2020 Disabilities IPE Student Evaluation

This evaluation covers the student pre-activity survey and post-activity survey. The post-activity survey includes the 27-item Interprofessional Attitude Survey (IPAS). This evaluation was not anonymous because in order to receive class credit, students were required to complete the evaluation and put their email at the end of the post survey.

Survey Questions

1. **Disabilities Pre-Survey:**
   Students were not required to answer each question.
   Question Blocks:
   i. IPE Training: Questions = 2
   ii. Knowledge: Questions = 5
   iii. Demographics: Age, Gender, Ethnicity, Race, Rural Residence, Background, AZ Residence, Military Service. Questions= 8
   iv. Education: Level, Enrollment Status, Year, Academic Institution, college/Dept, Degree: Questions = 6
   v. Open-ended = 0

2. **Disabilities Post-Survey:**
   Students were not required to answer each question.
   Question Blocks:
   i. Event Evaluation (retrospective pre-post): Questions = 5
   ii. New Information: Questions = 8
   iii. Event Activity: Questions = 8
   iv. Perceptions about profession and roles: Questions = 9
   v. IPE Profession/Experience: Questions = 7
   vi. IPAS: Questions = 27
   vii. Education: Institution, College/Department, Degree: Questions = 3
   viii. Email: Questions = 2
   ix. Open-ended Comments: Questions = 3
   - Briefly explain what you LIKED most about this event

Pre-Survey Data

Interprofessional (IPE) Training

How much training have you received in interprofessionalism? N = 555
Students received different amounts of training in interprofessionalism.

None = 60 students (11%)
A Little = 180 students (32%)
Some = 282 students (51%)
A Lot = 33 students (6%)

Have you participated in any other interprofessional (IPE) activities? Select all that apply.

Interprofessional Activity	***Frequency***
UAHS Interprofessionalism for Patient Safety	313
UAHS Interprofessional Team Behavior Simulation	177
UAHS Pandemic Flu: An Interprofessional Exercise	144
UAHS CLARION Case Competition	9
Annual Interprofessional Rural Health Professions Conference	14
Other IPE activity at the University of Arizona	61
IPE activity at another institution	20

Students were asked to describe "Other." Several responses were activities listed in the evaluation, but students did not associate it with the UAHS activities that were presented in the question. For example, students referred to the above activities as Safety and Flu Epidemic CPR and QPR Program instead of Pandemic Flu and Team Behavior Simulation. Other activities included: Social Justice Symposium, AHEC Scholars program, AZ summit, Opioid Epidemic, Clinical Skills Competition hosted by College of Pharmacy, Interprofessional Poverty, MNT Workshop Class at St. Luke's Home, NAU OTD, IPE at Medication Management Center, IPE community health assessment, IPEP Clinics with COM and COP, MILAGRO course, multidisciplinary team, Team Arizona Summit, Tele Health, Public Health courses.

Knowledge Questions

The biggest difference in the number of responses (443) occurred with question #5, where the majority of students felt the statement was True. Students were the least confident with Question #3 where the difference between True and False was 66. Overall, all five areas can be further clarified in the activity.

Item	**True**	**False**
1) The majority of Arizonans with developmental disabilities live in group homes, nursing homes or other group settings	152	401
2) The most common claim against health care providers under the Americans with Disabilities Act is the failure to provide sign language interpreters for deaf patients	351	206

3) 86% of spinal cord injured high-level quadriplegics rated their quality of life as average or better than average	245	311
4) After high school, young adults with intellectual disabilities can only expect to work in basic unskilled jobs or attend a day treatment program	137	425
5) People with disabilities have greater needs for health care than those without disabilities and are more likely to experience one or more secondary medical conditions	499	56

Demographics (students often chose to skip some questions)

Age N = 549

Age range 19 – 29 = 454 students
Age range 30 – 39 = 74 students
Age range 40 – 49 = 18 students
Age range 50 – 59 = 2 students
Age range 60 – 69 = 1 student

Gender N = 553

Female = 374
Male = 171
Non-binary = 2
Transgender Male/Female-to-Male = 1
Additional = 1
Prefer not to say = 3
Genderqueer = 1

Ethnicity N = 544

Hispanic or Latino = 115
Non-Hispanic or Non-Latino = 429

Race (select one or more)

	American Indian or Alaska Native	Asian	Black or African American	Native Hawaiian or other Pacific Islander	White
Frequency	16	100	33	10	417

Have you ever lived in a rural area (fewer than 50,000 people) N = 549

Yes = 162 (30%)
No = 387 (71%)

Can you answer yes to any of the following: a) You are the first in your family to attend college; b) You have received or currently receive a scholarship or loan for disadvantaged students; c) While growing up, you or your family ever used federal or state assistance programs (such as free or reduced school lunch, subsidized housing, food stamps Medicaid, etc.); d) While growing up, you lived where there were few medical providers at a convenient distance. **N = 548**

Yes, one or more of the above statements applies = 226 (41%)
No, none of the above statements applies = 322 (59%)

Did you grow up in Arizona? N = 549
Yes = 349 (64%)
No = 200 (36%)

Military Service N = 542

Military Service	***Frequency***
No military service	528 (98%)
Current active reserve or guard	2
Prior active duty – combat	4
Prior active duty – non-combat	3
Prior service- veteran status	2
Retired – combat	1
Retired – reserve or guard	1
Retired – veteran status	1

Education and Academic Programs

Highest Educational Level Completed N = 549

Level	**Frequency**	**Percent (rounded)**
Residency	1	
Post-doctorate	0	
Doctoral degree	4	1
Master degree	39	7
Bachelor degree	364	66
Associate degree	33	6
Technical certificate	1	
Post-high school/pre-college	12	2
High school diploma	86	16
Other	3	1

Enrollment Status N = 550
Full-time = 545 (99%)
Part-time = 5 (1%)

What year are you in your program of study? N = 548

Year	**Frequency**	**Percent (rounded)**
One	274	50
Two	178	33

Three	48	9
Four	39	7
Five	9	2

Academic Program – Institution Total N = 550

Arizona State University = 10 (2%)
Northern Arizona University = 44 (8%)
University of Arizona = 496 (90%)

College N = 550

	Frequency	**Percent (rounded)**
College of Medicine – Phoenix	1	
College of Medicine – Tucson	115	21
College of Nursing	175	32
College of Pharmacy	128	23
Zuckerman College of Public Health	38	7
Occupational Therapy Program	44	8
School of Social Work	1	
Other	48	9

Student Degree Program N = 550

Degree Program	**Frequency**	**Percent (rounded)**
Graduate degree	3	1
Undergraduate degree	45	8
MSW	1	
PharmD	128	23
OTD	44	8
MD	110	20
MD/MPH	1	
MD/PhD	5	1
BSN	53	10
MEPN (Phoenix)	58	11
MEPN (Tucson)	64	12
BS	1	
MPH	34	6
MPH/MA	1	
MPH/MBA	1	
MPH/MS	1	

Post-Survey Data Including IPAS

There were 59 students who declined to participate in Research.

Academic Program – Institution Total N = 510

Arizona State University = 4 (.8%)
Northern Arizona University = 39 (8%)
University of Arizona = 468 (92%)

College/Department N = 511

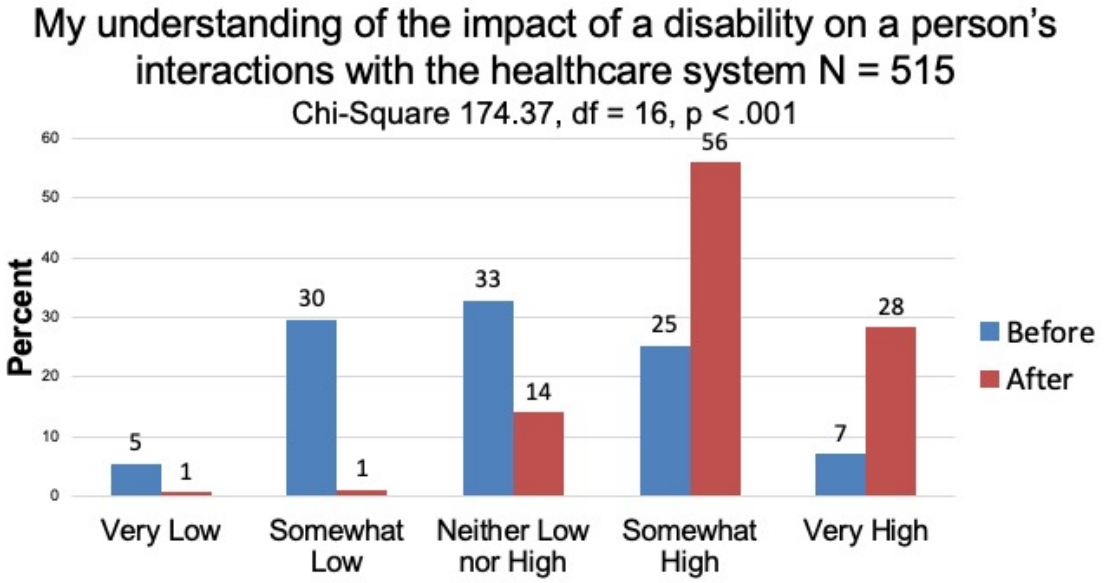
	Frequency	Percent (rounded)
College of Medicine – Phoenix	1	
College of Medicine – Tucson	100	20
College of Nursing	167	33
College of Pharmacy	123	24
Zuckerman College of Public Health	37	7
Occupational Therapy Program	39	8
School of Social Work	0	
School of Nutrition and Health Promotion	1	.2
Other	43	8

