayal of diversity</td>
<td>Ethnically diverse</td>
<td>Intervention</td>
<td>Diverse SPs case had improved residents’ cultural sensitivity and communication skills</td>
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<tr>
<td>Chun et al, 2012[27]</td>
<td>Portrayal of diversity</td>
<td>Ethnically diverse</td>
<td>Recruitment: not described Training: not described Medical residents (24)</td>
<td>To explore core competencies of cross-cultural care on the use of diverse SPs examination</td>
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<tr>
<td>Buenconsejo-Lum and Maskarinec, 2004[26]</td>
<td>Learning objectives supported by diversity</td>
<td>Ethnically diverse</td>
<td>Recruitment: actual ethnically diverse health care workers worked as SPs Training: SPs were especially informed to respond to the participants’ approach and questioning in their own cultural ways Medical residents (unspecified)</td>
<td>Descriptive To explore the learning experience emphasizing cross-cultural sensitivity the use of diverse SPs encounters Diverse SPs case had improved residents’ cultural sensitivity and communication skills</td>
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<tr>
<td>Robins et al, 2001[29]</td>
<td>Portrayal of diversity</td>
<td>Ethnically diverse</td>
<td>Recruitment: 6 ethnically diverse individuals were recruited Training: SPs were trained for 10 hours about the case, portrayal, feedback, and evaluation Medical students (71, level unspecified)</td>
<td>Descriptive To evaluate students’ awareness and sensitivity to diverse health beliefs the use of diverse SPs encounters Students’ deficiencies or differences of cultural competence are assessable using the diverse SPs case</td>
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</tbody>
</table>

**Effective communication with diverse patients**

<table>
<thead>
<tr>
<th>Study</th>
<th>Learning objectives supported by diversity</th>
<th>Linguistically diverse</th>
<th>Intervention</th>
<th>Competence of communication with linguistically diverse patient are measurable using the diverse SPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinto et al, 2019[35]</td>
<td>Learning objectives supported by diversity</td>
<td>Linguistically diverse</td>
<td>Recruitment: 4 native Spanish speakers were recruited Training: SPs were trained for 2 hours by Medical residents (12)</td>
<td>To evaluate communication with linguistically diverse patient the use of diverse SPs encounters Competence of communication with linguistically diverse patient are measurable using the diverse SPs</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Study</th>
<th>Portrayal of Diversity</th>
<th>Disability</th>
<th>Methodology</th>
<th>Intervention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yuksel and Unver, 2016&lt;sup&gt;34&lt;/sup&gt;</td>
<td>Portrayal of diversity (deafness)</td>
<td>Senior nursing students (22)</td>
<td>Qualitative</td>
<td>To evaluate communication with deaf patients the use of diverse SPs encounters</td>
<td>Repeating diverse SPs simulation had improved students’ learning of communication skills with deaf patients</td>
</tr>
<tr>
<td>Thomas et al, 2014&lt;sup&gt;31&lt;/sup&gt;</td>
<td>Portrayal of diversity (intellectual disability)</td>
<td>Fourth-year medical students (47)</td>
<td>Intervention</td>
<td>To evaluate students’ competencies of communicate with mild and severe intellectual disabilities the use of SPs with intellectual disabilities</td>
<td>Using SPs with intellectual disabilities were improved the students’ communication and clinical approach to patients with intellectual disabilities</td>
</tr>
<tr>
<td>Thacker et al, 2007&lt;sup&gt;32&lt;/sup&gt;</td>
<td>Portrayal of diversity (intellectual disability)</td>
<td>Medical students (unspecified)</td>
<td>Innovation</td>
<td>To evaluate the SPs programme with mild and severe intellectual disabilities</td>
<td>Using SPs with intellectual disabilities were improved the students’ communication and clinical approach to patients with intellectual disabilities</td>
</tr>
</tbody>
</table>
| Zabar et al, 2006<sup>33</sup> | Portrayal of diversity | Culturally and linguistically diverse | Recruitment: 2 linguistically diverse individuals were recruited  
Training: SPs were trained for 2 hours about the case, portrayal, and evaluation | Medical residents (76) | Innovation | To evaluate communication with linguistically diverse patient the use of diverse SPs encounters | Competence of communication with linguistically diverse patient are measurable using the diverse SPs encounters |
|-------------------------------|------------------------|-------------------------------------|---------------------------------------------------------------------------------|----------------|-----------|---------------------------------|---------------------------------------------|

### Highlighting health inequity

| Mayfield et al, 2017<sup>37</sup> | Learning objectives supported by diversity | Gender diverse | Recruitment: not described  
Training: not described | Second- and early third-year medical students (87) | Qualitative | To explore the learning experience emphasizing health disparities the use of diverse SPs-based module to take sexual history from patients of all gender identities | Using gender diverse SPs encounters were improved the students’ comfort with their ability to take sexual history |
|-----------------------------------|------------------------------------------|----------------|---------------------------------------------------------------------------------|----------------|-----------|---------------------------------|---------------------------------------------|
| Underman et al, 2016<sup>38</sup> | Portrayal of diversity | Gender diverse | Recruitment: actors with experience as SPs were recruited  
Training: not described | Fourth-year medical students (64) | Trial | To explore the learning experience emphasizing health disparities the use of diverse SPs case on transgender health | Students agreed that the SPs encounters had developed their approach with transgender health |
| Lee et al, 2014<sup>36</sup> | Portrayal of diversity | Gender diverse | Recruitment: not described  
Training: not described | First- and second-year medical students (156) | Trial | To explore the use of diverse SPs-based sexual history module to take sexual histories | Using gender diverse SPs encounters were improved the students’ confidence and performance of taking sexual history |

Abbreviations: EDI, equity, diversity, and inclusivity; SPP, standardized patient program; SP, standardized patient.
Publications identified from database (PubMed, SCOPUS, ScienceDirect, and Google Scholar) 
(n = 117)

Duplicate records excluded (n = 64)

Publications screened 
(n = 53)

Full-text articles excluded (n = 30)
- Did not address directly EDI characteristic(s) related to the SP education (n = 26)
- Did not contain data related to the SP education design, delivery, or effectiveness focused on EDI (n = 4)

Publications assessed for eligibility 
(n = 23)

Full-text articles excluded (n = 6)
- Did not provide sufficient data related to the SP education design, delivery, or effectiveness focused on EDI (n = 6)

Studies included in review 
(n = 17)

Figure 1