

NURSING STUDENTS' PERSPECTIVES: KNOWLEDGE AND ATTITUDES IN PROVIDING CARE TO PEOPLE WITH DISABILITIES IN PUNJAB, PAKISTAN

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Abstract

Purpose: To explore the knowledge, attitudes, and comfort level of nursing students in caring for people with disabilities (PWDs). *Method:* A total of 110 nursing students were recruited from Shalamar Nursing College, Lahore. A pre-post course survey was administered to collect both quantitative and qualitative data. The educational intervention consisted of a focused lecture addressing disability health care and an authentic learning encounter with a simulated patient consultant living with a disability. The surveys assessed students' knowledge, attitudes, and perceived competence before and after the intervention. *Results:* A total of 110 nursing students completed pre- and post-course surveys, and results showed positive shifts across all five domains, with 41% of survey items significantly improved. The most notable gain was in working with people with disabilities in a clinical setting, which increased significantly from 3.21 (SD = 0.58) to 3.85 (SD = 0.51; $p = .000$), while positive impressions of self-concepts of PWDs also improved significantly from 3.12 (SD = 0.65) to 3.41 (SD = 0.63; $p = .019$). *Qualitative themes supported these findings, revealing a shift from lack of knowledge, fear, and communication barriers toward greater professional responsibility, patient-centered care, and advocacy for people with disabilities. Conclusion:* Educational interventions combining lectures with authentic encounters can effectively enhance nursing students' competence, attitudes, and advocacy skills in providing care for PWDs. Such curricular strategies help prepare future nurses to deliver inclusive, patient-centered care.

INTRODUCTION

Nursing students' preparedness to care for people with disabilities (PwD) is a pressing educational and health-equity concern in Punjab, Pakistan, where recent analyses show notable district-level clustering of disability and clear urban-rural and sex differentials (Shaikh, 2023). Globally, around 15% of the population lives with disability, and PwD

consistently face barriers in accessing equitable, culturally competent healthcare—barriers that are often intensified by providers' limited training and implicit attitudes (World Health Organization [WHO], 2011). In this context, nursing education assumes a pivotal role: it shapes knowledge, attitudes, and confidence to deliver inclusive, person-centred

care to PwD across hospital and community settings (Edwards & Hekel, 2021).

A substantial international literature documents that while many nursing students express generally positive views toward disability, attitudes vary and are influenced by prior contact, curricular exposure, and stage of training (Uysal et al., 2014; Polikandrioti et al., 2020; Yilmaz, 2024). Cross-disciplinary evidence among health-profession undergraduates similarly reveals attitudinal heterogeneity and clusters ranging from highly inclusive to more ambivalent profiles, underscoring the need for structured, developmentally appropriate learning (Bania et al., 2023). Reviews focused on nursing curricula consistently identify gaps in disability-specific content and experiential learning opportunities, including limited integration of disability within simulation and clinical placements (Edwards & Hekel, 2021; San, 2022).

Evidence for targeted educational strategies is encouraging: contact-based education with people who have lived experience and high-quality simulation are associated with more favourable attitudes, improved self-efficacy, and reduced stigma, with effects observed across multiple health-training contexts (Tucker et al., 2020; Zhang et al., 2022; San, 2022). For Punjab, embedding such approaches—co-designed with PwD—into undergraduate nursing programs could strengthen students' knowledge and attitudes while aligning with equity goals and local epidemiologic realities (Shaikh, 2023). Together, these insights motivate context-specific curricular innovations that prioritize experiential learning, reflective practice, and sustained community engagement to advance disability-competent nursing care in the province (Edwards & Hekel, 2021; WHO, 2011).

1. Research Methodology

This study was conducted at Shalamar Nursing College, Lahore. The nursing students enrolled in the Bachelor of Nursing were invited to participate. Participation was voluntary, and students were informed that their involvement would not influence their course grades. A total of 110 students completed the pre- and post-course surveys.

Following completion of the pre-course survey, all students attended a lecture titled “Disability:

Awareness to Competency.” The lecture addressed key concepts including major definitions and models of disability, health status of people with disabilities, case studies illustrating barriers to healthcare access, social determinants of health affecting individuals with disabilities, the International Classification of Functioning, Disability, and Health (ICF), and nursing competencies required for disability-competent care. The adults who were living with various disabilities (e.g., spinal cord injury, spina bifida, developmental disabilities) voluntarily engaged and they shared their lived experiences. Each clinical group of approximately eight students interviewed an adult, following a structured health history format to ensure consistency in data collection.