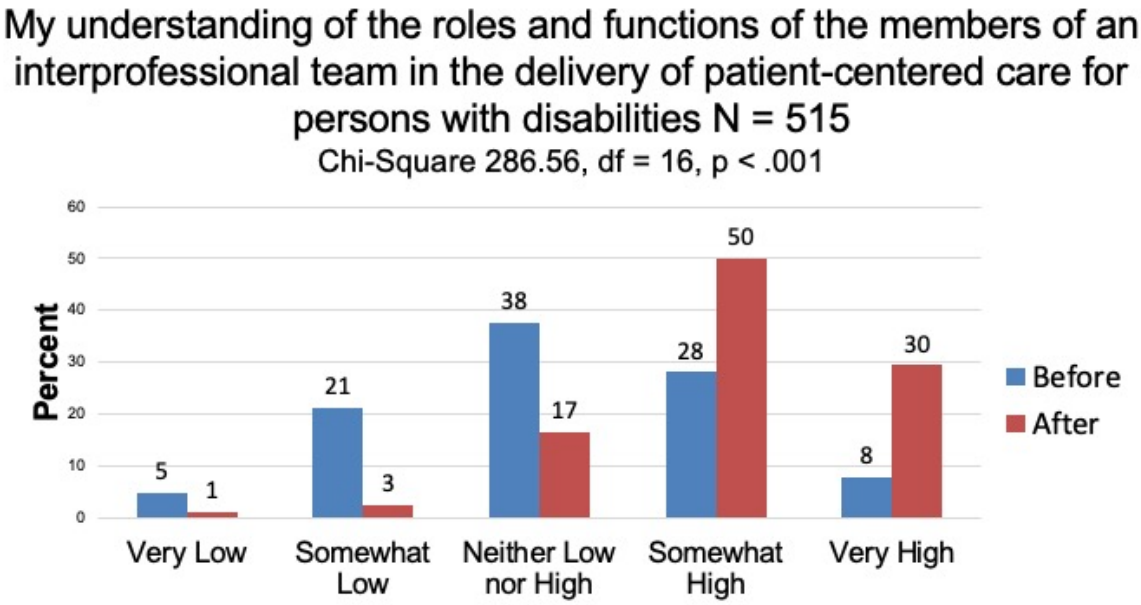
Student Degree Program. N = 511

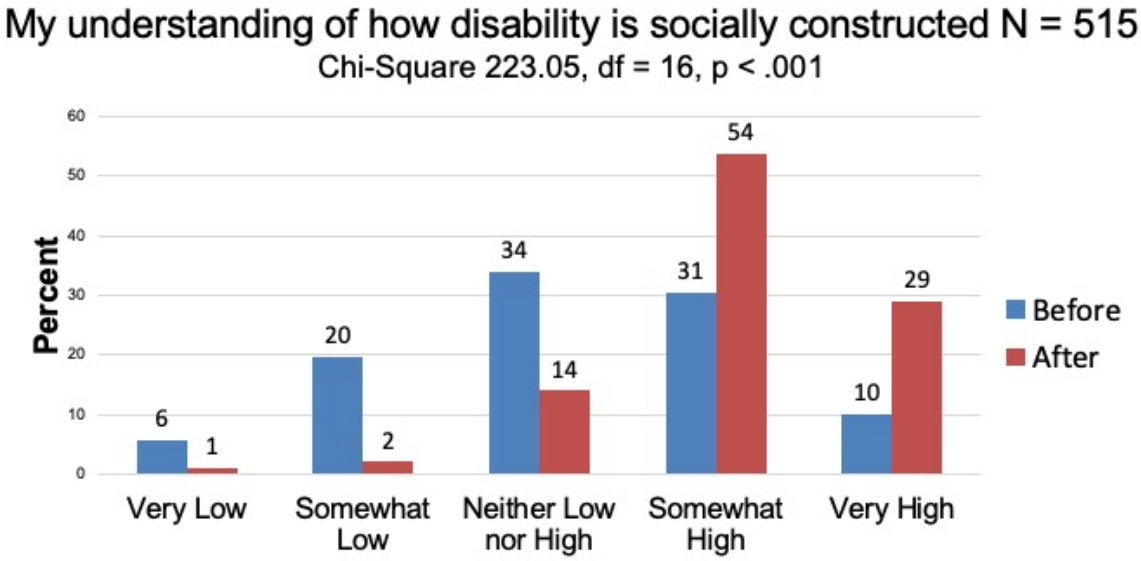
Degree Program N = 550	Frequency	Percent (rounded)
Graduate degree	4	1
Undergraduate degree	40	8
MSW		
PharmD	123	24
OTD	39	8
MD	97	19
MD/MPH	1	
MD/PhD	3	1
BSN	51	10
MEPN (Phoenix)	52	10
MEPN (Tucson)	64	13
BS	1	
MPH	35	7
MPH/MA	1	
MPH/MBA		
MPH/MS		

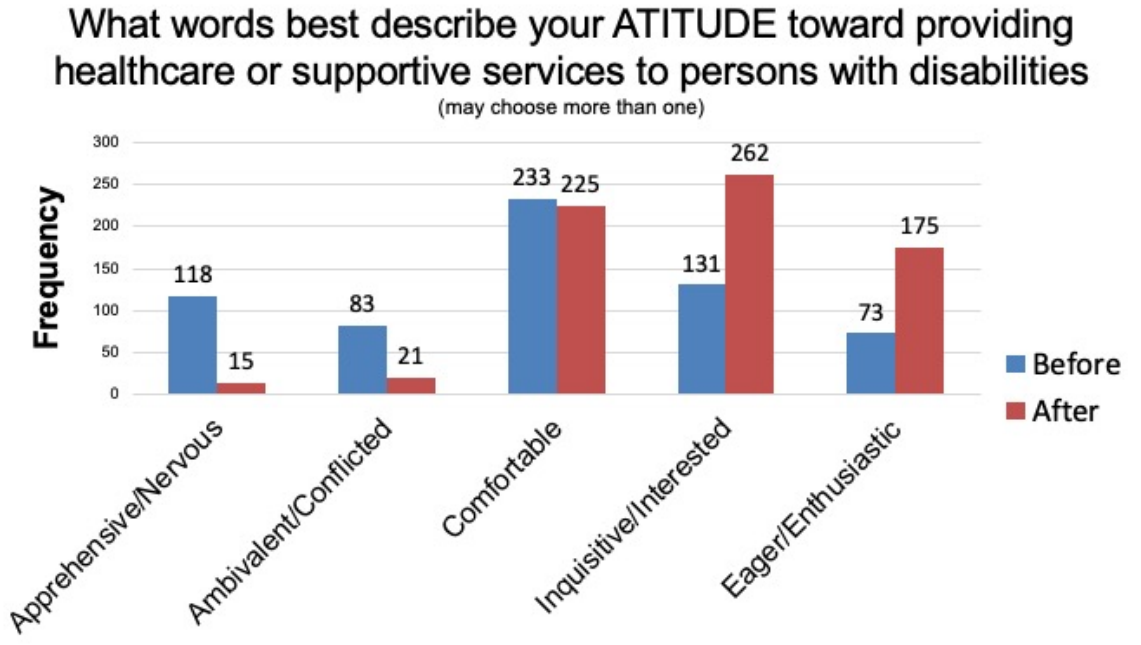
In this report, the retrospective Before-After questions are represented in graphs. Crosstabs with chi-square were calculated to identify if there was a significant change in students' perception of their learning. Significance does not identify causality. Means and a Paired T-test were not calculated because the scale is an ordinal measurement that indicates direction but does not have intervals that can be assumed to be equal.

The following three items were significant at p < .001. Overall, student improvement in their understanding of the four items were similar.









For the above graph, student attitudes shifted to being more Inquisitive/Interested and Eager/Enthusiastic after the activity.

How much NEW information did you learn about the following? N = 514
Percentage (rounded) is following by (Frequency)

Students reported learning the most about 1) the importance of knowing the person instead of a disability, 2) things to do to facilitate communication with persons with disabilities, and 3) the role of self-advocacy. This was followed by disability as a social construct. The remaining items were similar regarding the knowledge gained.

	None	A Little	Moderate Amount	A Lot	A Great Deal
Disability as a medical construct					
	5% (27)	20% (104)	35% (179)	31% (160)	9% (44)
Disability as a social construct					
	6% (30)	15% (76)	32% (164)	36% (187)	11% (57)
The importance of knowing the person instead of a disability					
	7% (37)	14% (71)	22% (112)	33% (167)	25% (127)
Things I can do to facilitate communication with persons with disabilities					
	5% (25)	13% (66)	25% (130)	37% (192)	20% (101)
Ways to make the healthcare environment accessible for persons with disabilities					
	5% (26)	15% (75)	30% (156)	33% (170)	17% (87)
People First Language					
	13% (65)	20% (103)	24% (125)	26% (135)	17% (86)
The role of self-advocacy for persons with disabilities					
	5% (25)	13% (66)	26% (134)	34% (177)	22% (112)
Community resources to support people with disabilities					
	9% (47)	23% (116)	27% (140)	26% (133)	15% (78)

To what extent do you disagree or agree with the following? N = 513 - 514
Overall, the level of agreement was similar for all items in the following table. Item 2 had the highest percentage of agreement. Items 3 and 4 had similar wording and a very similar response distribution.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
The exercise was effective in demonstrating the different perspectives of various professions					
	5% (27)	10% (49)	18% (91)	50% (257)	18% (90)
I was at the most appropriate level in my education to participate fully in the discussions					
	2% (11)	5% (27)	16% (84)	52% (269)	24% (123)
This session should be required for all students in my profession					
	5% (25)	7% (38)	18% (92)	38% (193)	32% (165)
This event should be required for all health professions students (asked later in the survey)					
	5% (23)	6% (28)	22% (111)	38% (197)	30% (154)

Please identify the case you discussed. *This question needs clarification.*
Vicky Cruz = 503

Within the last year, how many individuals with disabilities have you spent time with in your social, school, or work setting? (Time spent is defined as 15 minutes or longer for each interaction) N = 514

	Frequency	Percent (rounded)
None	66	13
1 to 3	221	43
4 to 6	95	19
7 to 9	29	6
10 or more	103	20

How relevant was Disabilities: An Interprofessional Exercise to your current professional education?

