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# **A Multi-Site Simulation Study Comparing Attitudes and Comfort Level of Undergraduate Nursing Students Interacting with People with Disability**

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## **Objectives:**

**Upon completion of this session, the learner will be able to:**

- **Identify strategies to integrate simulations using standardized patients with disabilities (SPWD)**
- **Discuss the outcomes of the simulations with SPWD on nursing students' interactions with and perception of people with disability.**

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# Background and Significance

- **One billion people worldwide (World Bank, 2017) and 60 million people in the US live with a disability (CDC, 2017).**
- **Evidence demonstrates that**
  - **Nursing programs and textbooks devote little attention to PWD (Smeltzer et al., 2005; 2010; 2012; 2014)**
  - **Nursing care of persons with disabilities is compromised and of poor quality (2012)**

# Background and Significance...

Lack of attention to disability in nursing education and compromised quality of nursing



Motivation for development of simulation-based experiences (SBE) with standardized patients with disability (SPWD)



Efforts have been single site studies with VU students



No differences on pre- to post-test measures *but* very positive responses from students

# Background and Significance...

**Test outcomes at non-VU sites**



**Second study site added because of interest of non-VU nursing faculty member and our goal of multi-site study**



**Purpose: to compare nursing students' attitudes and comfort with interacting with PWD among students who participated in a program of simulation with SPWD across the curriculum and students who did not participate in the SBEs.**

# Study Hypothesis

## Study Hypothesis:

- There will be a difference in nursing students' attitudes towards and comfort with interacting with PWD for students who participated in a simulation with SPWDs compared to students who did not participate in these simulations.

# Study Methods

- **Design: Post-test only comparative study**
- **Sample and setting:**
  - **Two private Catholic universities**
  - **Final semester students in a baccalaureate nursing programs (4-year and accelerated)**
- **Instruments:**
  - **Attitudes Towards Disabled Persons (ATDP) Scale (Yuker, Block, & Young, 1966; 1970)**
  - **Interactions with Disabled Persons (IDP) Survey (Gething, 1991) were used to measure attitudes and comfort interacting with PWD.**

# Overview of Instruments

- **Attitudes Towards Disabled Persons (ATDP-A) Scale**
  - 30-item instrument measuring attitudes toward PWD
  - Test-retest reliabilities range from 0.71 to 0.83; construct validity revealed a unidimensional construct of a general attitude towards disability.
- **Interactions with Disabled Persons (IDP) Survey**
  - 20-item instrument measures emotions, motivations, and reactions associated with actual or anticipated social interactions with PWD
  - Cronbach's alpha range from 0.74 to 0.86

# Intervention

<b>Semester</b>	<b>Simulation Scenario</b>
<b>1<sup>st</sup> semester Freshman</b>	<b>Video case scenario with a 25-year old SPWD (in WC with T-7 paralysis)</b>
<b>2<sup>nd</sup> semester Freshman</b>	<b>Capstone scenario with vital signs, communication, and patient education with SPWD</b>
<b>1<sup>st</sup> semester Sophomore</b>	<b>Musculoskeletal scenario with SPWD</b>
<b>2<sup>nd</sup> semester Sophomore</b>	<b>Fundamentals capstone with SPWD</b>
<b>1<sup>st</sup> semester Junior</b>	<b>Postpartum assessment &amp; preparation for discharge home with mother with disability</b>
<b>2<sup>nd</sup> semester Senior</b>	<b>Home health scenario with non-compliant CHF patient with disability</b>

# Results: Demographic Data

	<b>Villanova</b>	<b>Loyola</b>
<b>Gender (N = 179)</b>	Females (n = 113) Males (n = 2)	Females (n = 58) Males (n = 6)
<b>Ethnicity (N = 179)</b>	Hispanic or Latino (n = 7) Not Hispanic or Latino (n = 106) Prefer Not to Answer (n = 2)	Hispanic or Latino (n = 2) Not Hispanic or Latino (n = 61) Prefer Not to Answer (n = 1)
<b>Race (N = 179)</b>	White (n = 96) Asian (n = 9) Black or African American (n = 6) Prefer Not to Answer (n = 4)	White (n = 51) Asian (n = 12) Black or African American (n = 0) Prefer Not to Answer (n = 1)
<b>Mean Age (N = 174)</b>	22.97	22.68
<b>Do You Have a Disability? (N = 179)</b>	Yes (n = 6); No (n = 109); Prefer not to Answer (n = 0)	Yes (n = 3); No (n = 60); Prefer not to Answer (n = 1)
<b>Family Member with Disability (N = 179)</b>	Yes (n = 27); No (n = 85); Prefer not to Answer (n = 3)	Yes (n = 17); No (n = 45); Prefer not to Answer (n = 2)
<b>Close Friend with Disability? (N = 179)</b>	Yes (n = 51 ); No (n = 64)	Yes (n = 30); No (n = 34)

# Results: Quantitative Data

## Independent t-tests:

- Attitudes Towards Disabled Persons (ATDP-A) showed statistically significant differences ( $p < .001$ ) for students ( $N = 115$ ) who participated in SPWD simulations compared to students ( $N = 64$ ) who did not participate in SPWD simulations
  - Intervention group's mean score: 77.39
  - Control group's mean score: 66.31
- There was no statistically significant difference between groups on the Interactions with Disabled Persons (IDP) survey.
- Reliabilities for both surveys were  $> .70$ .

# Summary: Open-Ended Questions

- Reflected a positive experience for the students who participated in the simulations with SPWD.



# Discussion and Conclusions

- This study provides evidence that these simulation-based experiences with standardized patients with disability (SPWDs) had positive outcomes for students who participated in the program of simulation across their curriculum.
- This study focused specifically on end-of-program evaluation of this intervention.
- Future research could include:
  - A two-group, pretest-posttest design.
  - Assessment of patient outcomes for people with disability.

# Acknowledgements

- We gratefully acknowledge our standardized patients with disabilities. Without their participation and support these simulations with SPWD would not be possible.
- For more information about the study and simulation with SPWD, please contact:

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