A Learning Station Model to Inspire Medical Students When Caring for Patients with a Visible Disability

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BACKGROUND

- A shortage of properly trained providers is just one of the many challenges patients with disabilities face when accessing health care.
- A lack of comfort between a physician and a patient with a disability could lead to a breakdown in communication, a misdiagnosis, decreased quality of care, and an increased possibility of a secondary health crisis.[4,10]
- When medical students graduate, many feel they have had little to no exposure to patients with disabilities.[7] Some even feel fear when communicating with and caring for such patients.[10]
- Some schools have tried using various teaching modalities, such as lectures, discussion groups, and videos, to help fill the gap in students' knowledge about persons with disabilities.[8,11] However, these tools were seen to be inferior to utilizing a direct patient perspective[11] or an encounter with a patient with a disability.[8,10,13]
- Unfortunately, students do not get many opportunities to interact with patients with disabilities.[1,4,8] Thus, some schools rely on standardized patients (SPs). SPs are valuable tools used to encourage students to build upon their competencies and learn best practices through simulated clinical scenarios.[7]
- However, the use of SPs to represent a patient with a visible disability is very limited. Integrating a SP curriculum that uses SPs with disabilities requires both time and resources. Ensuring facilities are accessible, including exam rooms and bathrooms, is a crucial consideration.
- Using medical students to portray SPs, as well as to teach through learning activities, could be an effective alternative to help students become confident and capable of working with patients with a visible disability.

METHODS

- Second-year medical students were given the chance to be a participant or a SP at a 2-hour workshop. 11 students were participants in the workshop while 9 students were SPs.
  - SPs were assigned randomly to a station and given materials and had a 20-minute training (via Zoom) one week prior to the workshop.
- A pre-survey (and post-survey) was distributed in person before (and immediately after) the workshop to assess the students' knowledge and comfort.
- The first part of the workshop consisted of an activity about common biases/stereotypes around patients with a visible disability, personal experiences shared by a physician who self-identifies as having a visible disability, and a short didactic including statistics about the prevalence of persons with disabilities, student's comfort around such patients, and how access to healthcare is affected for these patients.
- The second part of the workshop consisted of 3 learning stations with an SP simulation at each station.
  - Station 1: Reviewed IHC Top 5 Rules[6], sorted 10 scenarios based on which of the "rule" was being broken and how to respond, SP simulation revolving around building rapport and addressing common bias/stereotypes for patients with a visible disability.
  - Station 2: Reviewed list of disability history-taking questions and categorized questions into themes (past medical history, social history, etc.), SP simulation revolving around eliciting key components of disability history through patient-centered communication.
  - Station 3: Reviewed online resources[2] available for patients with disabilities, discussed key takeaways in group and applied resources to corresponding scenarios, SP simulation revolving around identifying key resources to support patients with a visible disability.

RESULTS

- Pre- and post-survey contained a mix of Likert scale, multiple choice, and reflective questions.
  - 11 students completed the pre-survey while 5 students completed the post-survey
- Questions focused on a handful of aspects: communication, bias/stereotype, confidence, knowledge/competency, and effectiveness of workshop.

- Pre- and post-survey responses indicate an increased level of comfort and confidence when working with patients who have a visible disability after the workshop:

	Pre-Survey Mean Likert Score (Std Dev)	Post-Survey Mean Likert Score (Std Dev)
I am confident in my ability to care for a patient in a wheelchair	3.09 (0.79)	4.60 (0.49)
I am confident in my ability to build rapport with patients	4.09 (0.79)	4.80 (0.40)
I am confident in my ability to build rapport with a patient in a wheelchair	3.91 (0.67)	5.00 (0.00)
I know specific questions to ask when gathering a history of a patient in a wheelchair	2.27 (1.14)	4.80 (0.40)

- The students were better equipped to recognize the bias that patients with a visible disability face after the workshop as the options Strongly Disagree through Neither Agree nor Disagree were not chosen on these post-survey questions:

Pre-Survey	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	Total
Patients in wheelchairs are perceived to have a lower quality of life in regards to housing	0	1	2	8	0	11
Patients in wheelchairs are perceived to have a lower quality of life in regards to autonomy	0	3	1	7	0	11
Patients in wheelchairs are perceived to have a lower quality of life in regards to social engagement	0	1	4	6	0	11
Patients in wheelchairs are perceived to have a lower quality of life in regards to work	0	1	2	8	0	11

Post-Survey	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	Total
Patients in wheelchairs are perceived to have a lower quality of life in regards to housing	0	0	0	2	3	5
Patients in wheelchairs are perceived to have a lower quality of life in regards to autonomy	0	0	0	1	4	5
Patients in wheelchairs are perceived to have a lower quality of life in regards to social engagement	0	0	0	3	2	5
Patients in wheelchairs are perceived to have a lower quality of life in regards to work	0	0	0	2	3	5

CONCLUSION

- Physicians of all specialties will work with patients who have disabilities
- Medical students can be better equipped to work with these patients by use of learning activities combined with SP scenarios.
- The learning activities and SP scenarios help students engage and consider the realities that patients with disabilities experience when accessing healthcare, which students may otherwise not have the opportunity to do so during medical school.
- The use of such learning interventions will increase students' confidence and knowledge base so they can interact with and develop rapport with all patients, including those with disabilities.

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Workshop Slide Deck

IHC Top 5 Rules

Disability History Questions

CDC Resources