Seventy seven percent of the students found the exercise Moderately or Very Relevant.

Not relevant	4% (21)
Somewhat relevant	19% (97)
Moderately relevant	29% (147)
Very relevant	48% (249)

To what degree did Disabilities: An Interprofessional Exercise make you reflect on your own behaviors when interacting with persons with disabilities?

Fifty four percent of the students reported that they reflected on their own behaviors A Lot or A Great Deal.

Not at all	5% (23)
A little	14% (69)
Moderate amount	29% (146)
A lot	32% (164)
A great deal	22% (111)

Overall, how would you rate Disabilities: An Interprofessional Exercise?

Forty nine percent of the students rated the exercise Very Good or Excellent.

Poor	9% (45)
Fair	12% (62)
Good	30% (155)

Very Good 29% (150)
Excellent 20% (101)

In what CITY did you participate in the group activities:

Tucson = 376 students (73%)
Phoenix = 136 students (27%)

Please provide your perception regarding the following statements (N = 513)

There was strongest agreement with items

- *Understanding overlapping roles versus unique roles played by different professionals will make me a better caregiver*
- *Faculty in my college support interprofessional education*
- *The leadership role on a healthcare team should sometimes shift depending on the setting*
- *Faculty in my college model good interprofessional teamwork behaviors*
- *Students in my college support interprofessional education*

There was least agreement with the first and last item.

	Strongly Disagree	**Disagree**	**Neither**	**Agree**	**Strongly Agree**
The current health care environment facilitates effective teamwork					
	1% (7)	13% (66)	34% (172)	45% (229)	8% (39)
Faculty in my college model good interprofessional teamwork behaviors					
	1% (3)	2% (9)	15% (79)	52% (264)	31% (158)
My profession is often misunderstood					
	1% (7)	10% (50)	27% (139)	36% (183)	26% (134)
Faculty in my college support interprofessional education					
	0	1% (5)	12% (63)	47% (239)	40% (206)
Students in my college support interprofessional education					
	1% (4)	4% (22)	21% (109)	47% (241)	27% (137)
Understanding overlapping roles versus unique roles played by different professionals will make me a better caregiver					
	.4% (2)	1% (5)	10% (49)	48% (247)	41% (210)
The leadership role on a healthcare team should sometimes shift depending on the setting					
	1% (3)	2% (9)	13% (64)	44% (223)	42% (214)
My profession is not well integrated in the healthcare environment					
	17% (89)	28% (141)	26% (132)	21% (108)	8% (43)

Please rate the degree to which interprofessional education, including activities like this one, can accomplish the following (N = 513):

Overall, student responses for the following seven items were similar. More than 50% of students felt IPE can accomplish the following A Great Deal: a) improve health care outcomes, b) increase patient trust in health care team, c) maximize the skills and contribution of each team member, d) improve patient safety and e) change negative stereotypes. The ability to decrease disruptive behaviors and increase job satisfaction among health care providers were rated slightly lower.

	Not at all	Very Little	Somewhat	A Great Deal
Improve health care outcomes				
	2% (12)	6% (29)	38% (194)	54% (278)
Increase patient trust in health care teams				
	3% (14)	6% (31)	34% (173)	58% (295)
Maximize the skills and contributions of each team member				
	2% (11)	6% (32)	36% (184)	56% (286)
Decrease disruptive behaviors				
	4% (22)	8% (43)	45% (231)	42% (217)
Improve patient safety				
	3% (13)	5% (24)	38% (194)	55% (282)
Increase job satisfaction among health care providers				
	4% (20)	10% (51)	40% (204)	46% (238)
Change negative stereotypes about other professions				
	3% (16)	7% (36)	36% (183)	54% (278)

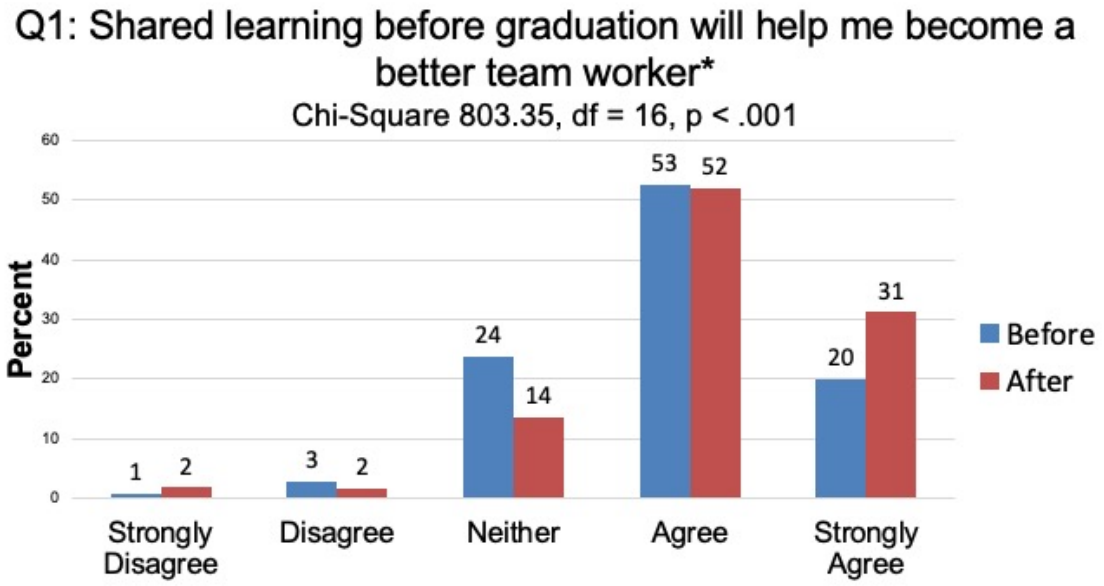
IPAS – Retrospective Pre-Post Questions (ASTEC and Other Rooms)

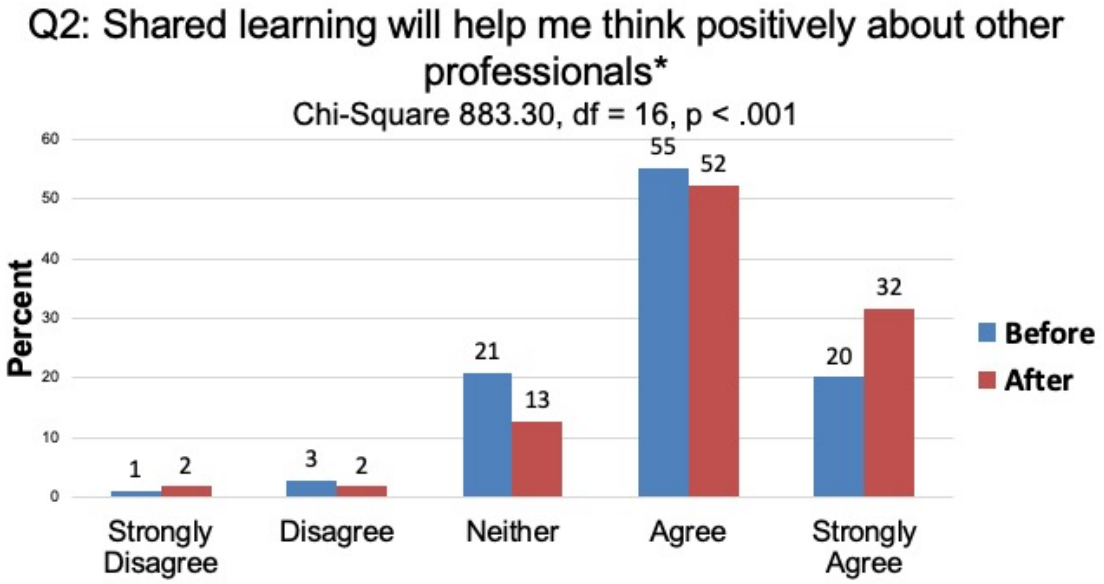
The Interprofessional Attitude Scale (IPAS) includes 27 items using a 5-point Likert scale: 1) Strongly disagree, 2) Disagree, 3) Neither agree nor disagree, 4) Agree, 5) Strongly agree.

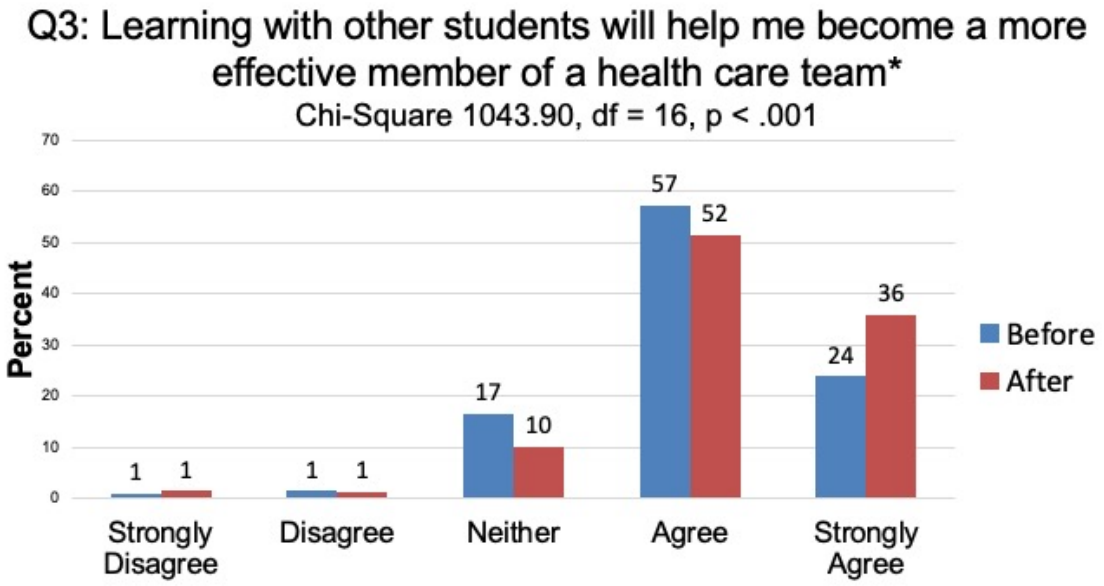
Retrospective Before and After percentages for the five scale options are reported in the graphs below. All items were significant at the $p < .001$. On all 27 items, student agreement in the positive direction increased.