The study utilized a cross-sectional, pre-post course survey design. Data were collected using the Medical Student Attitudes Toward Persons with Disabilities instrument, adapted with permission to reflect nursing students. The instrument consists of 30 items with dichotomous and Likert-scaled responses and requires about 15 minutes to complete. It is divided into four sections: demographics, factual experience, beliefs about people with disabilities, and responses to clinical scenarios. Previous psychometric testing demonstrated good internal consistency, with a Cronbach's alpha coefficient of 0.857, and exploratory factor analysis supported the categorization of items into five domains of attitudes and comfort levels. Survey data were collected through a structured interview guide over the course of four months. Quantitative data were analyzed using two-tailed paired-sample t-tests with a significance level of $\alpha < .05$, while qualitative responses were examined through thematic analysis independently conducted by four researchers.

2. Results

2.1 Quantitative Data

Table 1. Survey Results by Domain (N = 110)

Domain	Pre-Mean (SD)	Post-Mean (SD)	Mean Difference	p-value
Comfort interacting with PWDs	3.45 (0.62)	3.61 (0.59)	+0.16	0.081
Working with PWDs in a clinical setting	3.21 (0.58)	3.85 (0.51)	+0.64*	0.000*
Negative impressions of self-concepts	2.98 (0.71)	3.10 (0.68)	+0.12	0.108
Positive impressions of self-concepts	3.12 (0.65)	3.41 (0.63)	+0.29*	0.019*
Conditional comfort with PWDs	3.30 (0.60)	3.47 (0.55)	+0.17	0.067

Table 1 summarizes the pre- and post-course survey findings of 110 nursing students across five domains related to knowledge and attitudes toward people with disabilities (PWDs). Overall, all domains showed positive shifts, with two domains demonstrating statistically significant improvements. Comfort interacting with PWDs showed a small improvement in mean scores from 3.45 (SD = 0.62) to 3.61 (SD = 0.59), a mean difference of +0.16. Although the change was not statistically significant ($p = 0.081$), the trend indicated that students felt more at ease in general interactions with PWDs after the intervention. Specifically, one item within this domain—comfort in interacting with a person with an intellectual disability—showed a significant gain.

The most substantial improvement was observed in the domain of Working with PWDs in a clinical setting, which increased from a mean score of 3.21 (SD = 0.58) to 3.85 (SD = 0.51). The mean difference of +0.64 was highly significant ($p = 0.000$). All six items in this domain, related to clinical scenarios of patients with and without disabilities, demonstrated significant gains. Students reported higher levels of confidence in identifying patient roles, performing physical assessments, and developing nursing care plans, reflecting enhanced readiness to apply disability-competent clinical practice.

Negative impressions of self-concepts of PWDs shifted positively from 2.98 (SD = 0.71) to 3.10 (SD = 0.68), with a mean difference of +0.12. However, this change did not reach statistical significance ($p = 0.108$). The results suggest that while students' perceptions became more positive—recognizing that PWDs generally do not feel sorry for themselves, resent others, or expect special treatment—these changes were modest.

In contrast, Positive impressions of self-concepts of PWDs showed a significant improvement, rising

from 3.12 (SD = 0.65) to 3.41 (SD = 0.63), a mean difference of +0.29 ($p = 0.019$). Items contributing to this improvement reflected stronger agreement that PWDs are not ashamed of their disability and should be cared for in primary healthcare offices rather than in specialized clinics, suggesting an improved understanding of disability inclusion within general healthcare settings.

Finally, Conditional comfort with PWDs increased from 3.30 (SD = 0.60) to 3.47 (SD = 0.55), a mean difference of +0.17, though not statistically significant ($p = 0.067$). Students expressed a greater sense of self-comfort when working with individuals with intellectual disabilities, reflecting a positive but nonsignificant trend toward greater acceptance.

In summary, all domains demonstrated positive movement, with 41% of survey items showing statistically significant improvement. These findings highlight that the combined lecture and simulation intervention effectively enhanced nursing students' knowledge, attitudes, and confidence in caring for people with disabilities, particularly in clinical practice and perceptions of self-concept.

2.2 Qualitative Data

2.2.1 Pre-Course Themes

The qualitative findings reinforced the quantitative results, highlighting specific barriers and attitudinal challenges that nursing students faced in caring for people with disabilities (PWDs).

Lack of knowledge and experience was the most prominent theme, directly aligning with the relatively modest improvements in the domain of comfort interacting with PWDs. Many students reported that they had never interacted with a person with a disability before and expressed uncertainty about applying their limited clinical knowledge. Comments such as *"I normally do not interact with people with disabilities"* and *"We have not had enough practice on*

patients with disabilities” reflected students’ initial discomfort and lack of exposure, consistent with the pre-survey findings that showed low confidence in this area.

A second theme was lack of general nursing knowledge and clinical experience, which echoed the early stage of students’ training, as the health assessment course was one of their first clinically based experiences. Students noted difficulties in formulating nursing plans, stating *“I lack experience”* and *“I am not sure I could make a nursing plan for both scenarios.”* These perceptions paralleled the quantitative results showing significant gains in the working with PWDs in a clinical setting domain. The post-survey improvements suggested that the lecture and simulation helped students translate theoretical concepts into practical confidence.