Interprofessional Attitude Scale (IPAS)
27 Questions

Range of responses
511 - 513 for each question

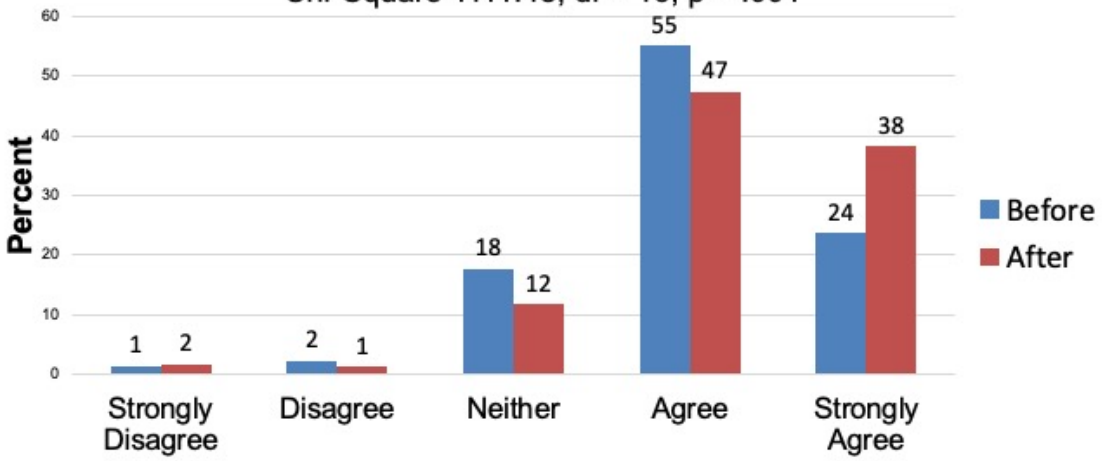



Q2: Shared learning will help me think positively about other professionals*
Chi-Square 883.30, df = 16, p < .001
Percent
60
50
40
30
20
10
0
1
2
3
2
21
13
55
52
20
32
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After


Q3: Learning with other students will help me become a more effective member of a health care team*
Chi-Square 1043.90, df = 16, p < .001
Percent
70
60
50
40
30
20
10
0
1
1
1
1
17
10
57
52
24
36
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After

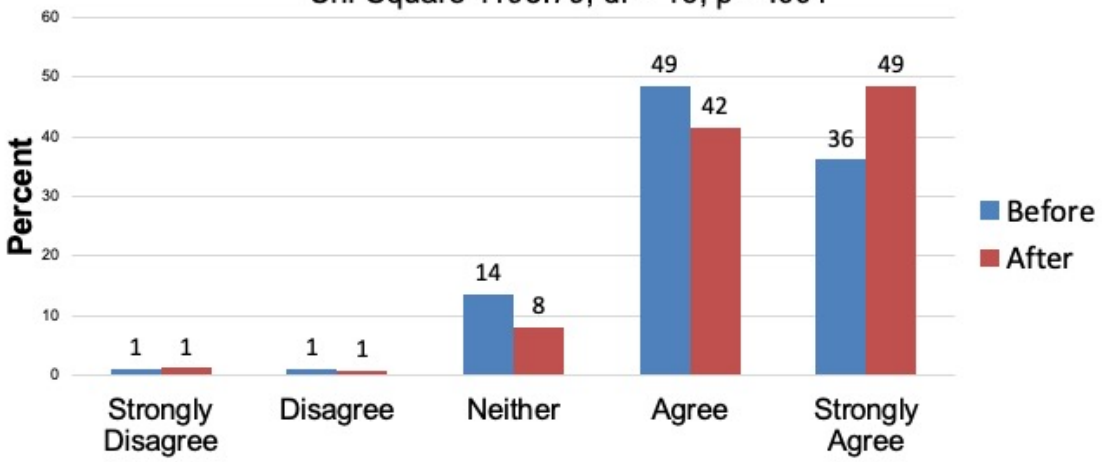
Q4: Shared learning experiences with other health care students will increase my ability to understand clinical problems*

Chi-Square 1111.48, df = 16, p < .001



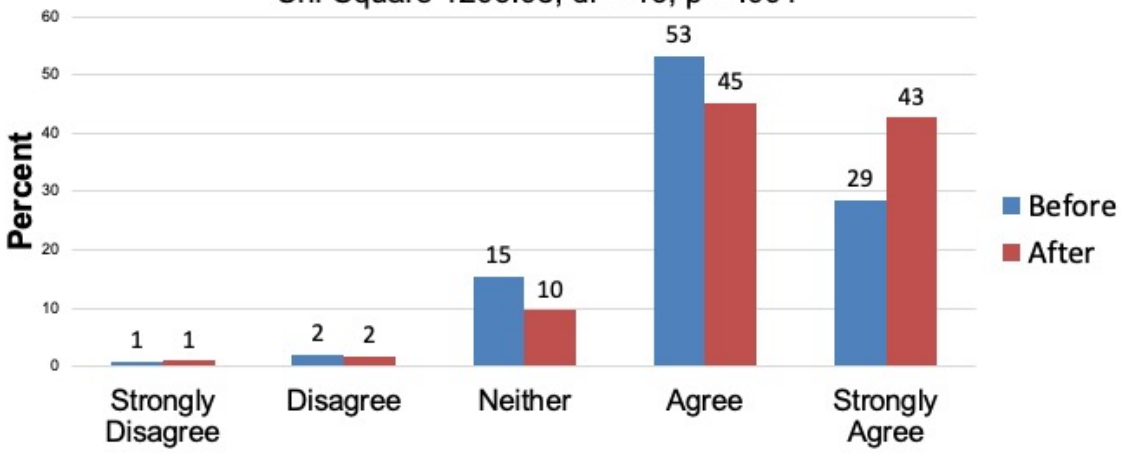
Q5: Patients would ultimately benefit if health science students worked together to solve patient problem*

Chi-Square 1193.79, df = 16, p < .001



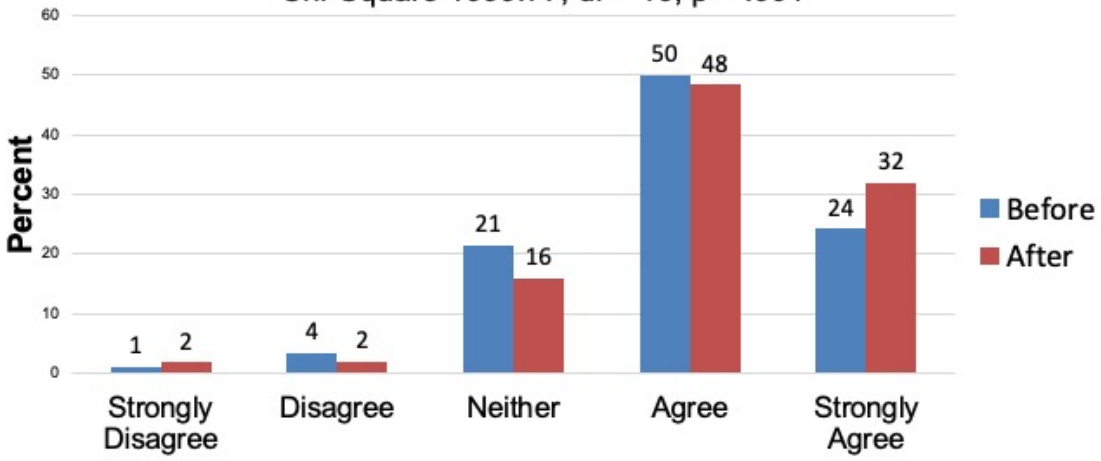
Q6: Shared learning experiences with other health care trainees will help me communicate better with patients and professionals*

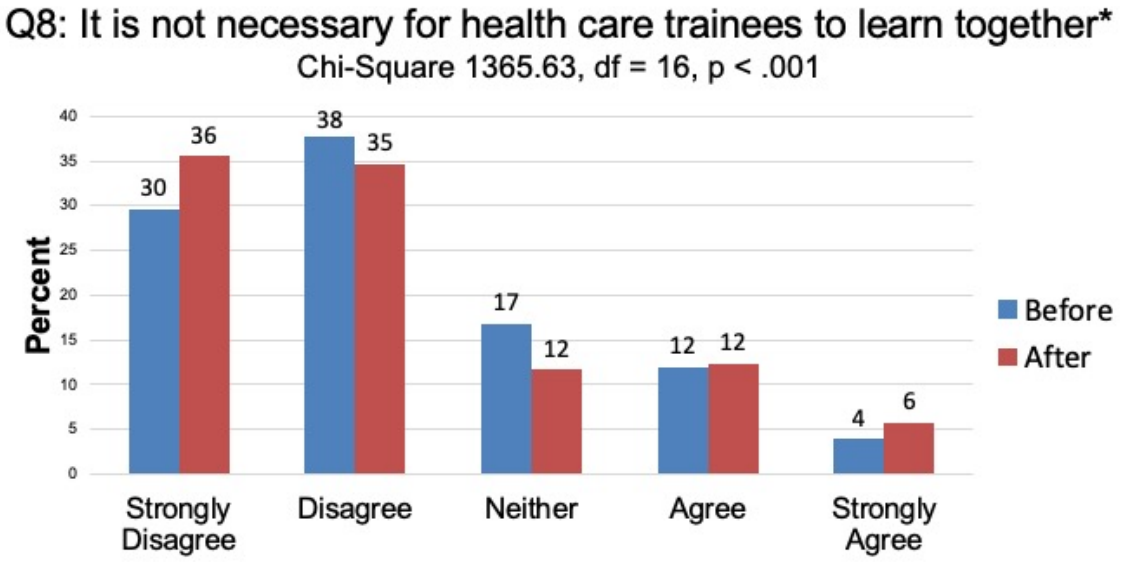
Chi-Square 1206.08, df = 16, p < .001

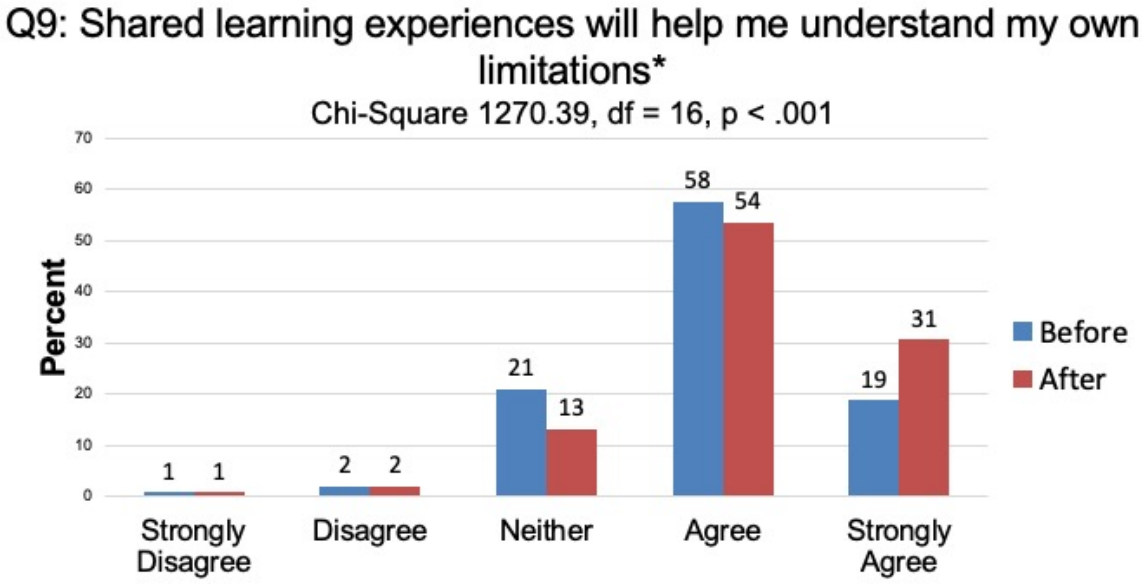


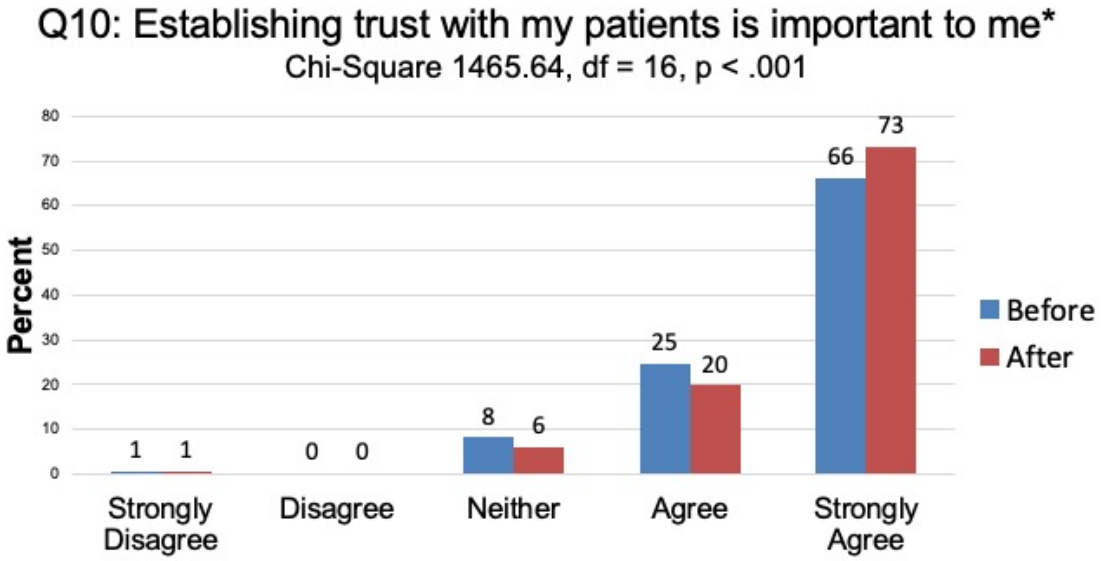
Q7: I welcome the opportunity to work on small-group projects with other health care professions*