The theme of fear of causing harm to or being harmed by patients also emerged. Students described apprehensions about injuring the patient or themselves during physical examinations of individuals with spasticity or in wheelchairs. Illustrative statements included *“I would be afraid I would hurt the man in the wheelchair”* and *“I would proceed with more care and caution.”* This concern corresponded with initial low scores in the clinical-setting domain but also highlighted why post-intervention improvements were significant, as students reported feeling more prepared and careful when approaching such scenarios.

Communication difficulties were another recurring theme, particularly in relation to patients with speech impairments. Students worried about misinterpreting patient speech or family members speaking on behalf of the patient. Such concerns complemented the quantitative findings in the conditional comfort and positive impressions of self-concepts domains.

Finally, students expressed specific discomforts with physical disabilities and contextual factors, including spasticity, jerking movements, garbled speech, and gender-related issues during examinations. For example, one student noted, *“I would be a bit more timid in my examination of the man in the wheelchair because I would be afraid to hurt him.”*

2.2.2 Post-Course Themes

While several pre-course themes such as lack of knowledge, fear of harm, and communication difficulties persisted, new themes emerged in the post-survey data. These themes reflected a shift in students’ perspectives from self-doubt and personal limitations toward a more patient-centered and professional orientation, complementing the quantitative findings that showed significant improvement in working with PWDs in a clinical setting and positive impressions of self-concepts of PWDs.

Fear of not meeting patient needs emerged as the first new theme. Rather than focusing solely on their own lack of skills, students began to articulate concerns about the quality of care they could provide and the importance of effectively addressing the needs of patients with disabilities. Illustrative responses included: *“I would want better training to better handle Scenario B”* and *“I want to be able to give him the best possible care.”* These comments align with the significant gains in clinical-setting competence, as students demonstrated growing awareness of their professional responsibility to ensure safe and effective care.

A second new theme centered on advocacy and patient autonomy. Students recognized the importance of advocating for patients with disabilities, particularly in situations where communication barriers might allow others to speak on the patient’s behalf. For example, one student expressed, *“I am worried that the woman in scenario B would try to speak for the man instead of allowing him to speak for himself.”* Others emphasized vigilance for signs of abuse or discomfort and the responsibility to ensure patients received proper treatment. This theme closely supports the quantitative improvements in positive impressions of self-concepts of PWDs, as students acknowledged the agency, dignity, and rights of patients with disabilities.

3. Discussion

The findings of this study demonstrate that structured educational interventions, including targeted lectures and simulation encounters with standardized patient consultants, can significantly enhance nursing students’ knowledge, attitudes, and

confidence in caring for people with disabilities (PWDs). The significant improvement in the domain of working with PWDs in a clinical setting reflects that experiential learning provides opportunities for students to develop critical clinical competencies, a result consistent with prior studies emphasizing the role of simulation in improving disability-related care skills (Aaberg, 2012; Carroll et al., 2018). Simulation-based exposure enables students to bridge the gap between theoretical understanding and applied practice, thereby increasing clinical confidence (Coyle et al., 2019).

Qualitative findings further reinforced these quantitative results by highlighting the shift from self-doubt to patient-centered care, particularly through themes of advocacy and fear of not meeting patient needs. This shift resonates with the broader literature suggesting that early, authentic engagement with PWDs fosters empathy, advocacy, and recognition of patient autonomy (Roh et al., 2018; Walker & Mann, 2016). Students' concerns about communication barriers echoed previous evidence that poor communication remains a central obstacle in disability care, underscoring the importance of training future nurses in alternative communication strategies and patient-centered dialogue (Iezzoni, 2016; Phelan et al., 2020).

The significant improvement in positive impressions of self-concepts of PWDs also illustrates how educational interventions challenge stereotypes and stigma. Similar studies have found that structured disability education reduces misconceptions, reshapes student attitudes, and enhances inclusivity within healthcare systems (Matthews et al., 2015; Smeltzer et al., 2018). Importantly, the persistence of some pre-course themes such as fear of harm and lack of clinical experience suggests the need for continuous reinforcement through longitudinal disability curricula, as one-off interventions, though impactful, may not achieve sustained changes without ongoing exposure and integration (Jenerette et al., 2016; Smith et al., 2017).

4. Conclusion

This study suggests that integrating structured lectures and simulation-based encounters into nursing curricula can significantly enhance students' knowledge, attitudes, and confidence in caring for

people with disabilities. Sustained disability-focused education and repeated clinical exposure are recommended to reinforce these gains and ensure long-term competency in inclusive nursing practice.

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