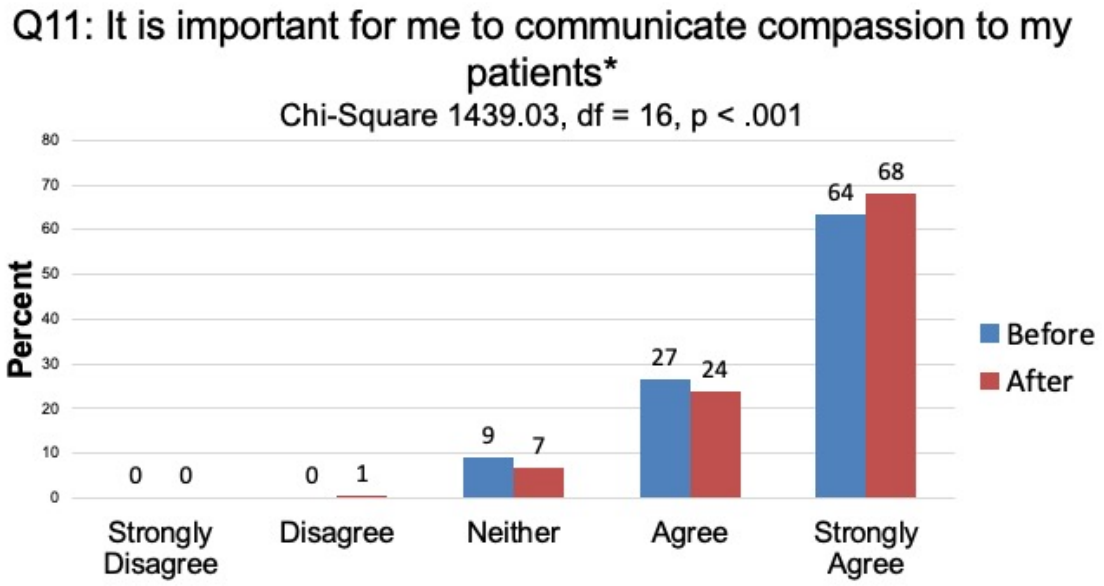
Chi-Square 1099.77, df = 16, p < .001

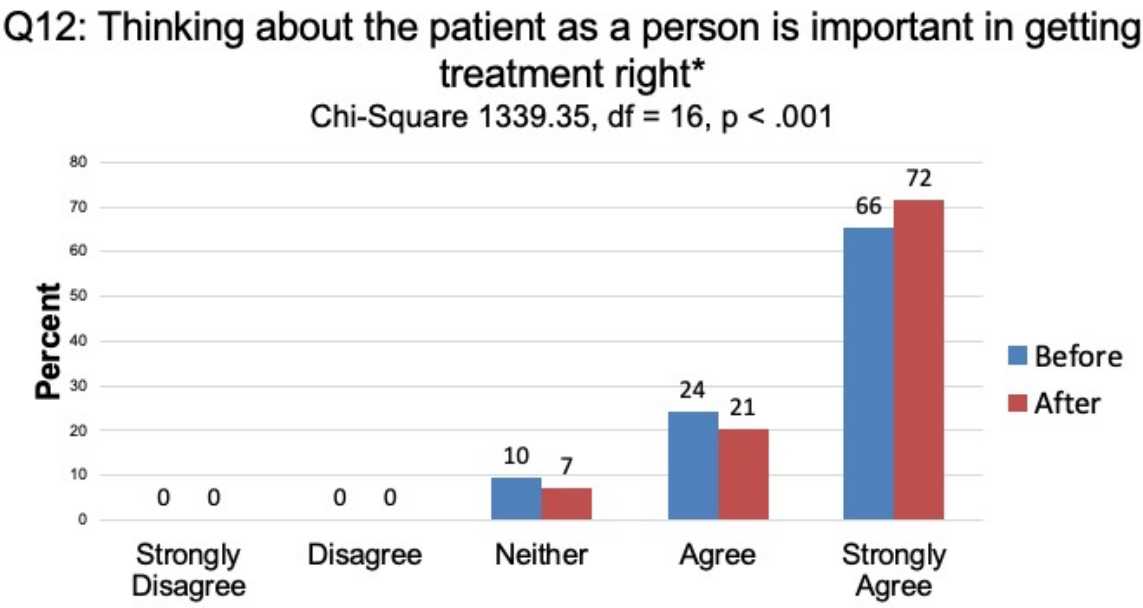


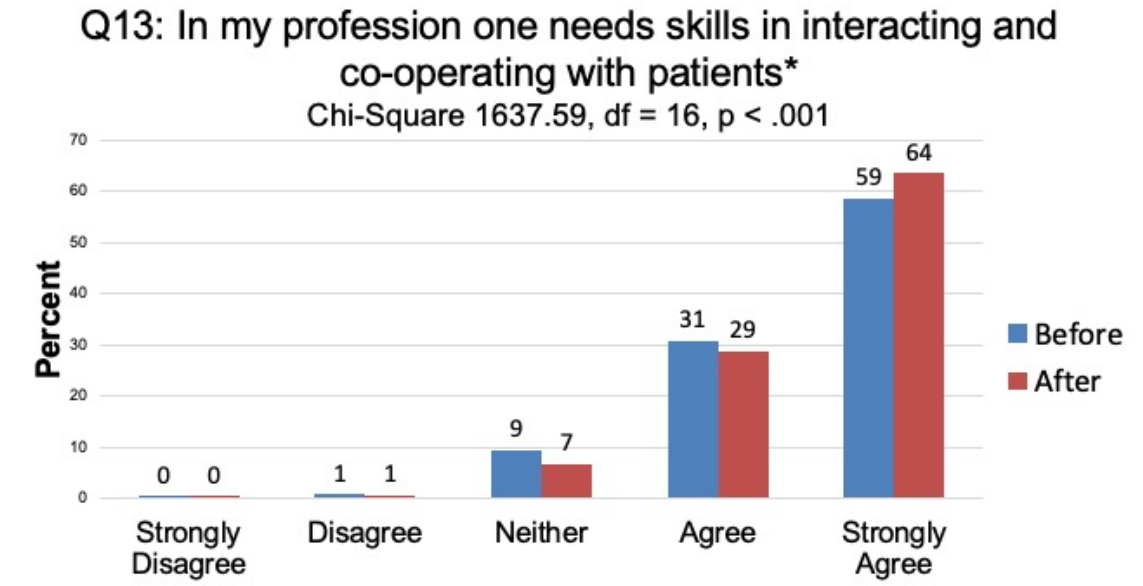

Q8: It is not necessary for health care trainees to learn together*
Chi-Square 1365.63, df = 16, p < .001
Percent
40
35
30
25
20
15
10
5
0
30
36
38
35
17
12
12
12
4
6
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After


Q9: Shared learning experiences will help me understand my own limitations*
Chi-Square 1270.39, df = 16, p < .001
Percent
70
60
50
40
30
20
10
0
1
1
2
2
21
13
58
54
19
31
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After


Q10: Establishing trust with my patients is important to me*
Chi-Square 1465.64, df = 16, p < .001
Percent
80
70
60
50
40
30
20
10
0
1 1
0 0
8 6
25 20
66 73
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After

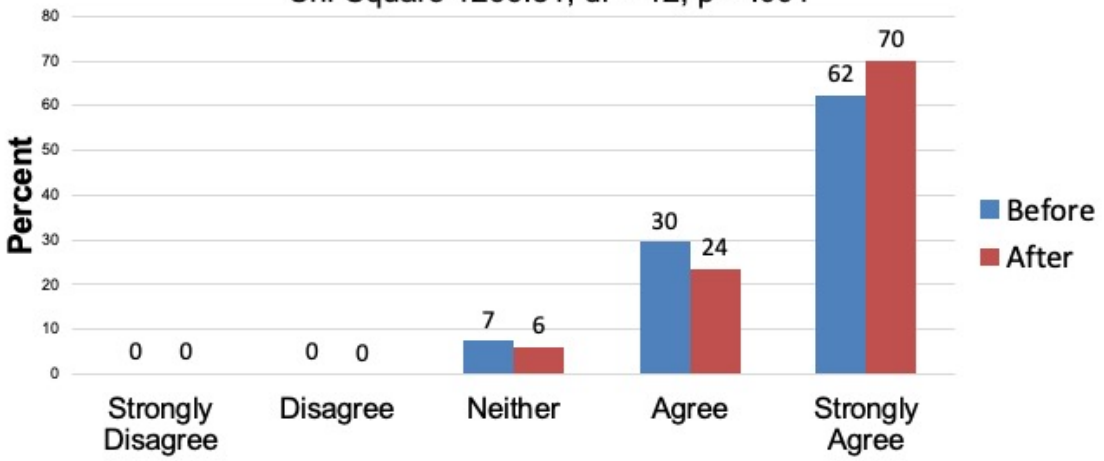

Q11: It is important for me to communicate compassion to my patients*
Chi-Square 1439.03, df = 16, p < .001
Percent
80
70
60
50
40
30
20
10
0
0 0
0 1
9 7
27 24
64 68
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After


Q12: Thinking about the patient as a person is important in getting treatment right*
Chi-Square 1339.35, df = 16, p < .001
Percent
80
70
60
50
40
30
20
10
0
0 0
0 0
10 7
24 21
66 72
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After


Q13: In my profession one needs skills in interacting and co-operating with patients*
Chi-Square 1637.59, df = 16, p < .001
Percent
70
60
50
40
30
20
10
0
0 0
1 1
9 7
31 29
59 64
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After

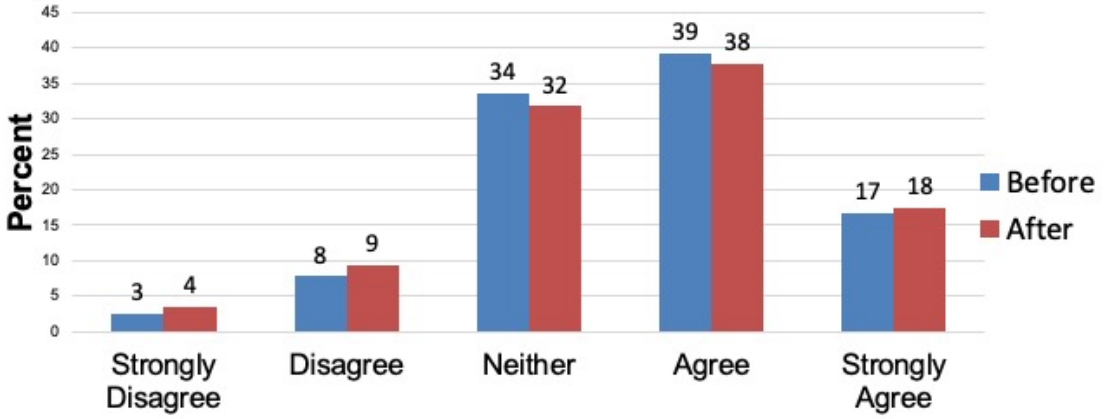
Q14: It is important for me to understand the patient's side of the problem*

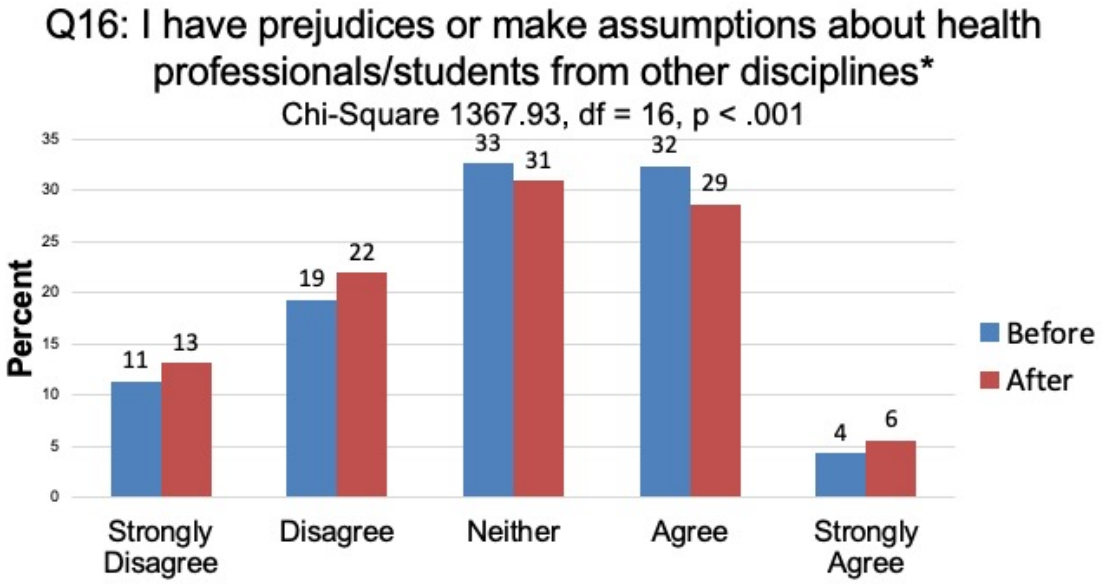
Chi-Square 1266.81, df = 12, p < .001

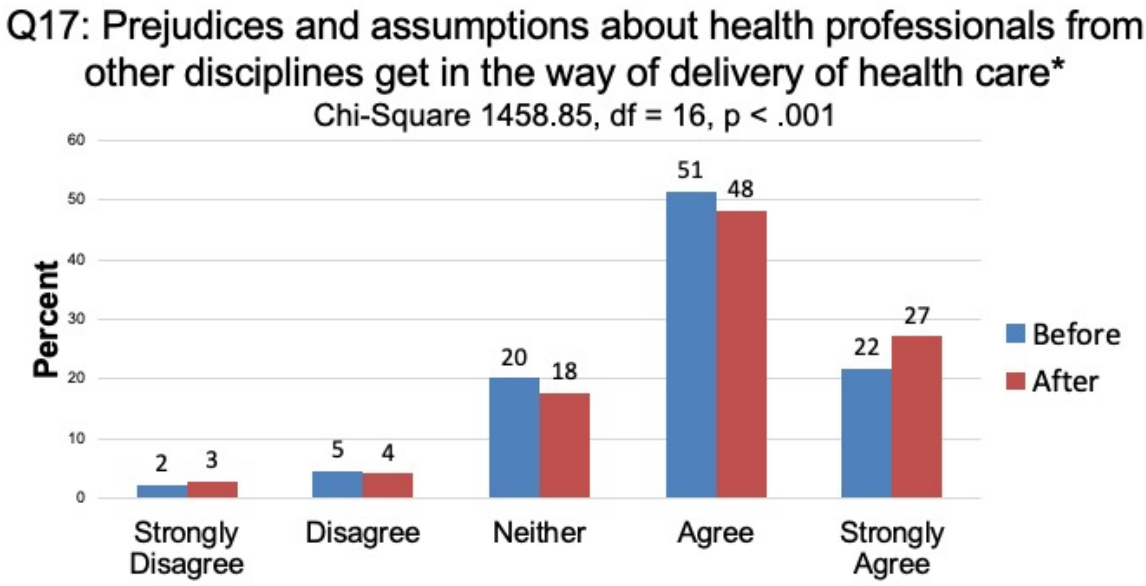


Q15: Health professionals/students from other disciplines have prejudices or make assumptions about me because of the discipline I am studying*

Chi-Square 1285.64, df = 16, p < .001

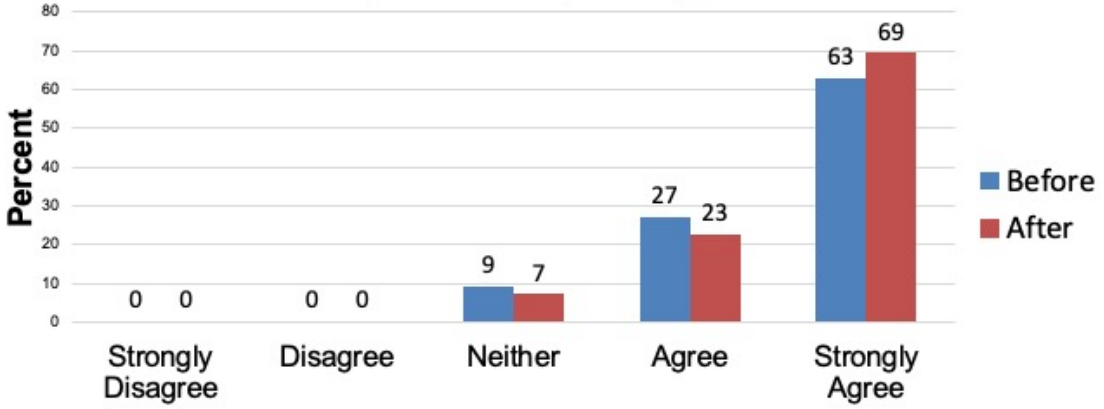



Q16: I have prejudices or make assumptions about health professionals/students from other disciplines*
Chi-Square 1367.93, df = 16, p < .001
Percent
35
30
25
20
15
10
5
0
11
13
19
22
33
31
32
29
4
6
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After


Q17: Prejudices and assumptions about health professionals from other disciplines get in the way of delivery of health care*
Chi-Square 1458.85, df = 16, p < .001
Percent
60
50
40
30
20
10
0
2
3
5
4
20
18
51
48
22
27
Strongly Disagree
Disagree
Neither
Agree
Strongly Agree
Before
After

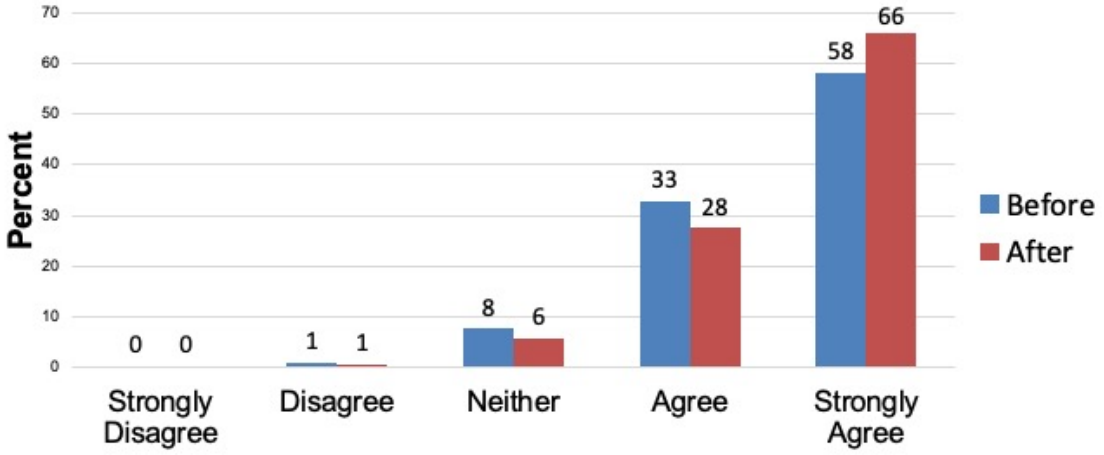
Q18: It is important for health professionals to respect the unique cultures, values, roles/responsibilities, and expertise of other health professions*

Chi-Square 1377.46, df = 16, p < .001



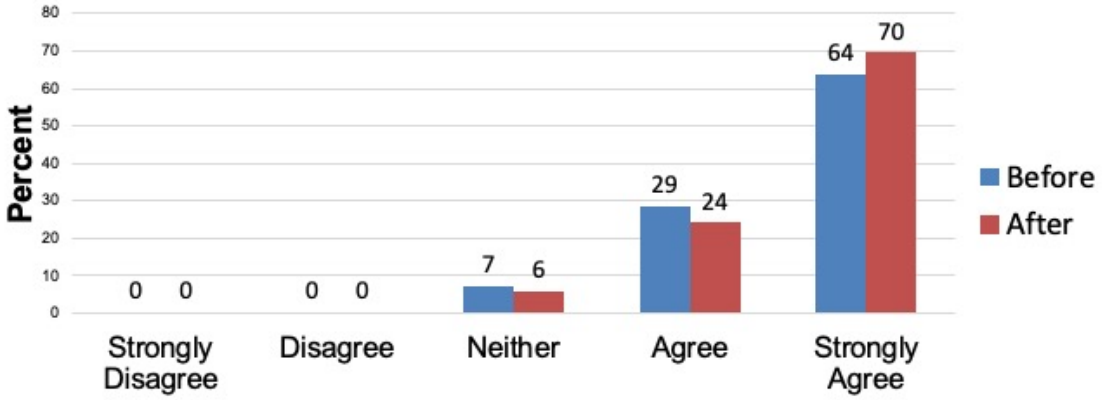
Q19: It is important for health professionals to understand what it takes to effectively communicate across cultures*

Chi-Square 1532.66, df = 16, p < .001



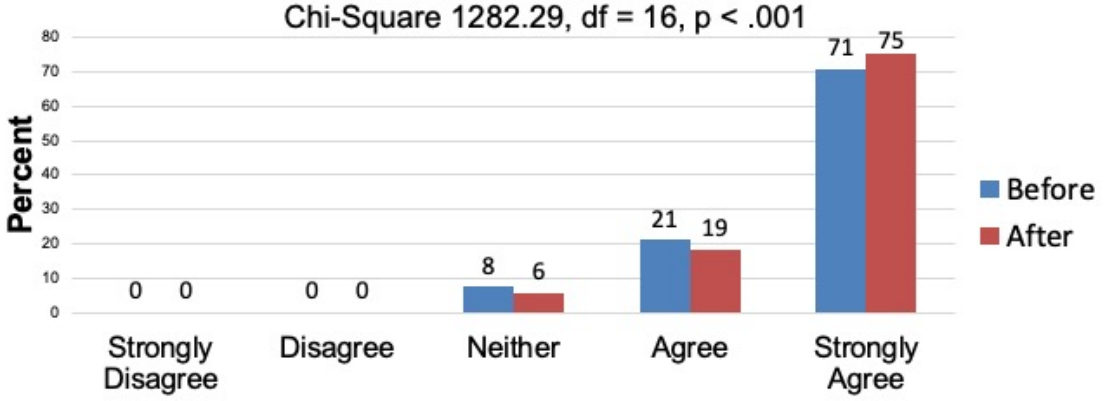
Q20: It is important for health professionals to respect the dignity and privacy of patients while maintaining confidentiality in the delivery of team-based care*

Chi-Square 1755.40, df = 16, p < .001

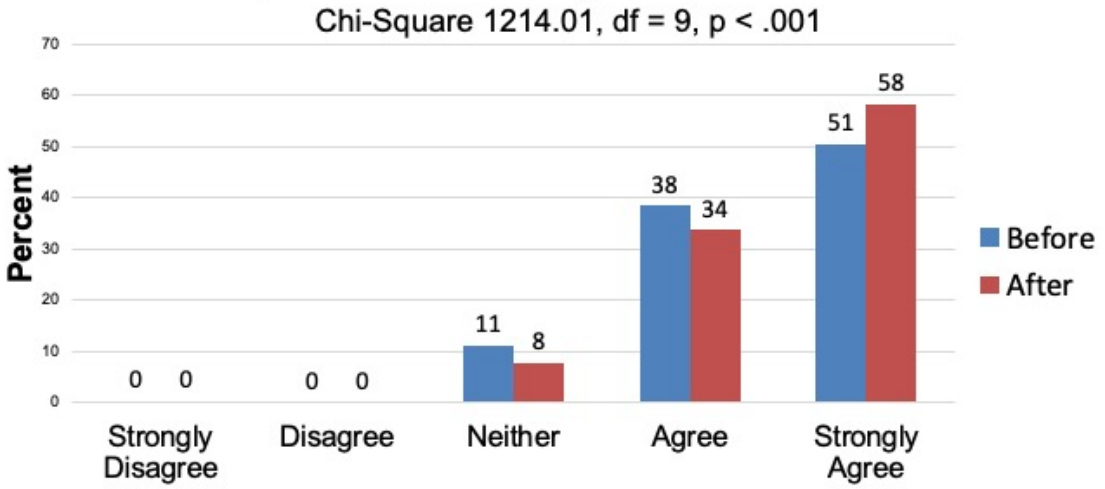


Q21: It is important for health professionals to provide excellent treatment to patients regardless of their background, e.g., race, ethnicity, gender, sexual orientation, religion, class, national origin, immigration status, or ability*

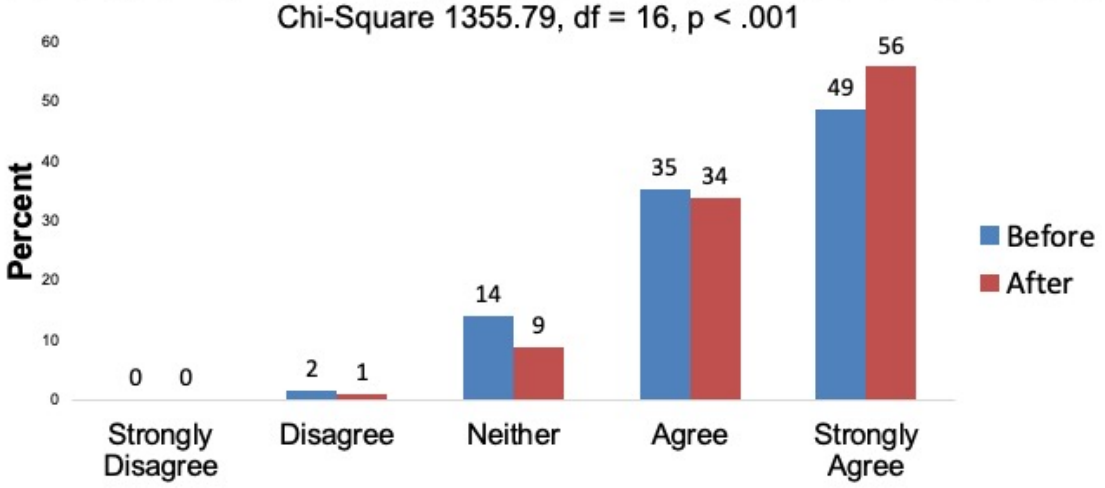
Chi-Square 1282.29, df = 16, p < .001



Q22: It is important for health professionals to work on projects to promote community and public health*

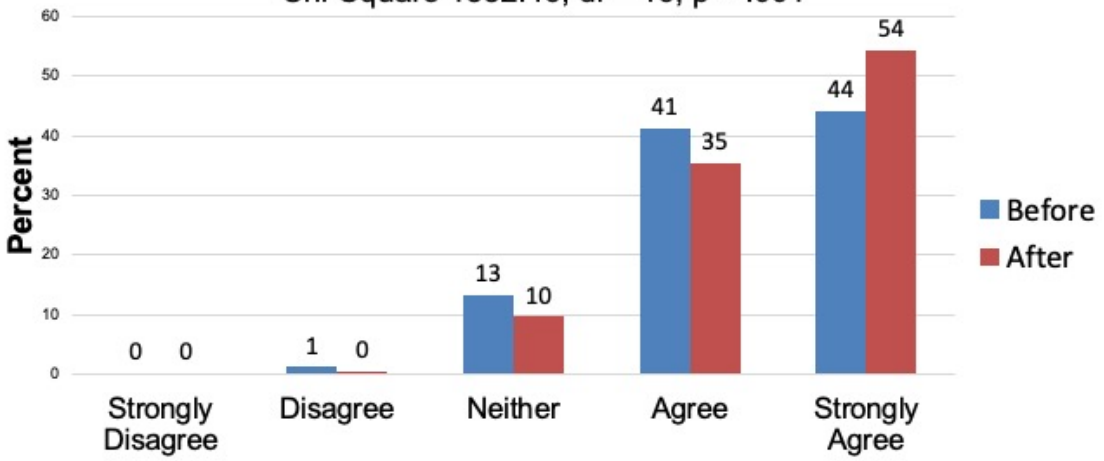


Q23: It is important for health professionals to work with legislators to develop laws, regulations, and policies that improve health care*



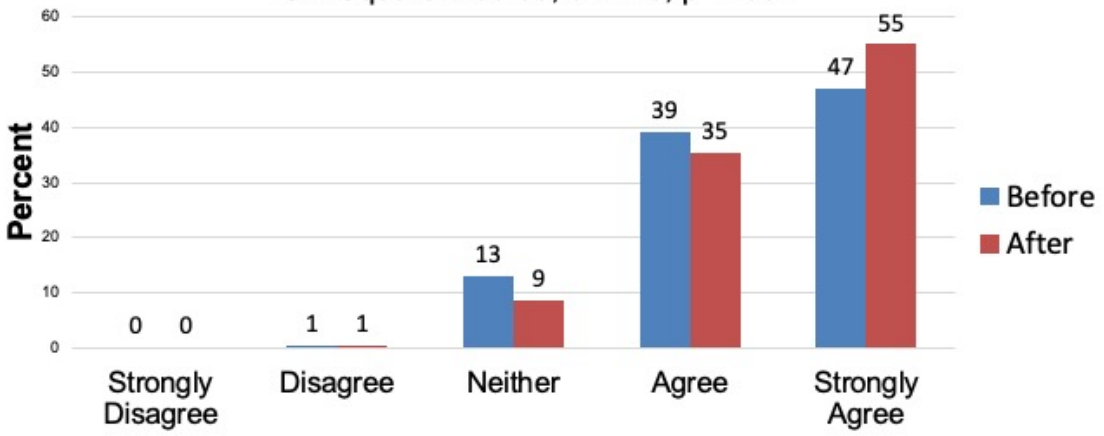
Q24: It is important for health professionals to work with non-clinicians to deliver more effective health care*

Chi-Square 1332.46, df = 16, p < .001



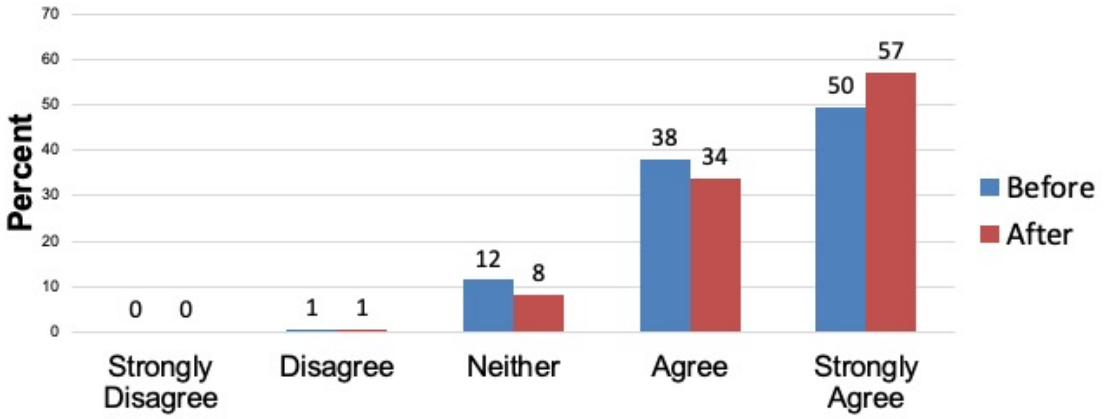
Q25: It is important for health professionals to work with public health administrators and policy makers to improve delivery of health care*

Chi-Square1400.00, df = 16, p < .001



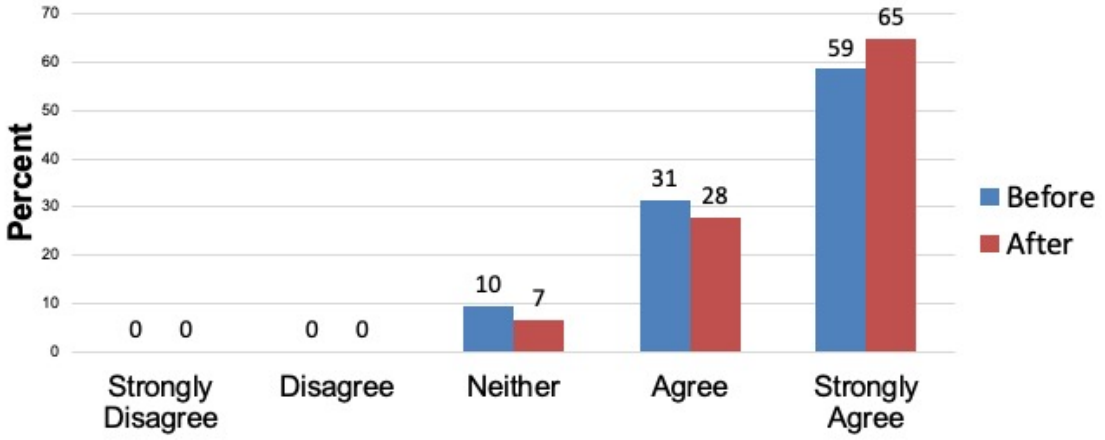
Q26: It is important for health professionals to focus on populations and communities in addition to individual patients, to deliver effective health care*

Chi-Square 1715.29, df = 16, p < .001



Q27: It is important for health professionals to be advocates for the health of patients and communities*

Chi-Square 1749.06, df = 16, p < .001



Footnote: Degrees of freedom (df) was either 9, 12, or 16 in the graphs. The df was less than 16 if one or more options were not selected. Since percentages were rounded, the graph may show 0%, even if there was one student who chose a particular response.